Review of Interconnection Rates
Consultation Document

issued by the

Turks and Caicos Islands
Telecommunications Commission

on

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Contents

1 Introduction

Pursuant to the *Telecommunications Policy 2013* (the "Policy"), sections 23, 24 and 25 of the *Telecommunications Ordinance 2009* (the "Ordinance") and sections 4, 14, 15, 18 and 19 of the Telecommunications (*Interconnection and Access to Telecommunications Facilities) Regulations 2009* as amended by the Governor on 31 March 2011[1] (the "Interconnection Regulations"), the Telecommunications Commission (the "Commission") is hereby initiating a consultation process to review interconnection rate levels for voice call termination and transit services in the Turks and Caicos Islands' ("TCI").

The licensed operators in TCI who are directly affected by and, therefore, considered parties to this consultation process include:

- Cable & Wireless (TCI) Ltd ("LIME"),
- Digicel (TCI) Ltd ("Digicel"), and
- Islandcom Telecommunications Limited ("Islandcom")

The specific interconnection rates under review in this consultation process are:

i) the mobile termination rate ("MTR"),[2]

ii) the fixed termination rate ("FTR"),[3] and

iii) transit rates, including:

  a. the LIME transit rate ("LTR"), which is charged by LIME when transit over its fixed network is required to terminate calls to LIME's mobile subscribers,[4] and

  b. the Transit Service rate ("TSR"), which is charged to transit call traffic over a fixed network to a domestic third-party service provider.[5]

The Commission will also consider whether termination rates for domestic and international call termination charges should be equivalent – i.e., whether the domestic and international FTRs and MTRs should each be equal.[6]

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1 Directive issued by the Governor's Office on 31 March 2011 amending section 19(2) of the Interconnection Regulations.

2 Referred to as the PLMN Terminating Access Services "Mobile Termination Part" under Part 2 of the Tariff Schedule associated with the parties' Interconnection Agreements.

3 Referred to as PSTN Terminating Access Services "Usage Charges" under Part 2 of the Tariff Schedule associated with the parties' Interconnection Agreements.

4 Referred to as the PLMN Terminating Access Services "Transit Part" under Part 2 of the Tariff Schedule associated with the parties' Interconnection Agreements. The Tariff notes that this transit charge is only applied when the Service Supplier (i.e., LIME) transits the call over its fixed network for termination on a mobile network.

5 Referred to as PSTN Transit Services "Usage Charges" under Part 4 of the Tariff Schedule associated with the parties' Interconnection Agreements.

The Commission initiated its first regulatory proceeding to review the level of domestic MTRs in 2010-2011 (the "First MTR Proceeding") by issuing the “Review of Mobile Termination Rate Consultation Document” dated July 19, 2010 (the “July 2010 MTR ConDoc”). The First MTR Proceeding concluded with the Commission issuing Telecommunications Decision 2011-2, *Decision on Mobile Termination Rates*, dated January 24, 2011. With Decision 2011-2, the Commission implemented a phased reduction of the maximum allowable domestic MTR from $0.1500 per minute,[7] the rate which had been in place at the time since January 1, 2008, to:

- $0.1100 as of April 1, 2011,
- $0.0975 as of April 1, 2012, and
- $0.0850 as of April 1, 2013.

The Commission relied on a benchmarking approach to set these domestic MTR maxima. The benchmarking approach included MTR data and information for just over a dozen Caribbean jurisdictions, normalized to take into account various demographic, socio-economic and other environment differences between the benchmark jurisdictions and TCI.

In view of the fact that the Decision 2011-2 domestic MTR reductions have now been completed and that the available evidence indicates that domestic MTRs continue to decline in many of the Caribbean jurisdictions included in the Decision 2011-2 benchmarking analysis as well as other jurisdictions, the Commission considers it appropriate to conduct the present regulatory proceeding to review the domestic MTRs and other interconnection rates.

The current level of the FTR is $0.030 and the LTR and TSR are each $0.015. These rates have remained unchanged since they were first established for mobile operators interconnecting with LIME. Available regional and international benchmarking evidence suggests that the FTR and transit rates have also been trending downwards over time. Consequently, the Commission considers it appropriate to include these interconnection rates in the present regulatory proceeding.

As well, evidence on domestic and international termination rates in the region suggest that domestic and international call termination rates should be set at equivalent levels. Consequently, the Commission considers it appropriate to include international termination rates in the present regulatory proceeding.

The Commission has updated the benchmarking analysis relied on to set domestic MTR maxima in Decision 2011-2. It has also expanded the benchmarking analysis to include information on FTRs and transit rates. The results and description of the benchmarking analysis are provided in Annex 1.

Based on the updated and expanded benchmarking analysis, in Chapter 5 the Commission has developed proposals to reduce the maximum allowable MTR, FTR and transit rates (collectively, the “Proposals”). The Proposals also include setting domestic and international termination rates

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6 In the case of the international rates, referred to as the Incoming International Call Termination to PSTN and PLMN "Usage Charges", respectively, both of which are under Part 2 of the Tariff Schedule associated with the parties' Interconnection Agreements.

7 Unless otherwise stated in this document, a) all money amounts are in United States of America (US) dollars and b) all time-based telecommunications prices are expressed on a per minute basis.

to equivalent levels. As in the case of Decision 2011-2, the proposed maxima would be phased in over three years, starting in April 2014 and ending in April 2016.

1.1 Consultation

Pursuant to the Interconnection Regulations and the *Telecommunications (Administrative Procedure) Regulations 2009* (the " Administrative Regulations"), the Commission is initiating this consultation process to seek comment on the issues to be addressed in reviewing the current interconnection rates and the Proposals.

On December 13, 2013, the Commission issued a Request for Information ("RFI") to Digicel, Islandcom and LIME to collect data and information on current interconnection arrangements, agreements, tariffs and call traffic volumes. It has received responses to the RFIs from all three operators.[8] The Commission has taken this data and information into account in preparing this Consultation Document and the Proposals.

The Commission invites interested parties ("Respondents") to provide their input and comments (the "Responses") with respect to the issues raised in this Consultation Document, including the Proposals and/or any other issues of relevance to the establishment of appropriate maximum allowable interconnection rates.

At the conclusion of this consultation process, the Commission proposes to issue a decision which will set the maximum allowable interconnection rates under review for the next three year period. Those maxima may be those included in the Proposals or, alternatively, may be modified or deemed unnecessary, in whole or part, based on the comments, data and information received through this consultation process. The decision would direct the affected licensed operators to amend their existing or new interconnection agreements, as necessary, and file same for approval with the Commission.

The Commission notes that it has engaged the services of Consultants to assist it with the consultation process, the analysis and assessment of the current interconnection rates in TCI, and the design and formulation of the Proposals.

1.2 Procedural Matters

This Consultation Document, along with all referenced Government and Commission documents, is available on the Commission's website at http://www.telecommission.tc/.[9] Respondents who wish to provide their views with, as may be required, supporting rationale and information in response to this Consultation Document are invited to submit their Responses in

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[8] Islandcom filed its response with the Commission on December 17, 2013; Digicel filed its response on January 3, 2014; and LIME filed its response on January 17, 2014. In addition, follow-up information was provided by Islandcom on January 9, 2014. The Commission is currently awaiting a response to follow-up questions directed to Digicel.

[9] Note that exceptions in this regard include the C&W Agreement of January 26, 2006 and operator-specific license agreements and inter-carrier interconnection agreements which include confidential information.

writing to the Commission. Responses shall also be submitted in electronic form to facilitate further distribution and posting on the Commission's website.

The Consultation Process is structured in two phases. In the first phase, Respondents may submit Initial Responses to comment on this Consultation Document. In the second phase, Respondents may submit Reply Responses to comment on the Initial Responses of other Respondents in whole or part.

The filing deadlines for Initial Responses and Reply Responses are as follows:

- Initial Responses must be received by the Commission no later than 3:30 p.m. local time on **Monday March 10, 2014**.
- Reply Responses must be received by the Commission no later than 3:30 p.m. local time on **Friday March 21, 2014.**

Responses filed in relation to this Consultation Document may be submitted to one or more of the following addresses:

a) E-mail to: consultations@tcitelecommission.tc

b) Delivery (paper and electronic copy) by hand or by courier to:

Mr. John Williams,
Director General
Turks and Caicos Islands Telecommunications Commission
Business Solutions Complex, Leeward Highway
Providenciales,
Turks and Caicos Islands

The Commission welcomes all Responses on the Consultation Document. The Commission invites Respondents to provide responses to the specific numbered questions set out in this Consultation Document (the "Consultation Questions") and any other issues Respondents consider relevant. A list of the full set of Consultation Questions is provided in Annex 2.

The Commission encourages Respondents to support all Responses with relevant data, analysis, benchmarking studies and information based on the national situation or on the experience of other countries to support their comments. The Commission may give greater weight to Responses supported by appropriate evidence. In providing their comments, Respondents are requested to indicate the number of the Consultation Question(s) to which each comment relates. Respondents are not required to comment on all Consultation Questions. The Commission is under no obligation to adopt the comments of any Respondent.

Copies of all Responses submitted by Respondents in relation to this Consultation Document will be published on the Commission's website at http://www.telecommission.tc. With a view to having as open a public consultation process as practical, the Commission encourages Respondents to structure their Responses not to include any confidential information.

If necessary, Respondents may submit Responses that include claimed confidential information in the form of two Responses:

- **Redacted Response** – In this document any claimed confidential information would be excluded. The other comments and information, not claimed as confidential, would be included in this version. This is the public version document that would be posted on the Commission website.

- **Confidential Response** – This document would be identical to the Redacted Response. except that this version would also include the claimed confidential information for the use of the Commission. This document would not be posted on the Commission website and all confidential information in the document would be held in strict confidence by the Commission and its Consultants.

Claims of confidentiality will be determined by the Commission on a case-by-case basis, and in compliance with the requirements set out in section 19 of the Administrative Regulations.

1.3 Overall Timeline

Table 1 summarizes the timeline for this consultation process and the subsequent decision-making and interconnection rate implementation process.

Table 1: Timeline for Consultation Process

Event	Date
Commission issues Request for Information	December 13, 2013
Responses to RFIs	January, 2014
Commission issues Consultation Document	February 10, 2014
Initial Responses from Respondents	March 10, 2014
Reply Responses from Respondents	March 21, 2014
Commission Decision	by March 31, 2014 (or as soon as possible thereafter)
First day of Phase I revised interconnections rates	April 1, 2014 (or as soon as possible thereafter)
Phase II revised interconnections rates	April 1, 2015
Phase III revised interconnections rates	April 1, 2016

2 Legal Framework

This Chapter provides a summary of the relevant legal and regulatory provisions in relation to interconnection rates in TCI.

2.1 Regulation of Interconnection Rates

In the July 2010 MTR ConDoc, the Commission summarized the legal and regulatory provisions relating to its authority to review and set on its own motion the maximum allowable level of MTRs in TCI. The relevant provisions relating to interconnection in general include the following:

i) The Policy which empowers the Commission to regulate, among other things, the terms and conditions of interconnection between the incumbent and entrant operators.

ii) Sections of the Ordinance, including:

   a. Section 23 which sets out in general terms the type of instructions that the Commission may issue to dominant licensees with respect to interconnection, including interconnection rates, non-discrimination, transparency and cost-orientation;

   b. Section 24 which sets out the Commission's authority to resolve interconnection disputes either on its own motion or at the request of an interested party; and

   c. Section 25 which requires that interconnection rates be cost-oriented based upon costs of the Licensee providing interconnection services.

iii) Sections of the Interconnection Regulations, including:

   a. Section 4(1) which sets out the main objectives for the Commission to pursue in its administration of interconnection arrangements including (1) the promotion of efficiency, (2) the promotion of sustainable competition, (3) the maximization of end-user benefits, and (4) ensuring that operators are compensated for interconnection services;

   b. Section 4(2)(d) which allows the Commission to act on its own initiative to carry out the objectives of the Ordinance and ensure compliance with the Ordinance and Interconnection Regulations;

   c. Sections 6(1) and 6 (2) relate to non-discrimination obligations and require that operators must offer to provide and provide interconnection on the basis of terms and conditions that are non-discriminatory, including with respect to rates and quality of service.

d. Section 11 which provides the Commission with the authority to deal with disputes regarding interconnection and interconnection agreements, including instances where there is a failure by the parties to conclude promptly an interconnection agreement or there is a disagreement with respect to the price or any other technical, commercial or other term and condition for any element of interconnection that the parties have not been able to resolve within a commercially reasonable time;

e. Section 12 requires that 28 days after parties have concluded an interconnection agreement, the operator that responded to the initial request for interconnection shall submit a copy of such agreement to the Commission. Section 13 specifies that when an interconnection agreement is modified and such modification(s) are material, then the parties shall notify the Commission of said modification(s).

f. Section 14 which provides a framework for the establishment of interconnection rates for dominant operators, including the requirement that dominant operators' interconnection rates are "cost-oriented", and where "cost-orientation" is defined as a rate that does not exceed the stand-alone cost of providing the service and the rate is not lower than the long-run average incremental costs of providing the service;[10] and

g. Sections 15(2) (d) and (e) which indicate that the Commission shall determine the methodology to be used in determining "cost-orientation," including setting out a series of general principles with relation to cost causation and the recovery of non-recurring and usage costs.[11]

2.2 Mobile Termination Rates

In addition to the provisions noted above that apply to all interconnection services, Section 19 of the Interconnection Regulations includes specific provisions relating to MTRs, including (1) that all mobile carriers are presumed to be dominant with respect to termination on their respective mobile networks and (2) that the domestic MTR shall not exceed specified rate levels (i.e., currently $0.0850 per minute).

Further, it should also be noted that Digicel, Islandcom and LIME's respective Licenses each include an identical provision which states that the Licensee shall set wholesale termination rates

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10 Note that under section 14(4) of the Interconnection Regulations (a) "stand-alone cost" means the cost of providing a service independently of providing any other service or services; and (b) "long-run average incremental costs" means the costs incurred by providing a service in addition to other service or services already provided.

11 In particular, section 15(d) states that rates shall permit the recovery of a reasonable rate of return for that carrier or service provider on the capital employed, all attributable operating expenditures, depreciation and a proportionate contribution toward such carrier's or service provider's fixed and common costs; and section 15(e) states that the burden of proof that rates are derived from costs shall lie with the carrier or service provider.

for termination on Licensee's mobile network in accordance with the Interconnection Regulations.[12]

In the July 2010 MTR ConDoc the Commission asked parties for their views on whether the Commission has the authority to establish the maximum allowable MTR on its own motion, without having received an interconnection dispute resolution request. Parties' views were mixed on this question. Consequently, in Decision 2011-2, the Commission opted for an alternative approach whereby it would issue a recommendation to Government to amend section 19(2) of the Interconnection Regulations to reflect the domestic MTR maxima adopted in Decision 2011-2. In addition, the Commission indicated that it would also issue a corresponding procedural directive to all three licensed mobile operators to give effect to the amended section 19(2) of the Interconnection Regulations.

The Commission plans to follow the same approach in the present regulatory proceeding in the event it concludes further changes to the maximum allowable level of the MTR are warranted. The proposed wording of the Recommendation and the associated Directive in this respect are provided in Chapter 6.

2.3 LIME's FTR and Transit Rates

In addition to the general provisions noted above, Section 18 of the Interconnection Regulations states that:

> *Every dominant carrier or service provider shall, at a minimum and as otherwise required by the Commission, offer to third parties unbundled, cost-oriented rates for terminating domestic and international calls on its domestic network.*

Consequently, as in the case of MTRs generally, LIME's FTR and transit rates are also subject to the Interconnection Regulations given that LIME is designated as dominant with respect to the provision of domestic and international services over its fixed network.[13] Moreover, given that LIME is designated as dominant with respect to both fixed and mobile network services, this further captures LIME's transit services which are used to terminate calls to LIME's mobile customers which originate from Digicel or Islandcom subscribers.

Therefore, in the Commission's view it has the authority to review and, if found warranted, revise LIME's maximum allowable FTR, LTR and TSR. To the extent that the Commission finds that changes to one or more of these rates is warranted, it intends to follow the same approach used in Decision 2011-2 – namely though a recommendation to the Government to modify the Interconnection Regulations accordingly. The proposed wording of the Recommendation to amend the Interconnection Regulations and the associated Directive in this respect are provided in Chapter 6.

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[12] Section 16 of C&W's license and section 18 of both Digicel's and Islandcom's licences.

[13] As stated in LIME's 2006 Telecommunications and Spectrum Licence, dated January 25, 2006, Annex A, section 3, and Annex B, section1.5.

2.4 Digicel's FTR

At this time, other than LIME, Digicel is the only other licensed operator offering fixed voice telephony services in TCI. Under the Interconnection Regulations and in its License,[14] Digicel is designated as dominant in the market for mobile wholesale voice telephony services on its licensed network; however, no reference is made to fixed wholesale voice telephony services provided on its licensed network.

In the Commission's view, the same factors that warrant a dominance designation in the case of mobile wholesale voice telephony services equally apply to fixed wholesale voice telephony services. Each licensed operator in TCI, Digicel included, possesses a monopoly over the provision of call termination to subscribers on its own Licensed Network including, as applicable, both mobile and fixed service subscribers. There is no alternative or substitute services or means available to complete such calls. In other words, there is no functioning market for call termination services on a service provider's mobile or fixed network. Consequently, as in the case of mobile wholesale voice telephony services, the Commission considers that all licensed fixed network operators offering voice telephony services are dominant in the market for fixed wholesale voice telephony services on their own network, Digicel included. Moreover, the Commission notes designating all licensed network operators dominant in the provision of fixed and mobile wholesale voice telephony services is standard practice in most international jurisdictions.

The Commission further notes that the current LIME-Digicel and LIME-Islandcom Interconnection Agreements include provisions requiring that call termination charges payable from one party to the other be the same for the same service.[15] Moreover, in this same respect, the Interconnection Agreements state that where Commission approves changes to any such charges, the other party should be notified so that both parties' charges would be changed equivalently and, therefore, remain the same.[16] In other words, to the extent the Commission revises LIME's FTR and transit rates through the present regulatory proceeding, under the current Interconnection Agreements, Digicel's FTR and, as applicable, transit rates should be automatically adjusted to equal those of LIME.

As a result, the Commission considers that any revisions to the FTR should equally apply to all fixed wholesale voice telephony service providers in TCI, including LIME and Digicel. To the extent the Commission concludes as a result of this proceeding that changes to the FTR are warranted, the Commission is of the preliminary view that these changes would equally apply to all licensed operators providing fixed wholesale voice telephony services.

The Commission notes that the LTR is currently unique to LIME's network. The LTR reflects the cost of transiting a call to a LIME mobile subscriber from LIME's fixed to its mobile network. As far as the Commission is aware, no other licensed operator employs separate

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14 Section 19(1) of the Interconnection Regulations and section 11.1 of Digicel's Licence.

15 For instance, in sections 9 and 10 of the Legal Framework of the Interconnection Agreements.

16 Ibid.

switches to service its fixed and mobile customers in TCI and, therefore, no other licensed operator would have a basis for charging such a transit fee.

Similarly, as far as the Commission is aware, LIME is the only operator currently providing transit service, the TSR. Consequently, the Commission is of the preliminary view that any changes to the TSR resulting from this regulatory proceeding would only apply to LIME at this time.

To bring into effect any changes in the FTR and, as applicable, transit rates found warranted as a result of this regulatory proceeding in the case of other licensed operators, including Digicel, the Commission proposes to recommend that the Government amend the Interconnection Regulations so that all fixed carriers are presumed to be dominant with respect to termination on their respective fixed networks (in the same manner that currently all mobile operators are presumed to be dominant with respect to termination on their respective mobile networks).

The proposed wording of the Recommendation to amend the Interconnection Regulations and the associated Directive in this respect are provided in Chapter 6.

2.5 Domestic and International Termination Rates

The Commission reiterates that sections 23 and 25 of the Ordinance and sections 14 and 15 of the Interconnection Regulations provide Commission with the authority set call termination rates and ensure that they are cost-oriented. In addition, as noted above, section 18 of the Interconnection Regulations specifically states that every dominant carrier or service provider shall offer to third parties cost-oriented rates for terminating "domestic and international" calls on its domestic network.

Consequently, in the Commission's view, it has the authority to review and, if found warranted, revise the allowed upper limits of both domestic and international MTRs and FTRs. To the extent that the Commission finds that changes to these rates are warranted as a result of this consultation process, it again intends to follow the same approach used to revise them as described above and as proposed in Chapter 6.

2.6 Discussion and Questions

As discussed above, the Commission is of the view that the Policy, Ordinance and Interconnection Regulations jointly provide it with the authority to regulate interconnection terms and conditions and interconnection rates, specifically including domestic and international MTRs and FTRs as well as domestic transit rates, either through the its own motion or in the context of a dispute. That said, following the practice established in Decision 2011-2, where found warranted, the Commission intends to issue a recommendation to Government to amend the Interconnection Regulations to reflect all interconnection rate maxima found to be warranted as a result of this regulatory proceeding. The recommendation would also ask the Government to amend the Interconnection Regulations so that all fixed carriers are presumed to be dominant with respect to termination on their respective fixed networks.

The Commission notes that the Proposals described in Chapter 5 set out maximum allowable interconnection rates and, as such, do not preclude operators from negotiating rates that are below such maxima. However, any such negotiated interconnection rate(s) must be offered to all operators on an equal and non-discriminatory basis pursuant to section 23(1)(c) of the Ordinance and sections 6(1) and 6 (2) of the Interconnection Regulations. Further, as set out in Sections 12 and 13 of the Interconnection Regulations operators shall submit to the Commission new interconnection agreements or material modifications to existing agreements, including those that are below the corresponding maxima.

Question 1: Please comment on the Commission's proposed legal basis and procedure for implementing any revisions to the maximum allowable interconnection rates under review.

Question 2: Please comment on the Commission's proposal to recommend to the Government that the Interconnection Regulations be amended so that all fixed carriers are presumed to be dominant with respect to termination on their respective fixed network. If you disagree with the proposal, provide supporting rationale.

3 Interconnection Policy and Regulatory Issues

3.1 Principles and Objectives

Pursuant to section 4 of the Interconnection Regulations, and consistent with the Ordinance, the Commission is required to encourage and, where appropriate, ensure the adequacy of interconnection between public telecommunications networks and public telecommunications services in such a way as to:

(a) promote efficiency;

(b) promote sustainable competition;

(c) give maximum benefit to end users; and

(d) provide that carriers and service providers are compensated for interconnection services.

The Commission addressed each of these four principles and objectives in detail in the July 2010 MTR ConDoc and, taking into account parties submissions on same, the subsequent *Second Review of Mobile Termination Rate Consultation Document* issued by the Commission on November 10, 2010 (the "November 2010 MTR ConDoc") as well as in Decision 2011-2. While the consideration of these factors was undertaken in the context of MTRs at the time, the Commission is of the view that they also apply to other interconnection rates as well, including FTRs and transit rates. In what follows, the Commission briefly recaps its conclusions on each of the factors considered.

3.2 Efficiency and Competition Considerations

The Policy, Ordinance and Interconnection Regulations state that interconnection rates should be "cost-oriented." Section 14 of the Interconnection Regulations places specific bounds on what would be considered a cost-oriented rate. The upper bound rate is defined being the "stand-alone cost" of the service[17] and the lower bound is defined as the long-run average incremental cost ("LRAIC") of the service.[18]

With the objectives of promoting efficiency and sustainable competition, in the First MTR Proceeding the Commission concluded that the MTR should be ideally set closer to the lower end of the specified range – i.e., closer to long-run incremental cost ("LRIC") rather than stand-alone cost.

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17 Which, as defined in the Interconnection Regulations, means the "cost of providing a service independently of proving any other service or services."

18 Which, as defined in the Interconnection Regulations, means the "costs incurred by providing the service in addition to other service or services already provided."

Parties to the First MTR Proceeding generally agreed with this principle. However, some argued that provision should also be made for the inclusion of a mark-up over and above LRIC to provide a contribution to fixed and common costs. In this respect, it was noted that section 15(2)(d) of the Interconnection Regulations explicitly requires interconnection rates provide a proportionate contribution towards the recovery of fixed and common costs. The Commission agreed and concluded in Decision 2011-2 that the MTR should include a proportionate contribution towards the recovery of fixed and common costs.

The Commission considers that its conclusions relating to the cost orientation in the case of MTRs equally applies to all other interconnection rates, including FTRs and transit rates.

3.3 End-User Benefits

Reducing interconnection rates to more efficient, cost-based levels should, in principle, provide a number of benefits to consumers or end-users. With respect to MTRs, as noted in the July 2010 and November 2010 ConDocs, these actual and potential benefits include:

(a) potential reductions in average retail prices or, more specifically, potential reductions average retail prices for "off-net" calling;

(b) reductions in fixed-to-mobile calling retail prices (as required under the price cap regime);

(c) to the extent reductions in MTRs translate into lower average retail prices, increased take-up in fixed and mobile wireless services; and

(d) also to the extent reductions in MTRs translate into lower average retail calling prices, increased usage of mobile and fixed services by end users.

The July 2010 ConDoc also provided empirical evidence, based on experience in the Caribbean, supporting the first two of these four noted benefits and, as a result, indirect support for the latter two as well. While parties to the First MTR Proceeding expressed differing views on the likely nature and extent of the potential benefits, they all agreed that there would be benefits for consumers from lowering MTRs closer to cost.

Experience since the Decision 2011-2 was issued confirms that consumers have indeed benefited either directly or indirectly from the mandated reductions in the maximum allowable MTRs:

First, there is evidence that mobile retail rates have declined over the last 3.5 years. Annex C of the July 2010 MTR ConDoc provided an analysis of retail per-minute call rates and MTRs in the Caribbean, which included July 2010 retail post-paid and pre-paid mobile call rates offered by Digicel, Islandcom and LIME in TCI.[19] Table 2 provides a summary of those rates along with current (i.e., as of January 2014) call rates for comparable, and, in some cases, identical service plans.

[19] See Initial MTR Consultation Document, Annex C, Table 7, page 41.

Table 2: Comparison Mobile Call Rates in TCI July 2010 versus January 2014

	Post-Paid			Pre-Paid			
	Post-Paid Plan	**On-Net**	**Off-Net**	**Pre-Paid Plan**	**On-Net**	**Off-Net**	**Differential**
TCI - July 2010							
Digicel	Select 900	0.110	0.110	Base Rates	0.33	0.38	15%
Islandcom	1000	0.180	0.180	Base Rates	0.25	0.3	20%
Lime	1250	0.120	0.120	Base Rates	0.30	0.40	33%
Average		**0.137**	**0.137**		**0.293**	**0.360**	**23%**
TCI - Jan 2014							
Digicel	Select 900	0.11	0.11	Base Rates	0.33	0.39	18%
Islandcom	1000	0.18	0.18	Base Rates	0.25	0.30	20%
Lime	Anywhere 1000	0.075	0.075	Anywhere Talk 1000	0.18	0.18	0%
Average		**0.122**	**0.122**		**0.253**	**0.290**	**14%**
TCI - Changes since 2010							
Digicel		0.0%	0.0%		0.0%	2.6%	20.0%
Islandcom		0.0%	0.0%		0.0%	0.0%	0.0%
Lime		-37.5%	-37.5%		-40.0%	-55.0%	-100.0%
Average		**-12.5%**	**-12.5%**		**-13.3%**	**-17.5%**	**-26.7%**

Note: averages calculated on a simple unweigthed basis.

As Table 2 shows that over the last 3.5 years:

i) on-net and off-net post-paid per-minute call rates have on average declined 12.5%;

ii) on-net pre-paid per-minute call rates have on average declined 13.3%;

iii) off-net pre-paid per-minute call rates have on average declined 17.5%;

iv) as in 2010, there is no rate differential between on and off-net rates in the case of post-paid services;

v) in the case of pre-paid, the on and off-net rate differential has declined on average over 25%, bringing the average rate differential level down to less than $0.04 per minute.

The Commission recognizes that these end-user benefits are not necessarily attributable in whole or part to Decision 2011-2; however, they are nevertheless fully consistent with expected benefits noted in that decision.

Second, LIME's Fixed-to-Mobile ("FTM") rates have been reduced in lock-step with the reductions in the maximum allowable MTRs under the price cap regime. As a result, LIME's fixed customers have directly benefited from a FTM rate which is currently $0.065¢ per minute lower than otherwise.

Third, the total number of mobile subscribers in TCI has increased since 2011, albeit to a relatively limited degree. Nevertheless, given the economic challenges faced in TCI in recent years, this is a positive outcome. Here again, while the growth in the subscribership cannot be necessarily be attributed to the recent reductions in the MTR in whole or part, it is nevertheless fully consistent with expected benefits noted in Decision 2011-2.

Fourth, while the available information on usage is very limited, where call rates have declined there is some indication that calling volumes per subscriber have increased. This result is also consistent with expected benefits noted in Decision 2011-2.

Consequently, the Commission is of the view that further reductions in the maximum allowable MTR, along with reductions in the maximum allowable FTR and transit rates, where found warranted to ensure these interconnection rates are more properly cost-oriented, would serve to further benefit end-users through potentially lower retail prices and, in turn, higher penetration and usage levels.

3.4 Methodologies for Setting Interconnection Rates

In the July 2010 MTR ConDoc the Commission discussed a number of alternative means for setting MTRs including relying on commercial negotiation, alternative costing methodologies and benchmarking approaches. The costing approaches included Fully Allocated Cost ("FAC"), pure LRIC and LRIC+ cost model approaches.

At the time, the Commission found that there was no evidence to suggest that reliance on commercial negotiations would be feasible or effective in achieving the objectives of the Policy, Ordinance and Interconnection Regulations.

In addition, the Commission concluded that while a LRIC-based approach to setting the MTR would be superior to an FAC approach, either approach would be complex, costly and time consuming for both operators and the Commission. As a result, the Commission concluded that the development of either a FAC or LRIC cost model approach to determine MTRs would not be a practical or feasible and, moreover, that cost and effort required would be disproportionate to the objective at hand.

In the alternative, the Commission decided that a benchmarking approach for setting the MTR would be more appropriate. Under this approach, MTR levels and trends in the Caribbean region would be used to assess the appropriateness of and, if found necessary, also provide the basis for revising the MTR.

The Commission notes that the Interconnection Regulations provide the Commission with the power to adopt an appropriate methodology of its own choosing, including benchmarking, to make a determination with respect to interconnection rates. Specifically, section 15(1) of the Interconnection Regulations states that: "... the Commission shall determine the methodology to be used for determining whether a carrier’s or service provider’s rates are cost-oriented."

In the First MTR Proceeding some parties raised concerns with the use of a benchmarking approach to set the maximum allowable MTR. However, the Commission addressed those concerns by modifying the benchmark sample and by also normalizing the benchmark results for demographic, socio-economic and other environmental factors. Ultimately, Digicel, Islandcom and LIME all expressed support for the revised benchmarking results presented by the Commission in the November 2010 MTR ConDoc.

The Commission notes that the current FTR and transit rates were established in relation to a FAC model approach produced by LIME at the time the TCI Government was in the process of liberalizing the telecommunications market, over 10 years ago. As in the case of the MTR, the Commission considers that efforts to reconstruct and update the FAC approach at this time would be complex, costly and time consuming for both operators and the Commission and, again, the cost and effort required would be disproportionate to the objective at hand.

Accordingly, the Commission is of the preliminary view that reliance on the same benchmarking approach would be appropriate for the purpose for assessing the interconnection rates under review. In this respect, the Commission notes that in response to the July 2010 MTR ConDoc, Digicel supported the use of the benchmarking approach developed for MTR review purposes to also review the level of the FTR.

The updated benchmarking analysis relied to develop the Proposals is described in Annex 1.

3.5 Other Considerations

The July 2010 MTR ConDoc proposed that the maximum allowable MTR should be set on a symmetric or reciprocal basis for all mobile operators. The Commission notes that parties – Digicel, Islandcom and LIME – agreed with the Commission's proposal in this respect.

The Commission is of the view that the symmetry principle should also apply to other interconnection rates, including the FTR and, as applicable, transit rates. The Commission notes that parties' Interconnection Agreements already include provisions requiring that interconnection rates be set reciprocally.[20]

The July 2010 MTR ConDoc also proposed that any changes to the MTR could be implemented on a glide path basis – i.e., in a phased-in manner over the course of several years. While parties' views on this matter differed, with at least one party suggesting that a flash-cut reduction in the MTR would be appropriate, Decision 2011-2 included phase-in reductions in the maximum allowable MTRs over a three year period. The Commission considers that to the extent it finds that reductions in one or more interconnection rates are warranted as a result of the present regulatory proceeding, a similar approach could be followed. However, ultimately the nature of any rate change glide path adopted by the Commission as a result of this proceeding, where warranted, would be considered on a case-by-case basis for each interconnection rate under review.

Question 3: Please comment on the Commission's policy considerations and regulatory proposals emanating from Decision 2011-2 in relation to the present review of MTR, FTR and transit rate levels, including:

[20] As specified under sections 9 and 10 of the Legal Frameworks of both the Islandcom-LIME and Digicel-LIME Interconnection Agreements.

(i) the principle that interconnection rates should, as best as possible, reflect LRIC plus a contribution to fixed and common costs;

(ii) lower interconnection rates should result in end-user benefits;

(iii) reliance on benchmarking for the purpose of setting maximum allowable interconnection rates;

(iv) reliance on the principle of rate symmetry for interconnection rates; and

(v) phasing in any reductions in the maximum allowable interconnection rate found to be necessary and appropriate.

Where alternative proposals are offered in relation to any one of these issues, please provide supporting evidence and rationale in each case.

4 Interconnection Rate Levels and Trends

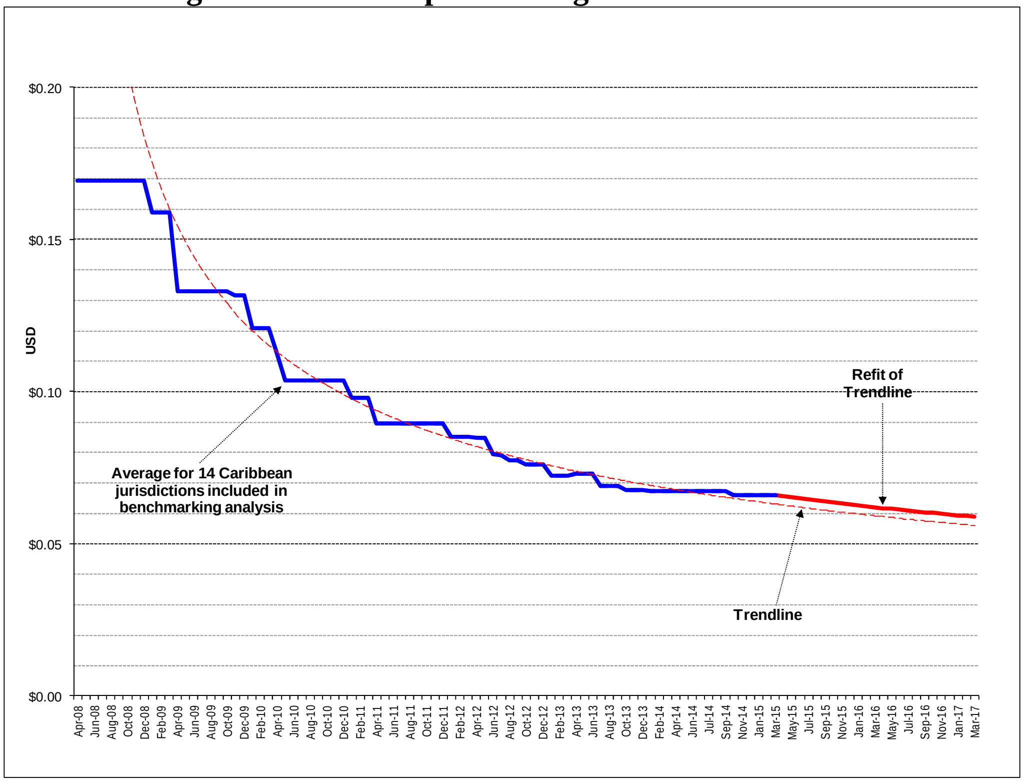
This Chapter provides a summary of interconnection rate levels and trends in the Caribbean and Europe, in comparison to TCI. The Caribbean comparisons are based on the Commission's updated and expanded benchmarking analysis described in Annex 1. As set out therein, the present analysis follows the same approach used in Decision 2011-2 and includes 14 Caribbean jurisdictions (the "Updated Benchmarking Sample").

4.1 MTR Levels and Trends

Figure 1 shows the average MTR for the 14 jurisdictions included in the Updated Benchmarking Sample (the "All Sample Average") for the period April 2008 to January 2014, and also includes the average projected MTR to March 2015 based on NRA-established glide paths or other transitional arrangements. In addition, a statistically fitted trendline is included based on the average MTRs extrapolated out to March 2015, which covers the period April 2015 to March 2017. The refitted trendline links the overall trendline to the last available average MTR observation (March 2015) to show the expected trend in the average MTR out to March 2017.

As illustrated in Figure 1, the benchmark MTR has fallen from roughly to $0.1700 in April 2008 to $0.0670 as of January 2014, a decline of roughly 60%. The average MTR is expected to drop to $0.0660 as of March 2015 and will likely decrease further to roughly $0.0590 by March 2017.

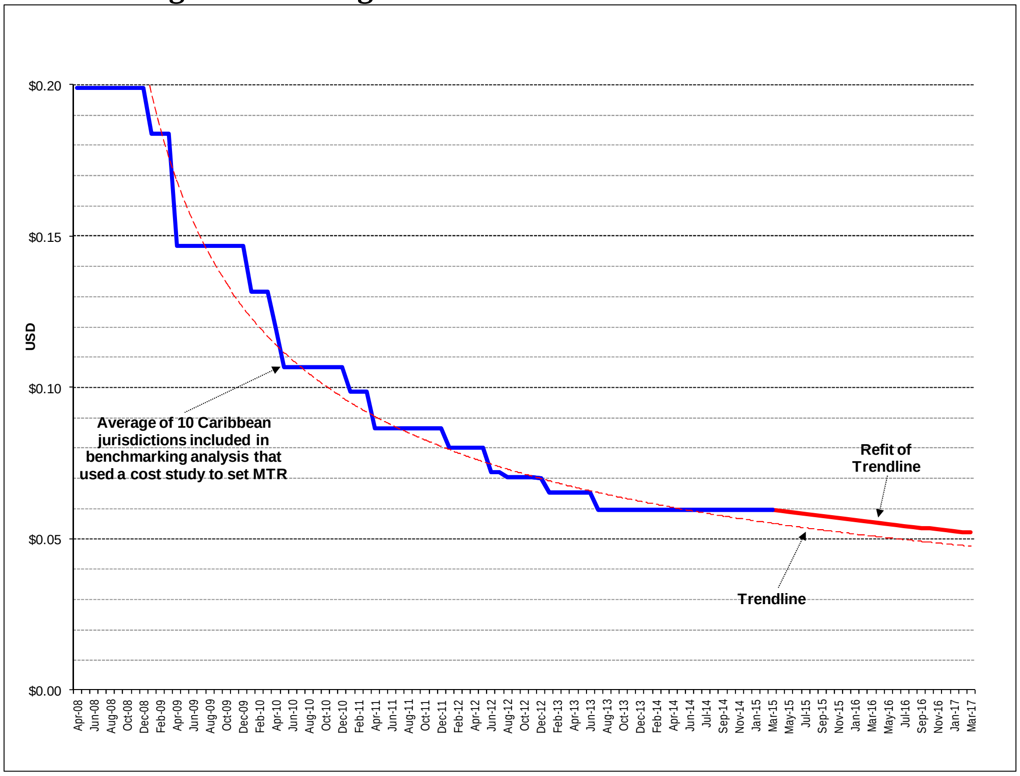
Figure 1: "All Sample" Average Benchmark MTRs



As discussed, a key objective of the present regulatory proceeding is to move the MTR maxima in TCI to closer to cost-based levels over time. As set out in Annex 1, since April 2008 a total of 10 of the 14 jurisdictions have set MTRs on the basis of a costing approach of some form ("Cost-Based MTRs"). Figure 2 shows average Cost-Based MTRs for the period April 2008 to January 2014 along with projected benchmark MTRs to March 2015 based on NRA-established glide paths or other transitional arrangements. The figure also includes a trendline projection of cost-based benchmark MTRs to March 2017 as well as a refit trendline as in Figure 1.

In this case, the average cost-based benchmark MTR has dropped from just under $0.2000 in April 2008 to roughly $0.0600 as of January 2014, a decline of roughly 70%. The refit trendline projection suggests that the average cost-based benchmark MTR can be expected to drop to about $0.0520 by March 2017.

Figure 2: Average of "Cost-Based" Benchmark MTRs

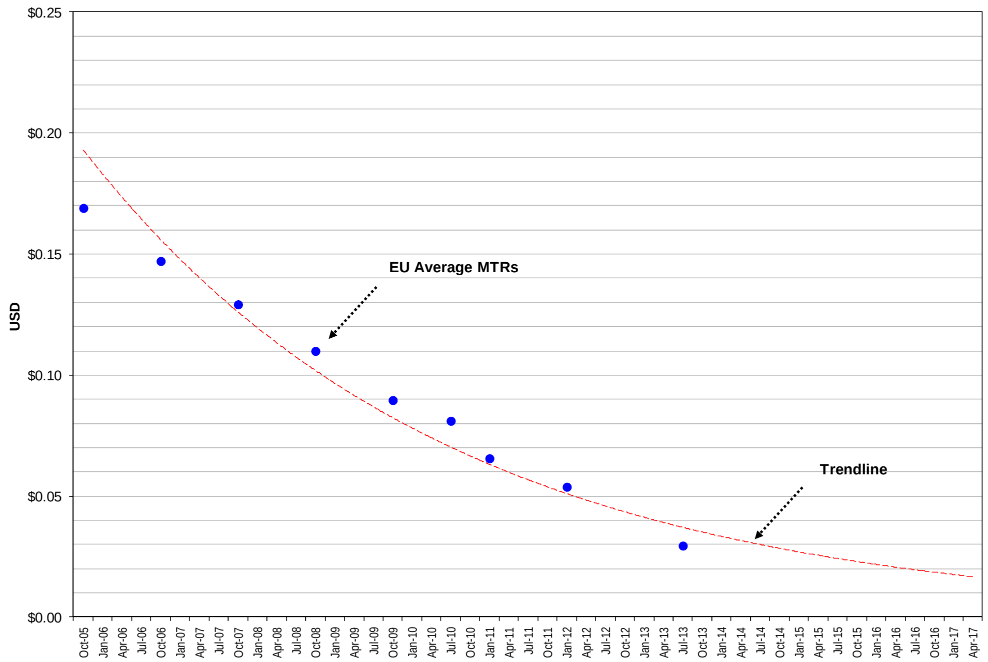


The observed reductions in the average All Sample and Cost-Based MTRs are also consistent with the reductions in MTRs in other regions, including Europe. Figure 3 provides the average MTR for European countries at various points in time between October 2005 and July 2013.[21] It

21 MTRs for the period 2005 to 2009 were drawn from the European Commission's Commission Staff Working Document: Progress Report on the Single European Electronic Communications Market (15th Report), Volume 1 (May 25, 2010) and the balance of the observations were drawn from Body of European Regulators for Electronic Communications (BEREC)

is worth noting that European MTRs are cost-based (typically LRIC or LRIC+). Over the period under consideration, the average MTR in Europe fell from roughly $0.1700 to $0.0300, a reduction of over to 80%. A trendline projection suggests that the average MTR in Europe will likely decline further still to under $0.0200 by 2017.

Figure 3: Average MTRs in Europe (USD)
(October 2005 to April 2017)



Based on the above analysis, the Commission is of the preliminary view that the current maximum MTR of $0.0850 is no longer a reasonable upper limit, and the rate should be decreased. While the observed MTR levels and trends in other jurisdictions do not provide direct evidence of the underlying cost of mobile call termination service in TCI, they nevertheless suggest that an efficient, cost-based MTR would likely be no more than about $0.0500.

In fact, there is good reason to believe that mobile terminations costs based on the latest available mobile technologies would be even lower still. As discussed in Annex 1, the Commission notes that recently introduced cost-based MTRs in the Caribbean region include: Cayman Islands at $0.0340, all French West Indies (Guadeloupe, Martinique, St. Martin and St. Barthelemy) at $0.0135, and Jamaica at $0.0110. All of these MTRs are based on recently-conducted costing studies. In contrast, many of the jurisdictions with above-average MTRs have not conducted reviews of MTR levels for years (e.g., the ECTEL Member-States) and, therefore, those rates can be considered largely outdated.

Termination Rates Benchmark Snapshot Reports (including BEREC Reports BoR (10) 30rev1, BoR (11) 27 final, BoR (12) 56, BoR (12) 80 and BoR (13) 178).

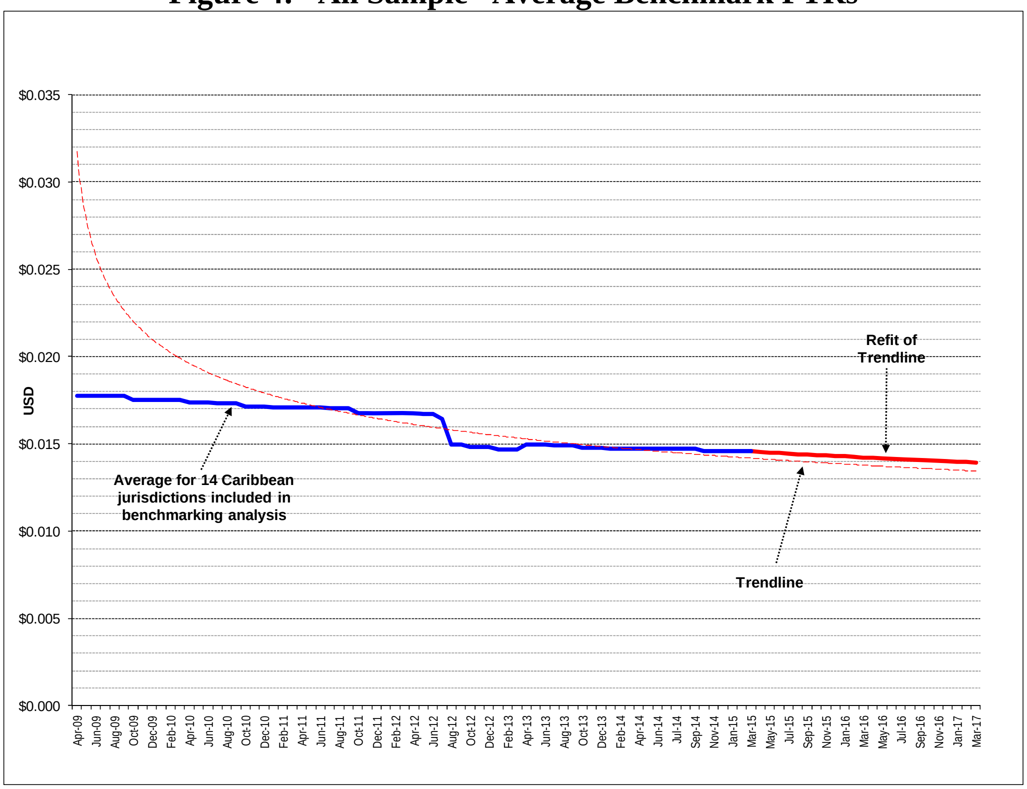
Question 4: Please comment on whether the observed downward trend in MTRs in the Caribbean region and Europe are consistent with the view that average MTRs in those regions are moving closer to the underlying costs of terminating calls on mobile networks (based on the latest available mobile network technologies). If not, explain why not. In responding to this question, please provide supporting rationale, fully explaining all data sources, assumptions and calculations as may be necessary.

4.2 FTR Levels and Trends

Figure 4 shows the All Sample Average FTR for the available 14 jurisdictions in the Updated Benchmark Sample for the period April 2009 to January 2014, with projected FTRs to March 2015 based on NRA-established glide paths or other transitional arrangements. Once again, a trendline and refitted trendline are included in the figure both of which are extrapolated to March 2017.

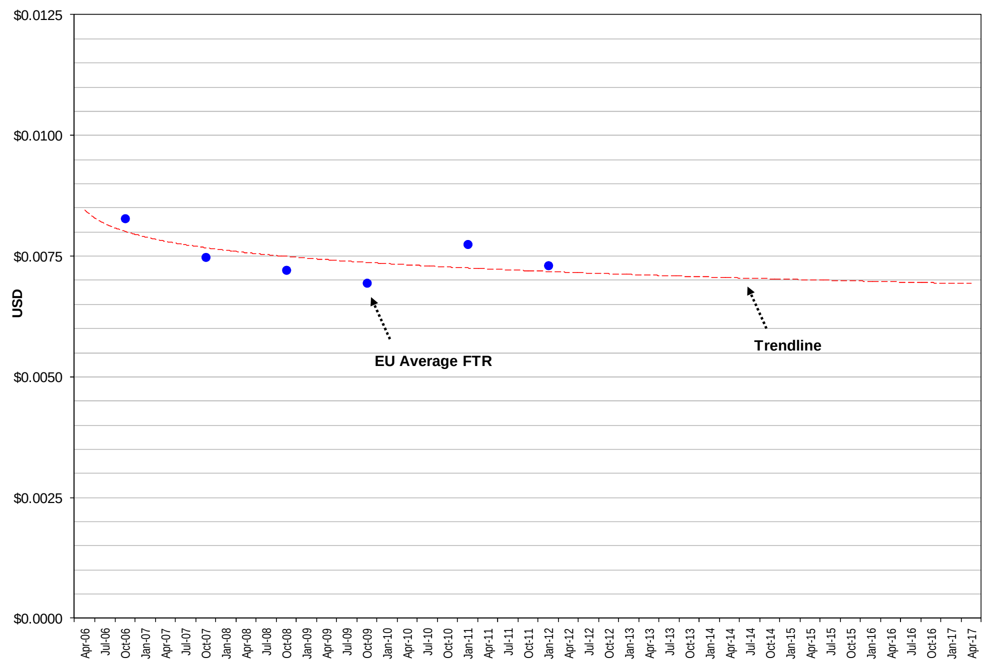
Figure 4 shows that the average benchmark FTR has fallen from roughly $0.0018 in April 2009 to about $0.0145 as of January 2014, a decline of just under 20%. The refit trendline projection suggests that the average FTR will likely decrease somewhat further to roughly $0.0139 by March 2017.

Figure 4: "All Sample" Average Benchmark FTRs



The observed reductions in FTRs in the Caribbean region are also similar to reductions in FTRs in Europe. Once again, it should be noted that FTRs in Europe are cost-based and typically determined using LRIC or LRIC+ approaches. Figure 5 shows the average FTR for incumbent operators in Europe at various points in time between October 2006 and January 2012.[22] Over the period considered, the average FTR in Europe fell from roughly $0.0083 to $0.0073, a reduction of 12%. The trendline projection suggests that the average FTR in Europe could decline to roughly $0.0070 by 2017.

Figure 5: Average FTRs in Europe
(October 2006 to April 2017)



Based on the above analysis, the Commission is of the preliminary view that the current maximum FTR of $0.0300 is no longer a reasonable upper limit, and the rate should be decreased. Once again, while the observed FTR levels and trends in other jurisdictions do not provide direct evidence of the underlying cost of fixed call termination service in TCI, they nevertheless suggest that an efficient, cost-based FTR should be no more than about $0.0140.

Furthermore, the Commission notes in 2012 the FTR in BVI was reduced to $0.0100 and the FTR in Anguilla was reduced to $0.0130. In Jamaica, a cost-based FTR of $0.0040 was recently introduced, based on an interconnection rate review completed in 2012. Again, many of the jurisdictions with above-average FTRs have not reviewed levels for years and, therefore, could

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22 MTRs for the period 2005 to 2009 were drawn from the European Commission's Commission Staff Working Document: Progress Report on the Single European Electronic Communications Market (15th Report), Volume 1 (May 25, 2010) and the balance of the observations were drawn from Body of European Regulators for Electronic Communications (BEREC) Termination Rates Benchmark Snapshot Reports (including BEREC Reports BoR (11) 57 and BoR (12) 56).

be considered outdated. Consequently, there is good reason to believe that an efficient, cost-based FTR for TCI could even be lower than $0.0140.

Question 5: Please comment on whether the observed downward trend in FTRs in the Caribbean region and Europe are consistent with the view that average FTRs in those regions are moving closer to the underlying costs of terminating calls on fixed networks (based on the latest available fixed network technologies). If not, explain why not. In addition, please provide supporting rationale, including any additional FTR benchmarking information that may be available that is of relevance to this Consultation, fully explaining all data sources, assumptions and calculations as may be necessary.

4.3 Transit Rate Levels and Trends

Figure 6 shows the All Sample Average transit rate for the available 10 jurisdictions in the Updated Benchmark Sample for the period April 2009 to January 2014, with projected rates to March 2015 based on NRA-established glide paths or other transitional arrangements. Once again, a trendline and refitted trendline projections are also included in the figure, both of which are extrapolated to March 2017.

As can be seen from Figure 6, the average transit rate has remained relatively stable over the period April 2009 to January 2014, ranging between $0.0072 and $0.0079. The refitted trendline projection suggests that the average transit rate will likely remain in this range as of March 2017.

Figure 6: "All Sample" Average Benchmark Transit Rates

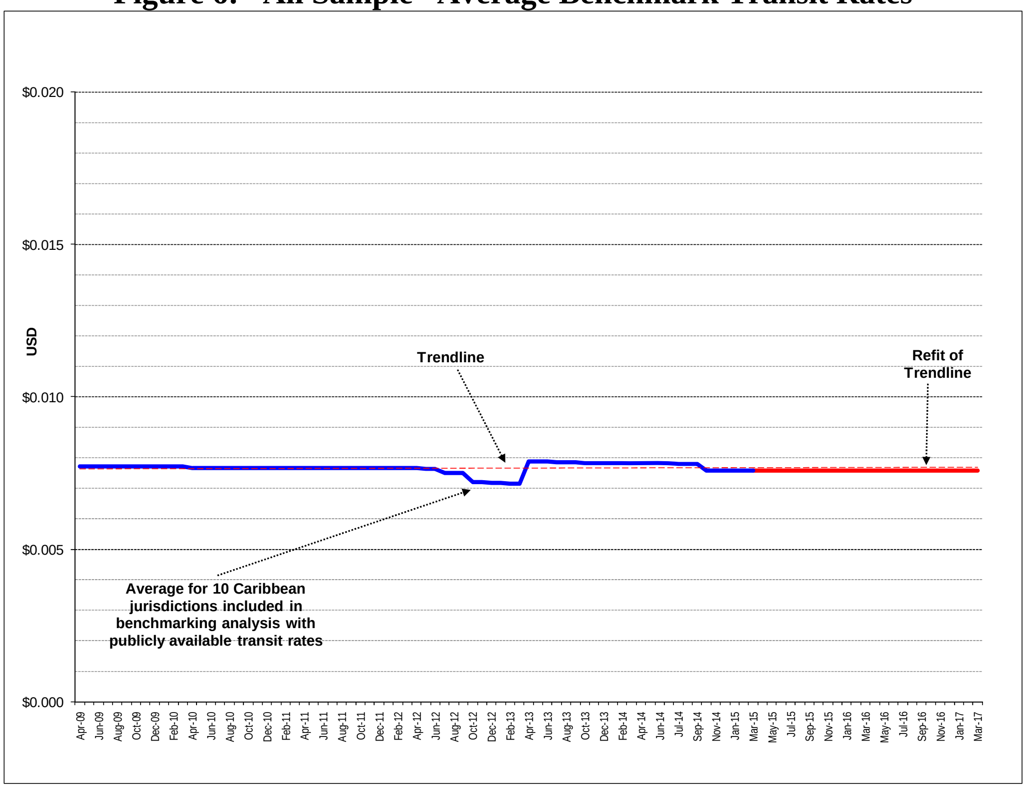
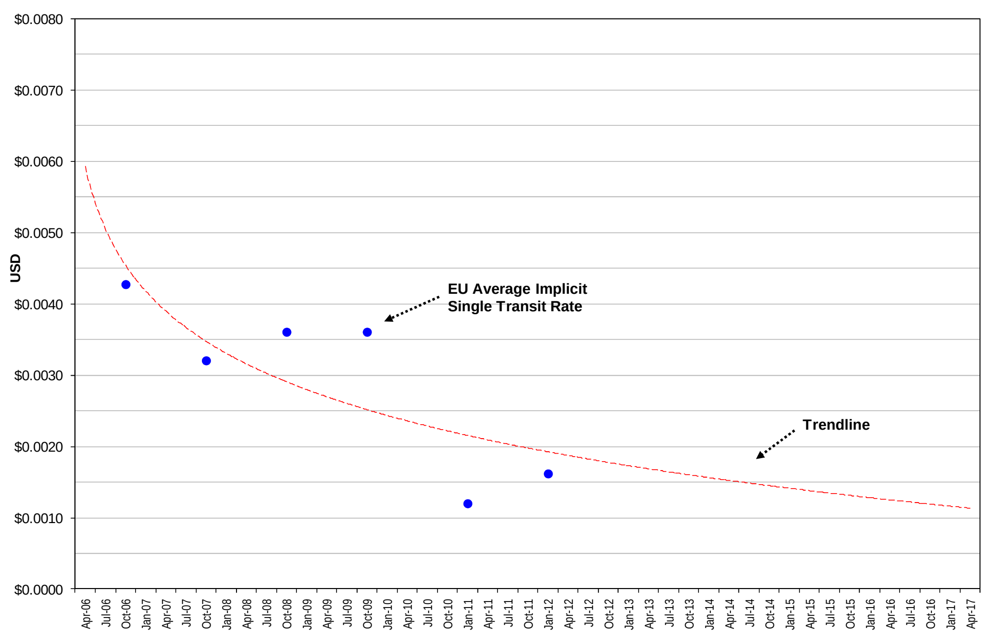


Figure 7 shows the level and trend in average transit rates in Europe.[23] The average implicit transit rate in Europe declined over the period April 2006 to January 2012 from $0.004 to $0.0016, a decline of 60%. The trendline projection suggests that the average implicit transit rate could drop further still to $0.0010 by March 2017.

Figure 7: Average Single Transit Rates in Europe
(Calculated as the difference between Layer 1 and 2 FTRs)
(October 2006 to April 2017)



Based on the above analysis, the Commission is of the preliminary view that the current maximum transit rates (LTR and TSR) of $0.0150 is no longer a reasonable upper limit, and the rate should be decreased. Consequently, here again, while the observed transit levels and trends in other jurisdictions do not provide direct evidence of the underlying cost of transit service in TCI, they nevertheless suggest that an efficient, cost-based transit rates should be no more than about $0.0070.

Question 6: Please comment on whether the observed level and trends in transit rates in the Caribbean region and Europe are consistent with the view that average transit rates are moving closer to the underlying costs of transiting call traffic over a fixed network. If not, explain why not. In responding to this question, please provide

[23] In this case, average transit rates are calculated as the difference between average Layer 1 and Layer 2 FTRs in Europe. A Layer 1 FTR covers to local call termination, whereas a Layer 2 FTR covers a single transit link as well as local call termination. Consequently, the difference between the two captures the transit component and, accordingly, represents the average implicit transit rate.

supporting rationale, including any additional transit rate benchmarking information that may be available that is of relevance to this Consultation, fully explaining all data sources, assumptions and calculations as may be necessary.

4.4 International Termination Rates

The Commission considers that call termination functionality is the same regardless of where a call originates, be it domestic or international. Hence, the costs of call termination service should be the same regardless of the point of origination of a call. Since the Ordinance and Interconnection Regulations require that call termination services be cost-oriented, the Commission is of the preliminary view that domestic and international FTRs and domestic and international MTRs should be equal. Setting domestic and international call termination rates to equivalent levels is common practice and, in fact, this is the case for the vast majority of the jurisdictions included in the Updated Benchmark Sample.

The Commission notes that in TCI, both domestic and international FTRs are currently set at an equivalent level of $0.0300. On the other hand, the current international MTR in TCI is $0.1375, which is substantially higher than the current domestic MTR of $0.0850. However, prior to Decision 2011-2, the international MTR was somewhat lower than the domestic MTR at the time (i.e., $0.15 prior to April 1, 2011).

Question 7: Please comment on whether there is any significant difference in the cost of terminating calls on a fixed or mobile network in TCI depending on whether the call originates domestically or internationally. If so, provide supporting evidence including detailed network diagrams as necessary. In addition, please comment on whether there are any other grounds to support differential domestic and international call termination rates, which supporting rationale, data and examples as necessary.

5 Interconnection Rate Proposals

This Chapter sets out the Proposals. For each of the interconnection rates under review, the Commission has proposed maximum allowable interconnection rates for the fiscal year ("FY") period FY2014-15 to FY2016-17. The proposed maximum allowable rates at the end of FY2016-17 would carry forward beyond that year absent any further interconnection rate review process.

The Commission reiterates that the Proposals set out allowed interconnection rate maxima and, as such, do not way operators from negotiating rates that are below the approved maxima. However, any such negotiated interconnection rate(s) must be offered to all operators on an equal and non-discriminatory basis as required under section 23(1)(c) of the Ordinance and sections 6(1) and 6 (2) of the Interconnection Regulations. Further, as set out in Sections 12 and 13 of the Interconnection Regulations operators shall submit to the Commission new interconnection agreements or material modifications to existing agreements, including those that are below the corresponding maxima.

5.1 Rate Maxima Determination Methodology

The methodology used by the Commission to determine the Proposals set out in this Chapter is the based on the same general approach it used to set the maximum allowable MTRs in Decision 2011-2.[24] The approach involves the following key elements:

i) *Benchmark Sample*: The development of a benchmark sample of interconnection rates which provides a sound and reasonable basis for establishing an appropriate and representative sample of comparable jurisdictions for interconnection rate benchmarking purposes for TCI. The Updated Benchmark Sample described in Annex 1 fulfils this objective.

ii) *Average Benchmark Rate Calculations*: Average benchmark interconnection rates were calculated for each month for the historical period under consideration and also projected to March 2015 based on NRA-established glide paths or other transitional arrangements. Benchmark interconnection rates were converted from local currencies into US dollars ("USD") using US / national currency exchange rates.[25] Benchmark MTR averages were also recalculated on the basis of fiscal years for the entire historical and projected period under consideration – i.e., FY2008-09 to FY 2014-15. In the case of the benchmark FTR and transit rate averages, the period covered in this same respect is FY2009-10 to FY 2014-15.

iii) *Average Benchmark Rate Projections:* The historical and projected fiscal year average benchmark interconnection rates were then statistically projected to FY2016-17 based on the statistical trendlines shown in the previous Chapter. Note that in the

24 See Decision 2011-2, Section 3.1, paragraphs 75 to 85, and the related references therein.

25 Exchange rates obtained from www.xe.com.

case of MTRs, two benchmark indexes are used – i.e., the first is based on the 10 Cost-Based MTRs and the second is based on the All Sample Average of all 14 jurisdictions in the Updated Benchmark Sample. In the case of FTRs and transit rates, one single benchmark index is used in each case – i.e., one that is based on all available jurisdictions in the Updated Benchmark Sample.

iv) *Normalization Adjustments*: In the course of the First MTR Proceeding, a comprehensive sensitivity and normalization analysis of the benchmark sample data was conducted to account for demographic, socio-economic and other environmental differences between the benchmark jurisdictions and TCI. The Commission considers that a similar exercise need not be repeated for the purpose of the present regulatory proceeding given that there is only one additional jurisdiction included in the Updated Benchmark Sample (i.e., increasing the sample size from 13 to 14 jurisdictions). The results of the analysis from the First MTR Proceeding suggested that to take into account demographic, socio-economic and other environmental differences within the MTR benchmark sample at the time:[26]

- an upward normalization adjustment of between $0.0025 to $0.0075 was warranted in the case of the average All Sample MTR, and
- an upward normalization adjustment of roughly $0.0010 was warranted in the case of the average Cost-Based MTR.

In the First MTR Proceeding the upward adjustments were calculated based on March 2012 projected averages of $0.0884 for the All Sample and $0.0810 for the Cost-Based MTRs. In percentage terms, the $0.0025 to $0.0075 All Sample adjustment is equal to 2.8% to 8.5%, while the $0.001 Cost-Based adjustment is equal to 1.2%. Given the differences in scale between MTRs, FTRs and transit rates, the Commission considers that the most appropriate manner to apply the adjustments would be on a percentage basis. The Commission notes that such an application is consistent with the normalization methodology it undertook in the First MTR Proceeding.

The Commission has relied on these above-noted considerations to develop the proposed maximum allowable MTR, FTR and transit rates for the three year forward-looking period FY2014-15, FY2015-16 and FY 2016-17.

5.2 MTR Proposals

As discussed in Section 4.1, the evidence on MTR levels and trends in Caribbean jurisdictions and Europe suggest that the current upper limit of $0.085 for the MTR in TCI should be reduced.

The average All Sample benchmark MTR is trending towards $0.0600 and the average Cost-Based MTR is trending towards $0.0500. As also noted, recently reviewed MTRs in the region have been reduced to much lower levels still on the basis of updated cost analyses.

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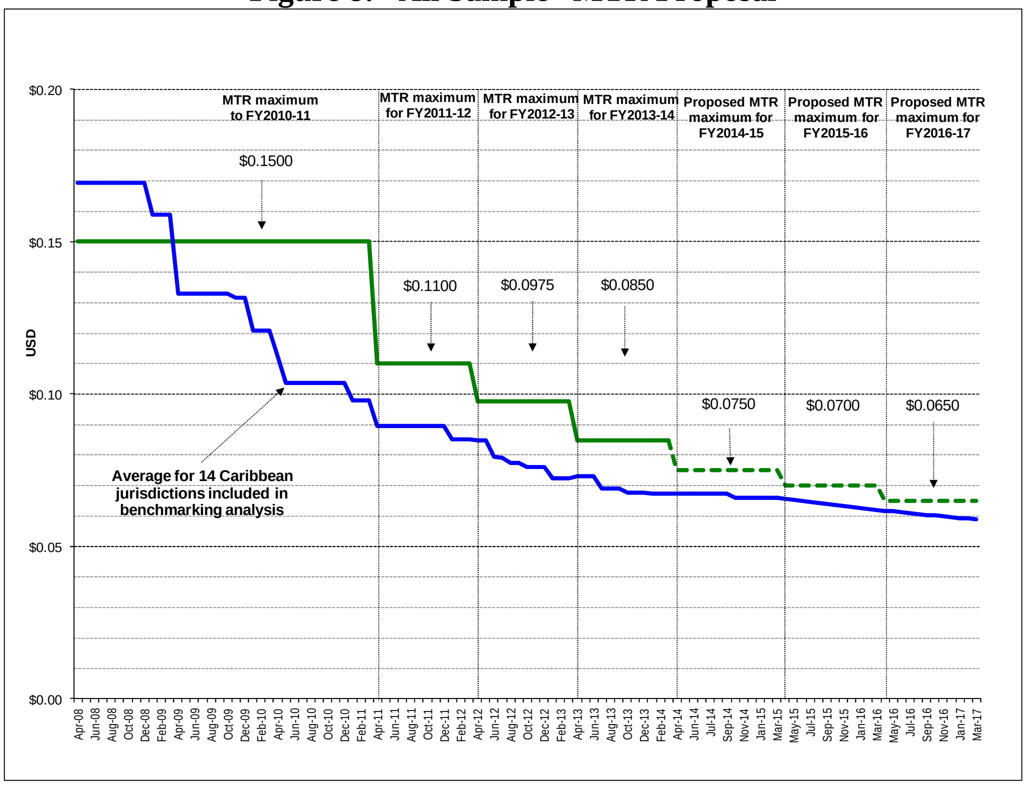
[26] A detailed description of the sensitivity and normalization analysis is provided in Annex C of the Second MTR Consultation Document.

In the case of the MTR, the Commission has developed two proposals. The first is based on the average All Sample MTR (the "All Sample MTR Proposal") and the second is based on the average Cost-Based MTR (the "Cost-Based MTR Proposal"). The two proposals provide upper and lower bounds for what the Commission considers on a preliminary basis to be fair and reasonable maximum allowable MTRs, and that also ensures that the proposed maximum MTRs are above cost – i.e., LRIC plus a proportionate contribution towards the recovery of fixed and common costs.

Figure 8 provides a summary of the All Sample MTR Proposal. Under this proposal, the maximum allowable MTR would decline from the current $0.085 to $0.075 as of April 2014, $0.070 as of April 2015 and $0.065 as of April 2016. As the figure shows, these reductions would leave the resulting MTR maxima above the projected all sample benchmark MTR trendline over the three year period in question.

Figure 8: "All Sample" MTR Proposal

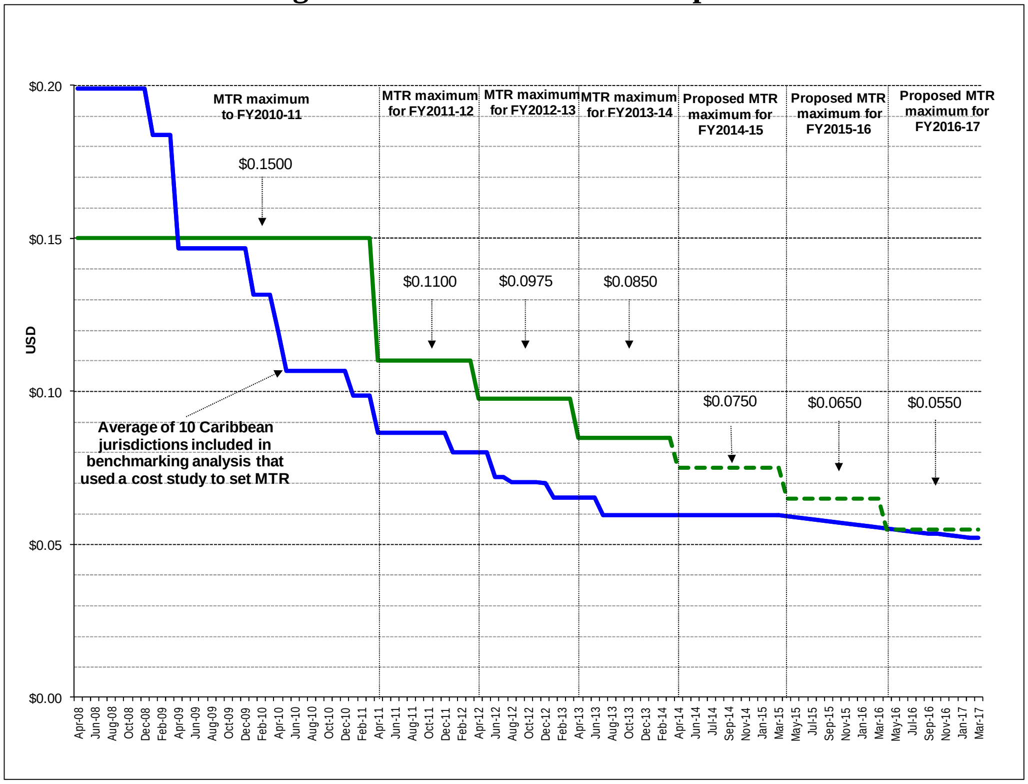


Moreover as shown in Table 3, the differences between proposed maximum allowable rates under the All Sample MTR Proposal and the trendline projection fall either above or within the "all sample" normalization adjustment range of 2.8% to 8.5%. As line d) of Table 3 shows, the smallest differential occurs in FY2016-17, where the difference is 7.8% which falls within the "all sample" normalization adjustment range.

Table 3: "All Sample" Benchmark Results and MTR Proposal Maxima (Fiscal Year Periods)						
	2011-12	**2012-13**	**2013-14**	**2014-15**	**2015-16**	**2016-17**
a) Benchmark Average (actual and projected)	$0.0883	$0.0774	$0.0692	$0.0667	$0.0638	$0.0603
b) TCI MTR	$0.1100	$0.0975	$0.0850			
c) Proposed TCI MTR Maxima				**$0.0750**	**$0.0700**	**$0.0650**
d) % difference (c – a)				12.4%	9.8%	7.8%

Figure 9 provides a summary of the alternative Cost-Based MTR Proposal. Under this proposal, the maximum allowable MTR would decline from the current $0.085 to $0.075 as of April 2014, $0.065 as of April 2015 and $0.055 as of April 2016. As the figure shows, these reductions would leave the resulting MTR maxima above the projected cost-based benchmark MTR trendline over the three year period in question.

Figure 9: Cost-Based MTR Proposal



As shown in Table 4, the differences between proposed rates under the Cost-Based MTR Proposal and the trendline projection are all above the "cost-based" sample normalization adjustment factor of 1.2%. As line d) of the table shows, the smallest differential occurs in

FY2016-17, where the difference is 2.7%, which is above the corresponding "cost-based" sample normalization adjustment factor.

Table 4: "Cost-Based" Benchmark Results and MTR Proposal Maxima (Fiscal Year Periods)						
	2011-12	**2012-13**	**2013-14**	**2014-15**	**2015-16**	**2016-17**
a) Benchmark Average (actual and projected)	$0.0849	$0.0707	$0.0610	$0.0596	$0.0573	$0.0536
b) TCI MTR	$0.1100	$0.0975	$0.0850			
c) Proposed TCI MTR Maxima				**$0.0750**	**$0.0650**	**$0.0550**
d) % difference (c – a)				25.7%	13.4%	2.7%

In the First MTR Proceeding the Commission concluded that it would rely on the All Sample Average for the setting of the maximum allowable MTR and use the Cost-Based Average to ensure that such maxima are above LRIC plus a reasonable allocation of fixed and common costs. Two considerations supporting that approach included: (1) that it was the first interconnection rate review in TCI and, hence, the Commission was minded that a more conservative and cautious approach in reducing MTRs was appropriate at the time; and (2) that cost-based MTRs accounted for about half of the MTRs in the benchmark sample and, hence, they did not constitute a large enough sample on which to rely primarily for the setting of the MTR maxima.

The situation has now changed with respect to the two above-noted considerations in the case of the MTR. With respect to the first consideration, as discussed in Section 3.3, the Commission considers that the MTR maxima reductions resulting from Decision 2011-2 where on balance beneficial. Further reductions, therefore, are also likely to be on balance beneficial. With respect to the second consideration, the Commission notes that, as set out in Annex 1, cost-based MTRs now constitute a significant majority of the sample (i.e., 10 of the 14 benchmark sample jurisdictions). Taking these factors in account as well as recent trends in the MTRs in the Caribbean region, the Commission is of the preliminary view that the Cost-Based MTR Proposal represents the superior option of the two proposals. Moreover, it represents the proposal that best ensures that the MTR in TCI moves to a level that is as close as possible to a LRIC cost standard including a proportionate contribution towards fixed and common costs.

Question 8: Please comment on of the Commission's All Sample and Cost-Based MTR Proposals, including which of the two proposals is preferable, and explain why. To the extent parties believe an alternative MTR proposal would be more appropriate, please describe any such proposals in detail and include supporting rationale and data as may be relevant.

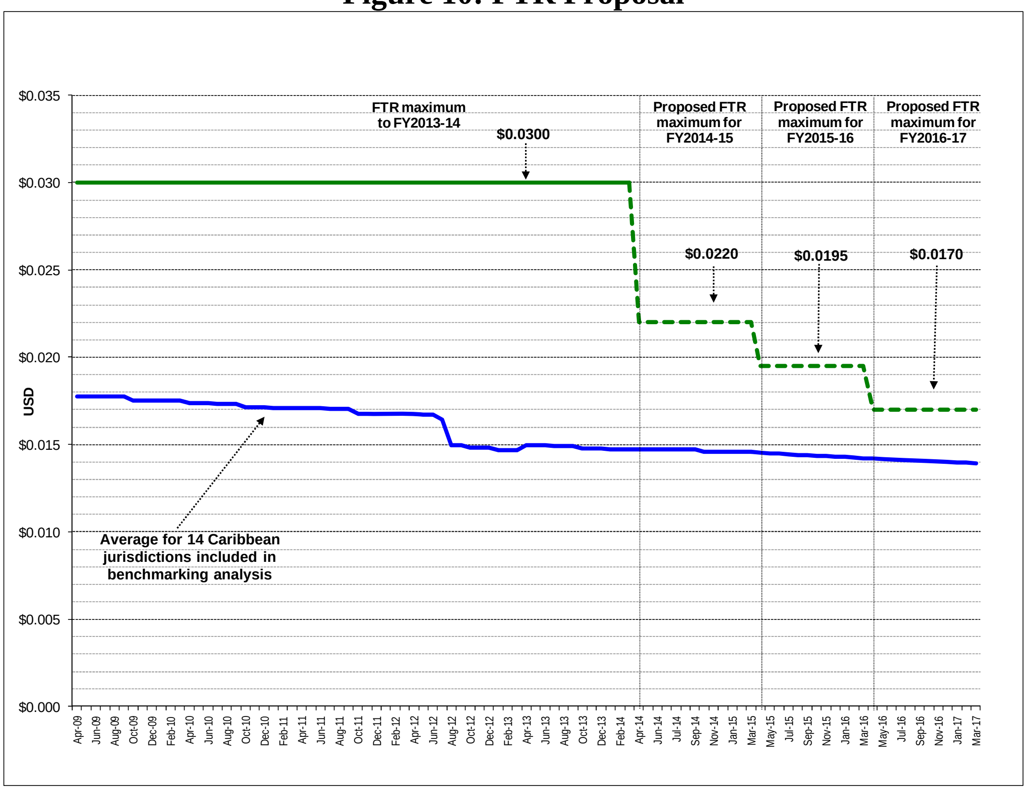
5.3 FTR Proposal

As discussed in Section 4.2, the evidence on FTR levels and trends in Caribbean jurisdictions and Europe suggest that the current FTR of $0.030 in TCI should be reduced. The Average All Sample FTR is trending towards $0.0140, less than half the current rate in TCI. As also noted, recently reviewed FTRs in the region have been reduced to much lower levels still on the basis of updated cost analyses.

For the purpose of developing the FTR Proposal, the Commission considered whether it would (a) rely on the All Sample Average for the setting of the maximum allowable FTR and use the Cost-Based Average to ensure that the proposed maxima are above cost, as in the First MTR Proceeding, or (b) follow the approach proposed above for the MTR and use the Cost-Based Average for both purposes (i.e., for setting the FTR maxima and ensuring they are above cost). In this case, the Commission is of the view that the former approach, which can be considered as more conservative and cautious, is preferable given this is the first time the FTR has been subject to review.

Therefore, FTR Proposal set out in Figure 10, is based on the All Sample Average FTR levels and trends projected out to March 2017. Under the proposal, the allowed upper limit FTR would be reduced from the current level of $0.0300 to $0.0220 as of April 2014, $0.0195 as of April 2015 and $0.0170 as of April 2016. As the figure shows, the proposed FTR maxima consistently fall above the average benchmark FTR projections out to March 2017.

Figure 10: FTR Proposal



As shown in Table 5, the FTR Proposal also satisfies both the "all sample" and "cost-based" sample normalization adjustment guidelines. In the first case, the differences between proposed maxima under the FTR Proposal and the trendline projected "all sample" benchmark average FTRs fall within the "all sample" normalization adjustment range of 2.8% to 8.5%. As line e) of Table 5 shows, the smallest differential in this respect occurs in FY2016-17, where the difference is 20.9% and which is above well above "all sample" normalization adjustment range. In the second case, proposed FTR maxima also exceed the trendline projected "cost-based" benchmark average FTRs by more than the "cost-based" sample normalization adjustment factor of 1.2%. As shown in line f) of the table, the smallest differential in this case is 53.3%.

Table 5: Benchmark Results and FTR Proposal Maxima (Fiscal Year Periods)

	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
a) "All Sample" Benchmark Average (actual and projected)	$0.0169	$0.0154	$0.0148	$0.0146	$0.0144	$0.0141
b) "Cost-Based" Benchmark Average (actual and projected)	$0.0121	$0.0116	$0.0113	$0.0113	$0.0112	$0.0111
c) TCI FTR	$0.0300	$0.0300	$0.0300			
d) Proposed TCI FTR Maxima				**$0.0220**	**$0.0195**	**$0.0170**
e) % difference #1 (d – a)				50.2%	35.7%	20.9%
f) % difference #2 (d – b)				94.9%	73.9%	53.3%

Therefore, given recent trends in the FTRs in the Caribbean region, the Commission is of the preliminary view that the FTR Proposal would ensure that the maximum allowed FTR in TCI is fair and reasonable and also moves to a level that is closer to underlying costs, where costs are based on a LRIC cost standard including a proportionate contribution towards fixed and common costs.

Question 9: Please comment on of the Commission's FTR Proposal. To the extent parties believe an alternative FTR proposal would be more appropriate, please describe any such proposals in detail and include supporting rationale and data as may be relevant.

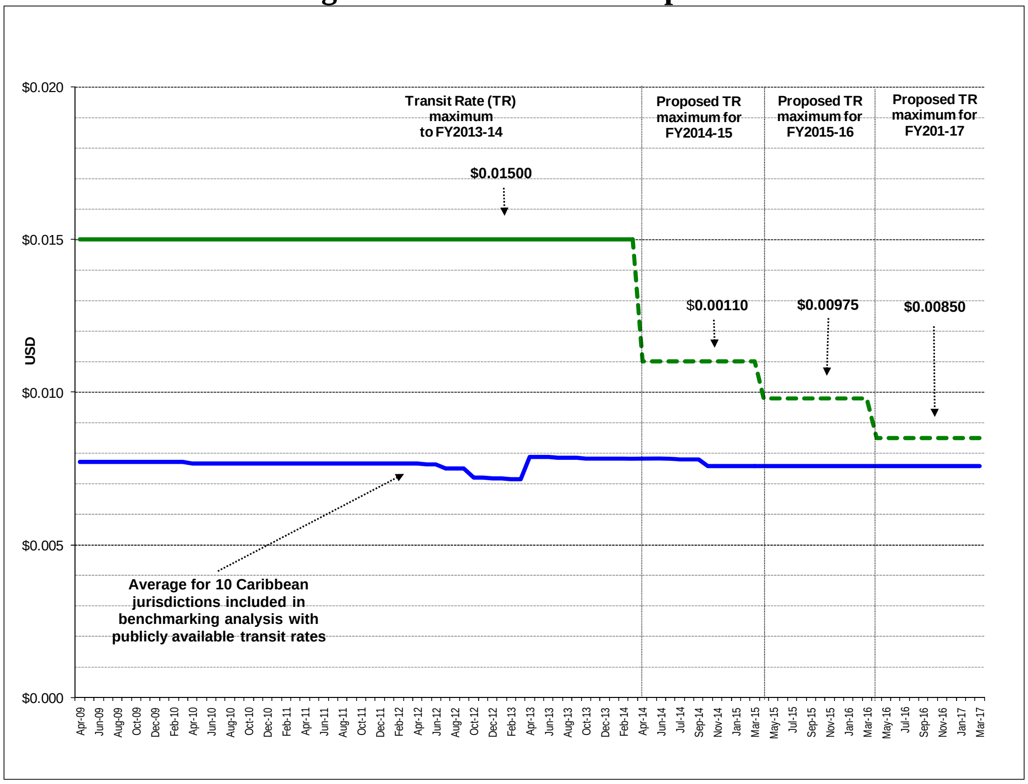
5.4 Transit Rate Proposal

As discussed in Section 4.3, the evidence on transit rate levels and trends in Caribbean jurisdictions and Europe suggest that current transit rate, both for the LTR and TSR, of $0.0150 in TCI should be reduced. The average benchmark transit rate is roughly $0.0075, half the current rate in TCI.

For the purpose of developing the Transit Rate Proposal, the Commission has followed the same approach as in the case of the FTR, and for the same reasons. Consequently, the Transit Rate Proposal relies on the All Sample Average for the setting of the maximum allowable transit rate and uses the Cost-Based Average to ensure that the proposed maxima are above cost.

The resulting Transit Rate Proposal is shown in Figure 11. Under the proposal, the allowed upper limit transit rate would be reduced from the current level of $0.0150 to $0.0110 as of April 2014, $0.00975 as of April 2015 and $0.0085 as of April 2016. At these levels, the proposed transit rate maxima would be effectively half the level of the proposed FTR maxima, consistent with the current rate relationship. As the figure shows, the proposed transit rate maxima consistently fall above the average benchmark transit rate projections out to March 2017.

Figure 11: Transit rate Proposal



As shown in Table 6, the Transit Rate Proposal sets maxima that satisfy both the "all sample" and "cost-based" sample normalization adjustment guidelines. In the first case, the differences between proposed maxima under the Transit Rate Proposal and the trendline projected "all sample" benchmark average transit rates fall within the "all sample" normalization adjustment range of 2.8% to 8.5%. As line e) of Table 6 shows, the smallest differential in this respect occurs in FY2016-17, where the difference is 11.9% and which is above well above "all sample" normalization adjustment range. In the second case, proposed transit rate maxima also exceed the trendline projected "cost-based" benchmark average transit rates by more than the "cost-based" sample normalization adjustment factor of 1.2%. As shown in line f) of the table, the smallest differential in this case is 1.5%.[27]

Table 6: Benchmark Results and Transit Rate Proposal Maxima (Fiscal Year Periods)						
	2011-12	**2012-13**	**2013-14**	**2014-15**	**2015-16**	**2016-17**
a) "All Sample" Benchmark Average (actual and projected)	\$0.0077	\$0.0074	\$0.0078	\$0.0077	\$0.0076	\$0.0076
b) "Cost-Based" Benchmark Average (actual and projected)	\$0.0075	\$0.0075	\$0.0084	\$0.0084	\$0.0084	\$0.0084
c) TCI LTR and TSR	\$0.0150	\$0.0150	\$0.0150			
d) Proposed TCI Transit Rate Maxima				**\$0.0110**	**\$0.00975**	**\$0.0085**
e) % difference #1 (d – a)				42.6%	28.4%	11.9%
f) % difference #2 (d – b)				31.4%	16.5%	1.5%

In view of the observed average benchmark transit rate levels in the Caribbean region, the Commission is of the preliminary view that the Transit Rate Proposal would ensure that the maximum allowed LTR and TSR in TCI would be fair and reasonable and also move closer to a level that is more consistent with a LRIC cost standard including a proportionate contribution towards fixed and common costs.

Question 10: Please comment on of the Commission's Transit Rate Proposal. To the extent parties believe an alternative LTR and/or TSR proposal(s) would be more appropriate, please describe any such proposals in detail and include supporting rationale and data as may be relevant.

5.5 International Termination Rate Proposal

As discussed in Section 5.4, the Commission considers that domestic and international FTRs and MTRs should be equal. This is common practice in many Caribbean jurisdictions. Furthermore, setting common maxima for these rates will ensure that they are properly cost-based as required under the Ordinance and the Interconnection Regulations.

[27] As shown in Table 6, the All Sample average transit rates are lower than the Average of the Cost-Based transit rates as of FY2013-14. This apparently anomalous result can be explained by the fact that the Arbitration Panel decision in Trinidad & Tobago established MTR, FTR and transit rates for the period April 2008 to March 2013 and, consequently, as of April 2013, interconnection rates in Trinidad & Tobago have been negotiated on a confidential basis. As a result, interconnection rates for Trinidad & Tobago are not included in the benchmarking sample as of April 2013. For the calculation of the All Sample and Cost-Based MTR and FTR averages, the impact of these "missing" observations is relatively small because MTRs and FTRs in Trinidad and Tobago were close to the benchmark sample averages in both cases (see figure A1 and A2 in Annex 1). In contrast, for the calculation of the All Sample and especially the Cost-Based transit rate averages, the impact is noticeable because transit rates in Trinidad and Tobago were the lowest in the benchmark sample up to March 2013 (see figure A3 in Annex 1) and also because the number of available jurisdictions with publicly available transit rates is lower than in the case of MTRs and FTRs.

The Commission notes that domestic and international FTRs are currently both set at the same rate of $0.030. Therefore, the Commission considers that the FTR Proposal described above which calls for the three step reduction in the FTR to a level of $0.0170 as of April 2016 should equally apply to the International FTR.

On the other hand, the current international MTR is $0.1375 which is well above the current domestic MTR of $0.085. Consequently, the Commission's All Sample MTR Proposal and its preferred Cost-Based MTR Proposal call for a three step reduction in the maximum allowable MTR to $0.065 and $0.055, respectively, as of April 2016. The Commission considers that both the maximum allowed domestic and international MTRs should be at the same level by that date; however, the glide paths in each case should differ given the differences in the current MTRs.

Table 7 below summarizes the Commission's International FTR and MTR Proposals. Two options apply in the case of the international MTR maxima to correspond with the two domestic MTR Proposals.

Table 7: International FTR and MTR Rate Maxima Proposals
(Fiscal Year Periods)

	2013-14	2014-15	2015-16	2016-17
1) International FTR Proposal	$0.0300	$0.0220	$0.0195	$0.0170
2 a) "All Sample" International MTR Proposal	$0.1375	$0.0100	$0.0800	$0.0650
2 b) "Cost-Based" International MTR Proposals	$0.1375	$0.0100	$0.0750	$0.0550

In view of recent trends in both the FTRs and MTRs in the Caribbean region, the Commission is of the preliminary view that these International FTR and MTR Proposals would ensure that the proposed international maximum allowable FTR and MTR move to a level that is as close as possible to the their corresponding cost, based on a LRIC cost standard, including a proportionate contribution towards fixed and common costs.

As in the case of the MTR Proposals, the Commissions is of the view that the Cost-Based MTR Proposal is superior to the All Sample MTR Proposal. Similarly in this case, the Commission considers that Cost-Based International MTR Proposal to be preferable to the alternative.

Question 11: Please comment on of the Commission's International FTR and MTR Proposals, including which of the two international MTR proposals is preferable to the other, and explaining why. To the extent parties believe an alternative international FTR and/or MTR proposals would be more appropriate, please describe any such proposals in detail and include supporting rationale and data as may be relevant.

6 Proposed Recommendation and Directive

This Chapter sets out the Commission's proposed Recommendation to Government and the corresponding Proposed Directive that the Commission would issue to all affected licensed operators in the event the Government gives legal force to the proposed amendments to the Interconnection Regulations.

6.1 Proposed Recommendation

In its decision in this regulatory proceeding, the Commission will determine what it considers to be fair and reasonable maximum allowable interconnection rates. Subject to the submissions received in response to this Consultation Document, such final allowable maxima may reflect the Proposals described in the previous Section. Assuming the proposed changes are those set out in the Proposals, the Commission intends to make the following recommendation to Government (supported by all documents referenced therein):

> *Whereas the Turks and Caicos Islands ("TCI") Telecommunications Commission (the "Commission") has conducted a comprehensive examination and public consultation on voice telephony interconnection rate levels in TCI, specifically including the level of the Mobile Termination Rate ("MTR"), the Fixed Termination Rate ("FTR") and Transit Rates, and found that each of those rates should be reduced in keeping with the objectives of the Telecommunications Ordinance and the Interconnection and Access to Telecommunications Facilities Regulations (the "Interconnection Regulations").*
>
> *Whereas the Commission has determined that the maximum allowed MTR be reduced from its current level of U.S. $0.0850 per minute to U.S. $0.0750 per minute as of April 1, 2014, U.S. $0.0650 per minute as of April 1, 2015 and U.S. $0.0550 per minute as of April 1, 2016.*
>
> *Whereas the Commission has determined that the maximum allowed FTR be reduced from its current level of U.S. $0.0300 per minute to U.S. $0.0220 per minute as of April 1, 2014, U.S. $0.0195 per minute as of April 1, 2015 and U.S. $0.0170 per minute as of April 1, 2016.*
>
> *Whereas the Commission has determined that the maximum allowed Transit Rates, specifically including the LIME Transit Rate and Transit Service Rate, be reduced from its current level of U.S. $0.01500 per minute to U.S. $0.01100 per minute as of April 1, 2014, U.S. $0.00975 per minute as of April 1, 2015 and U.S. $0.00850 per minute as of April 1, 2016.*
>
> *Whereas the Commission has determined that the maximum allowed International and Domestic Fixed Termination Rates should be equal.*

Whereas the Commission has determined that the maximum allowed International Mobile Termination Rate should be reduced from its current level of U.S. $0.1375 per minute to U.S. $0.0100 per minute as of April 1, 2014, U.S. $0.0750 per minute as of April 1, 2015 and U.S. $0.0550 per minute as of April 1, 2016 and, thereafter, that the maximum allowed International and Domestic Mobile Termination Rates should be equal.

Whereas the Commission concluded that all licensed fixed network operators offering voice telephony services are dominant in the market for fixed wholesale voice telephony services.

Whereas the rationale and supporting evidence for these specific interconnection rate reductions is provided in the Commission's MTR Review Decision [[XX]], dated [[XX]],which resulted from a written public consultation process the Commission conducted on the matter.

Whereas, the consultation was initiated by the Review of Interconnection Rates Consultation Document issued February [[XX]], 2014. In response to same, the Commission received Initial Responses from the three licensed operators in TCI, Cable & Wireless (TCI) Limited ("LIME"), Digicel (TCI) Limited ("Digicel") and Islandcom Telecommunications, Limited ("Islandcom"). In addition, the Commission also received Reply Responses on those Initial Responses from [[XX]].

Therefore, the Commission recommends that Government amend the Interconnections Regulations, as soon as practical so that the first reduction in the interconnection rates can be implemented by April 1, 2014 or as soon as possible thereafter, by replacing the Section 19 section heading and Sections 19(1) and 19(2) of the Interconnections Regulations, which currently reads as follows:

Mobile Carrier Termination

19. (1) A carrier that is licensed to own and operate a mobile telecommunications network is presumed to be dominant in the market for wholesale mobile voice termination services over such network, except insofar as the Commission, upon demonstration by such carrier, determines otherwise.

(2) Except as modified by the Commission, a carrier described in subsection (1) may not charge an interconnecting carrier or service provider a rate for terminating voice telephone calls on such carrier's mobile telecommunications network that exceeds

(i) U.S. $0.1075 per minute (adjusted pro rata for units of less than a minute) after March 31, 2011;

(ii) U.S. $0.0950 per minute (adjusted pro rata for units of less than a minute) after March 31, 2012; and

(iii) U.S. $0.0825 per minute (adjusted pro rata for units of less than a minute) after March 31, 2013.

With the following:

Fixed and Mobile Carrier Termination and Transit

19. (1) A carrier that is licensed to own and operate a fixed and/or mobile telecommunications network(s) is presumed to be dominant in the market for wholesale voice termination and transit services over such network(s), except insofar as the Commission, upon demonstration by such carrier, determines otherwise.

(2) Except as modified by the Commission, a carrier described in subsection (1) may not charge an interconnecting carrier or service provider

(a) a rate for terminating domestic voice telephone calls on such carrier's mobile telecommunications network that exceeds:

(i) U.S. $0.0750 per minute (adjusted pro rata for units of less than a minute) after March 31, 2014;

(ii) U.S. $0.0650 per minute (adjusted pro rata for units of less than a minute) after March 31, 2015; and

(iii) U.S. $0.0550 per minute (adjusted pro rata for units of less than a minute) after March 31, 2016.

(b) a rate for terminating domestic or international voice telephone calls on such carrier's fixed telecommunications network that exceeds:

(i) U.S. $0.0220 per minute (adjusted pro rata for units of less than a minute) after March 31, 2014;

(ii) U.S. $0.0195 per minute (adjusted pro rata for units of less than a minute) after March 31, 2015; and

(iii) U.S. $0.0170 per minute (adjusted pro rata for units of less than a minute) after March 31, 2016.

(c) an associated transit rate for conveying voice telephone calls on such carrier's fixed telecommunications network that exceeds:

(i) U.S. $0.01100 per minute (adjusted pro rata for units of less than a minute) after March 31, 2014;

(ii) U.S. $0.00975 per minute (adjusted pro rata for units of less than a minute) after March 31, 2015; and

(iii) U.S. $0.00850 per minute (adjusted pro rata for units of less than a minute) after March 31, 2016.

(d) a rate for terminating international voice telephone calls on such carrier's mobile telecommunications network that exceeds:

(i) U.S. $0.010 per minute (adjusted pro rata for units of less than a minute) after March 31, 2014;

(ii) U.S. $0.075 per minute (adjusted pro rata for units of less than a minute) after March 31, 2015; and

(iii)U.S. $0.055 per minute (adjusted pro rata for units of less than a minute) after March 31, 2016.

(e) the maximum allowable international and domestic mobile network voice telephone call termination rates should be equal after March 31, 2016.

The Commission also considered whether any changes to Digicel's License would be required to put into effect the dominance designation in its case with respect to wholesale voice termination services over Digicel's fixed network. In this respect, the Commission notes that the above-noted recommended changes to the Interconnection Regulations would ensure that carrier that is licensed to own and operate a fixed and mobile telecommunications network, as in Digicel's case, would be designated as dominant in the market for wholesale voice termination services over both its fixed and mobile networks. In addition, section 17 of Digicel's Licence requires that it comply with the Interconnection Regulations. Consequently, on a preliminary basis, the Commission considers that there is no additional requirement to amend Digicel's License to bring into effect any changes in the domestic or international FTR maxima that may result from this proceeding in Digicel's case given that the recommended changes to the Interconnections Regulations are sufficient for this purpose.

6.2 Proposed Commission Directive

Assuming the Proposed Recommendation or a modified version of the Proposed Recommendation is given legal force by Government, the Commission proposes to issue the following Directive to LIME, Digicel and Islandcom immediately after the amended Interconnection Regulations come into force:

> *The Commission directs Cable & Wireless (TCI) Limited ("LIME"), Digicel (TCI) Limited ("Digicel") and Islandcom Telecommunications, Limited ("Islandcom") to amend the Tariff Schedule in their respective interconnection agreements to reflect the interconnection rate maxima approved by the amended Interconnection Regulations. The respective changes should be effective on the date stipulated in the amended Interconnection Regulations.*
>
> *Therefore, LIME, Digicel and Islandcom are hereby directed to file for approval by the Commission an amendment to the Tariff Schedule of their current interconnection agreements within 14 days of the date of this Directive.*

Question 12: Please provide comments on the Commission's Proposed Recommendation to Government and the associated Directive, along with supporting rationale for any proposed changes to either the Recommendation or Directive.

Question 13: Please provide comments on the Commission's preliminary view that with the Proposed Recommendation to Government there would be no additional requirement to amend Digicel's Licence to bring into effect any changes to the FTR maxima resulting from this proceeding. If you disagree, provide the supporting rationale and explain which specific provisions in Digicel's Licence would have to be modified in your opinion.

7 Other Issues

7.1 Flow through of MTR changes to LIME's Retail Fixed-to-Mobile Call Rates

Under Telecommunications Decision 2009-4, *Decision on the Second Price Cap Regime*, issued 18 February 2009, LIME was required to reduce its fixed-to-mobile ("FTM") domestic calling rate in lock-step with any reductions in the MTR.[28]

The Commission completed a review of the Second Price Cap Regime when it issued Telecommunications Decision 2013-3, *Fixed Services Price Regulation Review Decision* on 27 March 2013. In Decision 2013-3, the Commission decided to forbear from regulating many of LIME's retail fixed telecommunications services. However, the Commission maintained a price cap on the rates of several of LIME's retail fixed services, including the FTM, which is currently capped at 30.75¢ per minute. Given the FTM rate remains subject to price cap regulation, LIME will be required to reduce the FTM rate cap in lock-step with any reductions in the maximum allowable MTR as a result of this regulatory proceeding.

Assuming the MTR Proposal as set out in this Consultation Document is adopted by the Commission, LIME would be required to implement the following equivalent reductions in its FTM rate:

i) After March 31, 2014 and concurrent with the first mandated reduction in the MTR maxima, LIME's FTM rate would to be reduced by $0.010 (i.e., the new FTM price cap would be 29.75¢ per minute).

ii) After March 31, 2015 and concurrent with the second mandated reduction in the MTR maxima, LIME's FTM rate is to be reduced by $0.010 (i.e., the new FTM price cap would be 28.75¢ per minute).

iii) After March 31, 2016 and concurrent with the third mandated reduction in the MTR maxima, LIME's FTM rate is to be reduced by $0.010 (i.e., the new FTM price cap would be 27.75¢ per minute).

7.2 Future Review

The Commission expects to again review interconnection rates in TCI in late 2016. This would provide the opportunity, if deemed necessary and appropriate at the time, to establish new interconnections rates beginning April 2017.

[28] Decision 2009-4, page 17, footnote 15.

Question 14: Please provide comments on the proposed flow through of any approved MTR changes to LIME's retail FTM call rates, the planned timing of the next interconnection rate review, and any other matters relevant to the Commission's review of the interconnection rates in TCI.

Annex 1: Benchmarking Summary

The updated benchmarking analysis used in the present regulatory proceeding follows the same approach used in the First MTR Proceeding, the details of which are described in Annexes A and B of the November 2010 MTR ConDoc. Further minor adjustments to the approach were also made in Decision 2011-2, which are described therein. Consequently, this Annex provides a high-level summary of the benchmarking approach and also describes all substantive changes and updates to the approach for the purposes of the present regulatory proceeding.

Selection of Caribbean Jurisdictions

In the First MTR Proceeding the Commission established six criteria,[29] all of which must be satisfied before a jurisdiction is included in the benchmark sample (the "Selection Criteria"). These criteria were developed for the purpose of selecting jurisdictions for inclusion in the MTR benchmarking analysis. The Commission considers that they continue to be appropriate for the present regulatory proceeding in relation to MTRs. Furthermore, the Commission also considers that the same set of jurisdictions can also be used for the purpose of benchmarking FTR and transit rates. In the Commission's view, to the greatest extent possible, the same set of jurisdictions should be used for FTR and transit rate benchmarking purposes as for MTR benchmarking purposes.

Therefore, the Commission is of the preliminary view that the Selection Criteria provide a sound and reasonable basis for establishing an appropriate and representative sample of comparable jurisdictions for interconnection rate benchmarking purposes for TCI. The selection criteria allow the establishment of a consistent benchmarking sample of reasonable breadth (thereby limiting the influence on the results on any one jurisdiction) while at the same time maintaining an appropriate degree of comparability to TCI.

Based on the Selection Criteria, the following Caribbean jurisdictions are included in the Updated Benchmarking Sample:

- Anguilla,
- Aruba,

[29] 1. *Regional Geography* – only jurisdictions in the Caribbean Region included;

2. *Physical Geography* – only island nations or jurisdictions included;

3. *Calling Party Pays ("CPP") versus Receiving Party Pays ("RPP") Regimes* – only full CPP regime jurisdictions included;

4. *Number of Operators* – only multi mobile operator jurisdictions included;

5. *Availability of MTR information* – only jurisdictions where the MTR is publicly available and verifiable by the Commission included; and

6. *Non-Confidentiality of MTR* – only jurisdictions where the MTR are not claimed to be confidential by all operators included.

- British Virgin Islands (BVI),
- Cayman Islands,
- Dominican Republic,
- Dominica (ECTEL Member-State),
- Grenada (ECTEL Member-State),
- St. Kitts and Nevis (ECTEL Member-State),
- St. Lucia (ECTEL Member-State),
- St. Vincent and the Grenadines (ECTEL Member-State),
- Guadeloupe and Martinique (French West Indies)
- St. Martin and St. Bartholomew (French West Indies)
- Jamaica, and
- Trinidad & Tobago.

Inclusion of Jamaica

Jamaica is the only new addition compared to the benchmarking sample included in Decision 2011-2. Jamaica had been excluded in the First MTR Proceeding because MTRs in the country were commercially confidential at the time. Jamaican MTRs are now publicly available and verifiable. In fact, the Office of Utilities Regulation recently issued a series of decisions on interconnection rates for Jamaica.[30] These interconnection rates have been included in the Updated Benchmarking Sample.

Treatment of French West Indies

In Decision 2011-2, for the purpose of calculating the "all sample" and "cost-based" benchmark MTR averages, the Commission treated FWI as a single jurisdiction (i.e., treating Guadeloupe and Martinique and St. Martin and St. Bartholomew as one observation). On the other hand, for the supporting sensitivity analysis included in Decision 2011-2, FWI was also treated as two observations given the significantly different demographic, socio-economic and environmental characteristics in Guadeloupe and Martinique compared to St. Martin and St. Bartholomew. The results of the sensitivity analysis were used to provide a normalization adjustment factor to ensure that the final maxima were set at fair and reasonable levels. In addition, the sensitivity analysis of cost-based jurisdiction MTRs was also used to ensure the final MTR maxima were above LRIC including a proportionate contribution towards the recovery of fixed and common costs.

In the First MTR Proceeding, Digicel argued, among other things, that the two FWI jurisdictions are subject to a single regulator[31] and, consequently, that treating them as two observations

[30] See: http://www.our.org.jm/ourweb/sectors/telecommunications.

[31] The French regulator: Autorité de régulation des communications électroniques et des postes ("ARCEP").

would place excessive weight on the cost-based MTR approach adopted by that one regulator. The Commission had initially treated them as two observations. However, in Decision 2011-2, the Commission agreed to combine the two jurisdictions as proposed by Digicel so as to reduce the weight of FWI in the overall and cost-based benchmark MTR averages.[32] As noted above, the Commission otherwise continued to treat them as two observations for sensitivity and normalization analysis purposes.

For the present regulatory proceeding the Commission proposes to treat FWI as two rather than a single observation for several reasons. For one, a key objective of the present interconnection rate review, as also was the case in the First MTR Proceeding, is to ensure that interconnection rates in TCI are set as close as possible to LRIC plus a proportionate contribution to fixed and common costs. Consequently, the greater the number of cost-based benchmark MTR jurisdictions included the sample, the better it will serve this objective. As well, the Commission does not consider that treating FWI as two jurisdictions would place excessive weight on the FWI rates. The two FWI jurisdictions are subject to the same regulator, but the same can be said of the five ECTEL Member States who are under a common regulatory regime. If the two FWI jurisdictions are treated as one for this reason, a similar argument could be made to also treat the five ECTEL Member States as one observation. However, the Commission does not consider this to be a valid reason for consolidating observations. Furthermore, the vintage of the cost studies should also be taken into account. The cost studies used in the case of the FWI jurisdictions are more recent than those used in the ECTEL jurisdictions (see Table A1 below). In fact, cost studies used to set rates for the five ECTEL Member States are effectively outdated and, as a result, are no longer based on forward-looking technologies and costs. Consequently, the Commission considers that treating FWI as a single observation while treating ECTEL Member States as five observations would have the effect of placing excessive weight on the ECTEL Member States. Therefore, for the purpose of calculating the “all sample” and, where relevant, "cost-based" benchmark averages, the Commission has treated Guadeloupe & Martinique and St. Martin & St. Bartholomew as two separate benchmark sample observations.

Calculation of Benchmark Averages

MTR Averages

Historical monthly MTRs were collected for each jurisdiction included in the Updated Benchmark Sample for the period April 2008 to January 2014. In addition, MTR projections through to March 2015 were determined based on NRA-established glide paths or transitional arrangements. Further MTR projections to March 2017 were estimated using best-fit statistical regression analysis.

All Sample versus Cost-Based Average

As set out in Table A1, ten of the 14 jurisdictions included in the Updated Benchmarking Sample have MTRs which have been set on the basis of a costing study of one form or another, including

[32] Decision 2011-2, paragraph 59 and 60.

pure LRIC, LRIC+ or FAC. These 10 jurisdictions, which are identified in Table A1 below, are used to calculate the average "Cost-Based" MTR.

As noted above, the Commission has also taken into account the vintage of the cost study and underlying cost data used in each cost-based jurisdiction. As shown in Table A1, for instance, while the MTRs in the five ECTEL jurisdictions are all cost-based (i.e., using LRIC+), the ECTEL cost studies themselves are now six years old and the underlying costing information at least seven years old. In fact, it appears that the ECTEL cost studies were based on 2.5G mobile technology and, consequently, they are no longer reflective of current or forward looking mobile technology. Indeed, the results of the ECTEL cost studies are well out of line with more recently conducted cost studies conducted in the Cayman Islands, Jamaica, Guadeloupe & Martinique and St. Barthelemy & St. Martin. Further, the Cayman Islands' cost study breaks out 2G and 3G technology-based MTRs and the results demonstrate that 3G costs are significantly lower than 2G costs.[33]

Table A1: Summary of Cost-Based MTRs

Jurisdiction	Cost Basis for MTR	Year in which Cost Study reviewed/	Estimate of average year of data for
Cayman Islands	Pure LRIC	2012	2011
Dominica	LRIC+	2008	2007
Grenada	LRIC+	2008	2007
Guadeloupe & Martinique	Pure LRIC	2010	2009
Jamaica	LRIC+	2012	2011
St. Barthelemy & St. Martin	Pure LRIC	2010	2009
St. Kitts & Nevis	LRIC+	2008	2007
St. Lucia	LRIC+	2008	2007
St. Vincent	LRIC+	2008	2007
Trinidad & Tobago	FAC	2008	2008
AVERAGE		**2009Q1**	**2008Q1**

Benchmark FTR and Transit Rate Averages

The same information was collected for FTRs and transit rates. In this case, however, consistent information across the jurisdictions was only available starting in April 2009. Otherwise, FTR and transit rate data was collected though to January 2014 and also projected through to March 2015 based on NRA-established glide paths or transitional arrangements. Projections to March 2017 were estimated using best-fit statistical regression analysis.

In the case of the FTR and transit rate data collected for the present review, most of the rates apply to the LIME operator in the jurisdiction. The transit rates correspond directly to LIME's LTR and, in some cases, its TSR. In any event, the Commission considers that these two transit services are effectively equivalent in terms of functionality and costs. Therefore, for the purpose

33 http://www.icta.ky/da_fllric4.php.

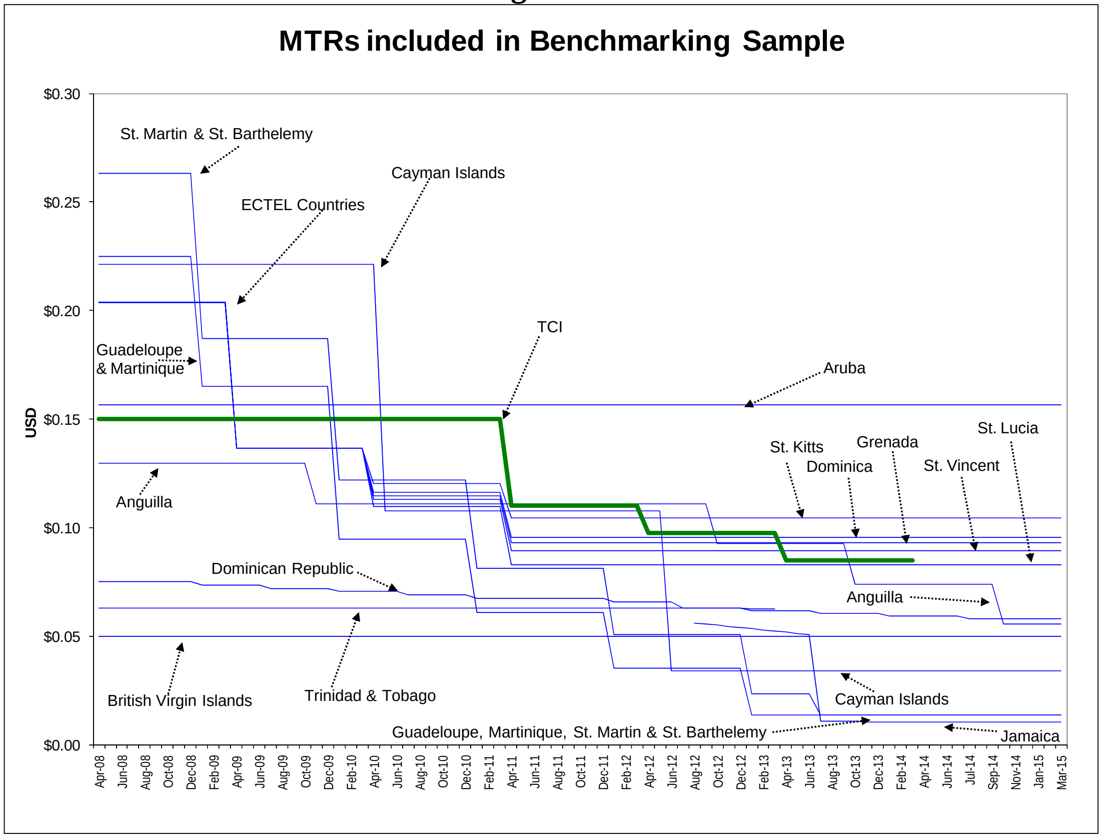
of this interconnection rate review process they are treated as one in the same. In cases where LIME is not present the FTR and transit rate are those applicable to the fixed incumbent.

The FTR and Transit Rate results presented below are based on "all sample" benchmark rate averages, which in all cases are calculated on an unweighted basis. Further, for the same reasons noted above, FWI is treated as two observations when calculating FTRs and transit rate benchmark averages.

Benchmarking Sample Details

Figure A1 provides a summary of the monthly benchmark MTRs for the all 14 jurisdictions included in the Updated Benchmark Sample and, for comparison purposes, also TCI. In addition, Table A2 provides a summary of fiscal-year average MTRs for the same set of jurisdictions.

Figure A1



Note that in Table A2 there are no observations for Jamaica for the first 4 fiscal years. As noted above, this is because the MTRs were confidential during that period. Similarly, the Arbitration Panel decision that established rates in Trinidad & Tobago expired in March 2013, after which rates have been negotiated on a confidential basis – hence there are no observations starting April 2013 for Trinidad and Tobago (this also applies in the case of FTRs and transit rates).

Table A2: Average MTRs by Fiscal Year

	FY08-09	FY09-10	FY10-11	FY11-12	FY12-13	FY13-14	FY14-15
Anguilla	0.1296	0.1219	0.1111	0.1111	0.1019	0.0833	0.0655
Aruba	0.1564	0.1564	0.1564	0.1564	0.1564	0.1564	0.1564
British Virgin Islands	0.0500	0.0500	0.0500	0.0500	0.0500	0.0500	0.0500
Cayman Islands	0.2214	0.2214	0.1171	0.1076	0.0463	0.0341	0.0341
Dominica	0.2037	0.1367	0.1161	0.0956	0.0956	0.0956	0.0956
Dominican Republic	0.0746	0.0720	0.0690	0.0671	0.0634	0.0605	0.0585
Grenada	0.2037	0.1367	0.1148	0.0930	0.0930	0.0930	0.0930
Guadelupe & Martinique	0.2101	0.1475	0.0863	0.0545	0.0298	0.0135	0.0135
St. Barthelemy & St. Martin	0.2442	0.1708	0.1116	0.0736	0.0440	0.0161	0.0135
Jamaica					0.0543	0.0208	0.0105
St. Kitts & Nevis	0.2037	0.1367	0.1205	0.1043	0.1043	0.1043	0.1043
St. Lucia	0.2037	0.1367	0.1098	0.0830	0.0830	0.0830	0.0830
St. Vincent	0.2037	0.1367	0.1130	0.0894	0.0894	0.0894	0.0894
Trinidad & Tobago	0.0630	0.0630	0.0630	0.0630	0.0628		

Figure A2 provides a summary of the monthly benchmark FTRs and Table A3 provides a summary of fiscal-year average FTRs. Note that in the case of Figure A2, which shows benchmark FTRs, Aruba is not included because its FTR of $0.051 is so much higher than all other jurisdictions, its inclusion would distort the scaling for the figure. As explained above, there are no observations starting April 2013 for Trinidad and Tobago because from that date the rates have been negotiated on a confidential basis.

Figure A2

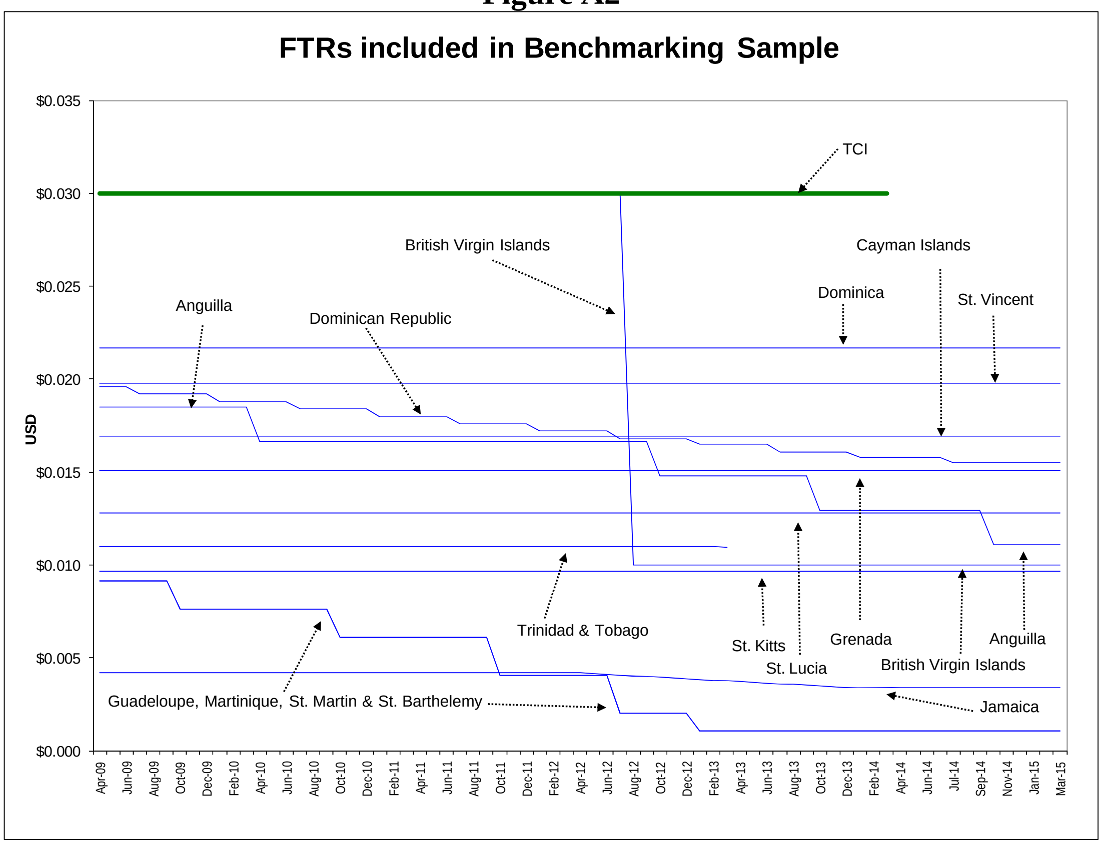


Table A3: Average FTRs by Fiscal Year

	FY09-10	FY10-11	FY11-12	FY12-13	FY13-14	FY14-15
Anguilla	0.0185	0.0167	0.0167	0.0157	0.0139	0.0121
Aruba	0.0511	0.0511	0.0511	0.0511	0.0511	0.0511
British Virgin Islands	0.0300	0.0300	0.0300	0.0167	0.0100	0.0100
Cayman Islands	0.0170	0.0170	0.0170	0.0170	0.0170	0.0170
Dominica	0.0217	0.0217	0.0217	0.0217	0.0217	0.0217
Dominican Republic	0.0192	0.0184	0.0176	0.0168	0.0161	0.0156
Grenada	0.0151	0.0151	0.0151	0.0151	0.0151	0.0151
Guadelupe & Martinique	0.0084	0.0069	0.0051	0.0023	0.0011	0.0011
St. Barthelemy & St. Martin	0.0084	0.0069	0.0051	0.0023	0.0011	0.0011
Jamaica	0.0042	0.0042	0.0042	0.0040	0.0035	0.0034
St. Kitts & Nevis	0.0097	0.0097	0.0097	0.0097	0.0097	0.0097
St. Lucia	0.0128	0.0128	0.0128	0.0128	0.0128	0.0128
St. Vincent	0.0198	0.0198	0.0198	0.0198	0.0198	0.0198
Trinidad & Tobago	0.0110	0.0110	0.0110	0.0110		

Figure A3 provides a summary of the monthly benchmark transit rates and Table A4 provides a summary of fiscal-year average FTRs. As explained above, there are no observations starting April 2013 for Trinidad and Tobago because from that date the rates have been negotiated on a confidential basis. For the same reason, there are no observations for Aruba and BVI because there are confidential. As well, Guadeloupe & Martinique and St. Martin & St. Bartholomew are not included because transit rates were not regulated in the French West Indies during the period in question and, hence, are commercially confidential.

Figure A3

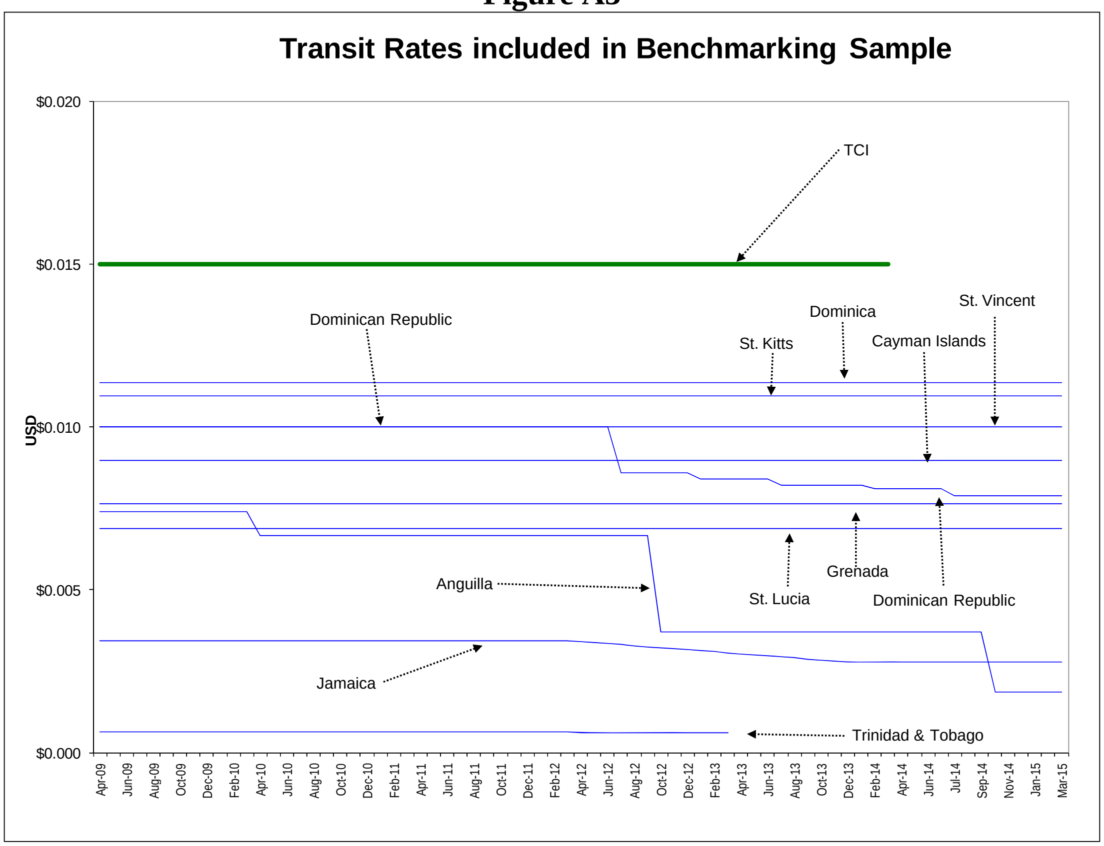


Table A4: Average Transit Rates by Fiscal Year

	FY09-10	FY10-11	FY11-12	FY12-13	FY13-14	FY14-15
Anguilla	0.0074	0.0067	0.0067	0.0052	0.0037	0.0028
Cayman Islands	0.0090	0.0090	0.0090	0.0090	0.0090	0.0090
Dominica	0.0114	0.0114	0.0114	0.0114	0.0114	0.0114
Dominican Republic	0.0100	0.0100	0.0100	0.0089	0.0082	0.0080
Grenada	0.0076	0.0076	0.0076	0.0076	0.0076	0.0076
Jamaica	0.0034	0.0034	0.0034	0.0032	0.0029	0.0028
St. Kitts & Nevis	0.0110	0.0110	0.0110	0.0110	0.0110	0.0110
St. Lucia	0.0069	0.0069	0.0069	0.0069	0.0069	0.0069
St. Vincent	0.0100	0.0100	0.0100	0.0100	0.0100	0.0100
Trinidad & Tobago	0.0006	0.0006	0.0006	0.0006		

Question 15: Please comment on the proposed Updated Benchmarking Sample and benchmark interconnection rate average calculation methodology. If alternative proposals are made, provide supporting rationale, and data and references where necessary.

Annex 2: List of Consultation Questions

Question 1: Please comment on the Commission's proposed legal basis and procedure for implementing any revisions to the maximum allowable interconnection rates under review.

Question 2: Please comment on the Commission's proposal to recommend to the Government that the Interconnection Regulations be amended so that all fixed carriers are presumed to be dominant with respect to termination on their respective fixed network. If you disagree with the proposal, provide supporting rationale.

Question 3: Please comment on the Commission's policy considerations and regulatory proposals emanating from Decision 2011-2 in relation to the present review of MTR, FTR and transit rate levels, including:

i) the principle that interconnection rates should, as best as possible, reflect LRIC plus a contribution to fixed and common costs;

ii) lower interconnection rates should result in end-user benefits;

iii) reliance on benchmarking for the purpose of setting maximum allowable interconnection rates;

iv) reliance on the principle of rate symmetry for interconnection rates; and

v) phasing in any reductions in the maximum allowable interconnection rate found to be necessary and appropriate.

Where alternative proposals are offered in relation to any one of these issues, please provide supporting evidence and rationale in each case.

Question 4: Please comment on whether the observed downward trend in MTRs in the Caribbean region and Europe are consistent with the view that average MTRs in those regions are moving closer to the underlying costs of terminating calls on mobile networks (based on the latest available mobile network technologies). If not, explain why not. In responding to this question, please provide supporting rationale, fully explaining all data sources, assumptions and calculations as may be necessary.

Question 5: Please comment on whether the observed downward trend in FTRs in the Caribbean region and Europe are consistent with the view that average FTRs in those regions are moving closer to the underlying costs of terminating calls on fixed networks (based on the latest available fixed network technologies). If not, explain why not. In addition, please provide supporting rationale, including any additional FTR benchmarking information that may be available that is of relevance to this Consultation, fully explaining all data sources, assumptions and calculations as may be necessary.

Question 6: Please comment on whether the observed level and trends in transit rates in the Caribbean region and Europe are consistent with the view that average transit rates are moving closer to the underlying costs of transiting call traffic over a fixed network. If not, explain why not. In responding to this question, please provide supporting rationale, including any additional transit rate benchmarking information that may be available that is of relevance to this Consultation, fully explaining all data sources, assumptions and calculations as may be necessary.

Question 7: Please comment on whether there is any significant difference in the cost of terminating calls on a fixed or mobile network in TCI depending on whether the call originates domestically or internationally. If so, provide supporting evidence including detailed network diagrams as necessary. In addition, please comment on whether there are any other grounds to support differential domestic and international call termination rates, which supporting rationale, data and examples as necessary.

Question 8: Please comment on of the Commission's All Sample and Cost-Based MTR Proposals, including which of the two proposals is preferable, and explain why. To the extent parties believe an alternative MTR proposal would be more appropriate, please describe any such proposals in detail and include supporting rationale and data as may be relevant.

Question 9: Please comment on of the Commission's FTR Proposal. To the extent parties believe an alternative FTR proposal would be more appropriate, please describe any such proposals

Question 10: Please comment on of the Commission's Transit Rate Proposal. To the extent parties believe an alternative LTR and/or TSR proposal(s) would be more appropriate, please describe any such proposals in detail and include supporting rationale and data as may be relevant.

Question 11: Please comment on of the Commission's International FTR and MTR Proposals, including which of the two international MTR proposals is preferable to the other, and explaining why. To the extent parties believe an alternative international FTR and/or MTR proposals would be more appropriate, please describe any such proposals in detail and include supporting rationale and data as may be relevant.

Question 12: Please provide comments on the Commission's Proposed Recommendation to Government and the associated Directive, along with supporting rationale for any proposed changes to either the Recommendation or Directive.

Question 13: Please provide comments on the Commission's preliminary view that with the Proposed Recommendation to Government there would be no additional requirement to amend Digicel's Licence to bring into effect any changes to the FTR maxima resulting from this proceeding. If you disagree, provide the supporting rationale and explain which specific provisions in Digicel's Licence would have to be modified in your opinion.

Question 14: Please provide comments on the proposed flow through of any approved MTR changes to LIME's retail FTM call rates, the planned timing of the next interconnection rate review, and any other matters relevant to the Commission's review of the interconnection rates in TCI.

Question 15: Please comment on the proposed Updated Benchmarking Sample and benchmark interconnection rate average calculation methodology. If alternative proposals are made, provide supporting rationale, and data and references where necessary.