Telecommunications Decision 2011 – 2

Decision on the
Mobile Termination Rate Review

issued by the

Turks and Caicos Islands
Telecommunications Commission

on

January 24, 2011

Contents

Summary

In this Decision, the Telecommunications Commission (the "Commission") makes a determination to reduce the current mobile termination rate ("MTR") in the Turks and Caicos Islands ("TCI") in a phased manner over the course of three years. The MTR is the wholesale price that operators pay to terminate a call on a mobile operator's network and as such is an integral component of all mobile calls. The Commission expects the MTR reductions to result in significant consumer benefits, including in the form of lower retail prices.

The Commission initiated a public consultation in July 2010 to review the current MTR in TCI because it was of the preliminary view that the current upper limit (maximum) of $0.15 is relatively high and should therefore be reduced. The consultation process allowed interested parties to provide comments in response to two comprehensive Consultation Documents issued by the Commission, which involved proposals to reduce the MTR maxima. All mobile operators participated actively in the consultation process, submitting a total of 8 comment and reply documents.

The Commission adopted a detailed and comprehensive benchmarking approach to determine fair and reasonable MTR maxima based on average MTRs in a dozen Caribbean jurisdictions, normalized to take into account various demographic, socio-economic and other environment differences between the benchmark jurisdictions and TCI.

The $0.15 MTR has been in effect in TCI since January 2008. Based on its analysis, the Commission found that for fiscal year ("FY")2008-09, the MTR in TCI was about 8% below the Caribbean average. However, the Caribbean average MTR has continued to decline, so that currently, for FY2010-11, TCI's MTR is about 40% higher than the Caribbean average. Without any change in the TCI MTR, the gap would grow larger and TCI would increasingly become a regional outlier in this respect.

In this context, the Commission has determined that reductions in the current MTR maximum of ***$0.15*** *per minute in TCI should be phased in over the course of three years, such that the MTR maxima for all mobile operators in TCI should be as follows:*

- *i)* *After March 31, 2011:* ***$0.1100***
- *ii)* *After March 31, 2012:* ***$0.0975***
- *iii)* *After March 31, 2013:* ***$0.0850***

Under the current price cap regime for regulated fixed-line services, reductions in the MTR must be flowed through simultaneously in the form equal reductions to the FTM calling rate. Thus, consumers will benefit from FTM rate reductions as a result of the above-noted MTR reductions. The Commission also expects potential reductions in average mobile-to-mobile retail prices (especially for "off-net" calling), among other potential consumer benefits of MTR reductions.

The Commission intends to issue a Recommendation to Government requesting that modifications be made to Section 19(2) of the Interconnection and Access to Telecommunications Facilities Regulations as quickly as possible in order to implement the Commission's MTR maxima determination reached in this Decision. The Commission intends to issue the Recommendation immediately following the release of this Decision.

1 Introduction

1. Under Section 19(1) of the Interconnection and Access to Telecommunications Facilities Regulations of 2005 (the "Interconnection Regulations") all mobile operators in the Turks and Caicos Islands ("TCI") are presumed to be dominant with respect to call termination on their respective mobile networks and, further, Section 19(2) of the Interconnection Regulations stipulates that the mobile termination rate ("MTR") shall not exceed US $0.15 per minute.[1]

2. The C&W and Digicel Interconnection Agreement of June 30, 2006 set the MTR at a level of $0.19 from 30 June 2006 to 31 December 2007 and at $0.15 from 1 January 2008 forward. As well, the C&W and Islandcom Interconnection Agreement of March 9, 2007 established an identical MTR schedule. Under these agreements, the current MTR of $0.15 has now been in effect for just over three years.

3. In July 2010, the TCI Telecommunications Commission (the "Commission") initiated a public consultation process to review the current maximum allowable MTR of $0.15. The consultation was launched because the Commission was of the preliminary view that available evidence, including consideration of MTR levels and trends in the Caribbean region, suggested that the rate should be reduced.

4. As a result, and pursuant to the Interconnection Regulations and the Telecommunications (Administrative Procedure) Regulations of 2008, the Commission issued its Review of Mobile Termination Rate Consultation Document (referred herein to as the "Initial Consultation Document") on 19 July 2010. The Initial Consultation Document outlined the reasons and supporting rationale for the Commission's preliminary view that the current maximum allowable MTR of $0.15 should be reduced. It also provided an initial MTR Proposal (the "Initial Proposal") involving a phased reduction of the MTR maxima over the next three years,[2] along with supporting rationale and data.

5. Interested parties were invited to provide comments on the issues and specific questions raised in the Initial Consultation Document, including the Commission's Initial Proposal. In response, Cable & Wireless (TCI) Limited ("LIME"), Digicel (TCI) Limited ("Digicel") and Islandcom Telecommunications, Limited ("Islandcom") (collectively

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1 Note that, unless otherwise specified, (a) all money amounts in this document are specified in United States of America ("US") dollars and (b) all time-based telecommunications prices are expressed on a per minute basis.

2 The details and supporting rationale for the Initial Proposal are described in Chapters 4 and 5 of the Initial Consultation Document. The Initial MTR Proposal called for the MTR maxima to be reduced from the current level of US$ 0.15 per minute to US$ 0.09 as of January 1, 2011, US$ 0.07 as of January 1, 2012 and US$ 0.05 as of January 1, 2013.

referred to herein as the "Respondents") filed responses with the Commission.[3] Subsequently, LIME and Digicel also filed reply responses with the Commission.[4]

6. Based on these responses, the Commission found that while Respondents were in agreement with many of the Commission's preliminary views set out in the Initial Consultation Document, there were at least two areas of significant disagreement, i.e.:

- whether the Telecommunications Ordinance 2004 (the “Ordinance”) and the Interconnection Regulations grant the Commission the authority to amend the MTR maxima on its own motion in the absence of a dispute between operators, and

- the basis for and the specific MTR maxima set out in the Initial Proposal.

7. To address these issues, the Commission issued a Second Review of Mobile Termination Rate Consultation Document (the "Second Consultation Document") on 10 November 2010. The Second Consultation Document provided a review and analysis of responses to the questions raised in the Initial Consultation Document and, on many issues, provided the Commission's conclusions. As well, in view of the first key area of disagreement noted above, the Commission indicated that to avoid doubt and uncertainty relating to its authority to amend the MTR maxima on its own motion, that the Commission intends to make a recommendation to Government that section 19(2) of the Interconnection Regulations be amended to establish reduced MTR maxima in accordance with the Commission's determinations in this proceeding. With respect, to the second area of disagreement, the Commission modified the methodology used to set the MTR and, in doing so, provided a Revised MTR Proposal (the "Revised Proposal") in the Second Consultation Document. Like the Initial Proposal, the Revised Proposal also involved a phased reduction of the MTR maxima over the next three years.[5] The supporting rationale for and data underlying the Revised Proposal are provided in the Second Consultation Document.

8. Interested parties were once again invited to provide comments on the issues and specific questions raised in the Second Consultation Document, including the Commission's Revised Proposal. In this respect, LIME and Digicel filed responses with the Commission and, subsequently, LIME filed a reply response.[6] Islandcom did not file any comments on the Second Consultation Document.

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[3] Digicel's response was filed on and dated 25 August 2010. LIME's and Islandcom's responses were filed on and dated 30 August 2010.

[4] Both Digicel and LIME's reply responses were filed on and dated 17 September 2010.

[5] The details and supporting rationale for the Revised Proposal are described in Chapters 3 of the Second Consultation Document, with supporting analysis and data in Annexes A, B and C, of the Second Consultation Document. The Revised MTR Proposal called for the MTR maxima to be reduced from the current level of US$ 0.15 per minute to US$ 0.1075 as of April 1, 2011, US$ 0.0950 as of April 1, 2012 and US$ 0.0825 as of April 1, 2013.

[6] LIME's response was filed on 7 December 2010 and dated 6 December 2010, whereas Digicel's response was filed on and dated 7 December 2010. LIME's reply response was filed on and dated 17 December 2010.

9. In this Decision, the Commission first provides, in Chapter 2 below, a summary and analysis of the responses to the four Consultation Questions posed in the Second Consultation Document and the Commission's conclusions in each case. Based on its determinations in this respect, the Commission sets out in Chapter 3 what it considers to be fair and reasonable MTR maxima for the next three years. To implement these rates, immediately following the release of this Decision, the Commission plans to issue a Recommendation to Government requesting that Section 19(2) of the Interconnection Regulations be amended to reflect the Commission's determinations regarding the maximum allowable MTR as set out in this Decision. The planned wording of the Recommendation and associated Directive to mobile operators is provided in Chapter 4.

10. The Commission notes that it engaged the services of consultants to assist it with this consultation process, including the analysis and assessment of the current MTR in TCI, the submissions of Respondents in response to both the Initial and Second Consultation Documents, the design and formulation of the Initial and Revised Proposals as well as the preparation of this Decision.

2 Responses to Second Consultation Document

11. In Chapter 2 of the Second Consultation Document, the Commission provided a review of the 12 Consultation Questions posed in the Initial Consultation Document (the "Initial Consultation Questions"), along with a summary of Respondent's submissions on each question and the Commission's conclusions in each case. In instances where substantial doubt was raised with respect to the validity or reasonableness of the Commission's preliminary views set out in the Initial Consultation Document, alternative approaches or modifications were proposed by the Commission in the Second Consultation Document to address such concerns. As a result of Respondents' submissions, the Commission developed a significantly Revised MTR Proposal, which is described in the Second Consultation Document.

12. In addition, in view of the fact that Respondents' submissions raised doubt and uncertainty relating to the Commission's authority to amend the MTR maxima on its own motion, the Commission indicated that it intended to make a recommendation to Government that Section 19(2) of the Interconnection Regulations be amended to establish reduced MTR maxima in accordance with the Commission's determinations in this proceeding. The proposed wording of the Recommendation was provided in Chapter 4 of the Second Consultation Document, along with the proposed wording of the associated Directive to mobile operators to subsequently implement the MTR changes once the Interconnection Regulations are amended.

13. The Second Consultation Document requested Respondents' comments on four additional Consultation Questions. The responses to those questions, where applicable, are reviewed and evaluated in the following four sections.

2.1 Conclusions on Initial Consultation Document Questions

14. In the first Consultation Question in the Second Consultation Document,[7] parties were asked to comment on the Commission's review of and conclusions relating to the comments received in response to the 12 Consultation Questions posed by the Commission in the Initial Consultation Document.

15. In response, Digicel provided comments on several but not all of the 12 Consultation Questions included in Chapter 2 of the Second Consultation Document. LIME's Response was more general in nature. LIME did not comment explicitly on any specific Initial Consultation Questions, other than in its Reply Response in which it addressed certain claims or arguments made by Digicel. The issues and concerns raised in relation to the first, second, fourth, fifth, sixth and eighth questions by Digicel and LIME are addressed in the following sub-sections. Digicel and Lime did not raise specific issues or concerns in relation to the third, seventh, ninth, eleventh or twelfth questions so that these are not included below. The issues and concerns in to the tenth question (proposed directive) are addressed in Chapter 4.

2.1.1 Commission Authority to Amend MTR

16. The first Initial Consultation Question reviewed in the Second Consultation Document dealt with the question of whether the Commission has the authority to modify the maximum allowable level of the MTR that can be charged by mobile operators in TCI on its own motion, without having received an interconnection dispute resolution request. The Respondents had differing views as to the Commissions' authority to make such changes on its own motion. To avoid doubt and uncertainty, the Commission decided therefore that it would issue a recommendation to Government to amend section 19(2) of the Interconnection Regulations in accordance with the MTR maxima and time lines set out this Decision rather than amend the maximum allowable level of the MTR on its own motion.

17. While in its Response on this issue Digicel added nothing further on the specific question of Commission's authority to modify the current MTR on its own motion, it raised the concern that if the MTR is modified as a result of this proceeding, it would have the effect of undermining Digicel's ability to negotiate a reduction in other interconnection rates – namely LIME's current fixed termination rate ("FTR") and transit rate[8] – both of which Digicel considers to be excessive. In effect, if the MTR is reduced by regulatory mandate, Digicel is concerned that LIME would have no incentive to commercially negotiate reductions in the FTR or transit rate, which Digicel claims would leave it in a competitively disadvantaged position.

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7 Second Consultation Document, page 25.

8 Note that Digicel refers to LIME's "transit" service as a "transit/link" or "transit and link" service in view of the fact that Digicel considers the service to include a link functionality. In this Decision, the Commission refers to the service as "transit" as per LIME's current Tariff Schedule.

18. In this respect, Digicel has suggested that the Commission could use the same benchmarking approach and sample developed to revise the MTR in the present proceeding to also review the FTR. It believes that such a review could be conducted in relatively short order. On the other hand, it acknowledged that reviewing the transit rate may require more investigation.

19. While the Commission appreciates Digicel's concern in this respect, it notes nevertheless that Digicel has the option of filing a formal dispute with the Commission if it is unable to reach a mutually acceptable agreement with LIME with respect to the noted interconnection rates. The risk of regulatory intervention should, in the Commission's opinion, provide sufficient incentive for parties to negotiate in good faith and reach a mutually acceptable agreement on these rates. That said, if a new agreement cannot be reached, the Commission may consider that a review of these interconnection rates is necessary.

2.1.2 Efficiency Considerations for Setting MTR

20. The second Initial Consultation Question reviewed in the Second Consultation Document dealt with the question of whether the MTR should be set at a level that is reflective of the marginal or incremental cost of mobile call termination in order to promote the objective of economic efficiency. Based on Respondents' submissions on this question, the Commission concluded that, given the potentially wide range in what “cost-orientation” may constitute pursuant to Section 14(4) of the Interconnection Regulations, the Commission concluded that the MTR should be set closer to long run increment cost ("LRIC") than to stand-alone costs. Moreover, the Commission agreed with Respondents that the MTR should also include a proportionate contribution towards the recovery of fixed and common costs.

21. In its Response, Digicel did not dispute the Commission's conclusion on this question, but rather raised concerns about certain factors that in its view could significantly affect the calculation of LRIC costs – e.g., the measurement of the cost of capital and the assessment of risk – especially in the case of a small jurisdiction such as TCI. With these two specific factors in mind, Digicel suggested that LRIC models or, more specifically, LRIC+[9] models could easily underestimate the true long run costs of an efficient operator in TCI.

22. The Commission acknowledges that Digicel raises valid concerns regarding the calculation of LRIC-based cost estimates. The Commission notes that Digicel raised similar concerns in its response to the Initial Consultation Document. However, it should be borne in mind that the Commission is not conducting a LRIC-based cost exercise in the context of this proceeding, but rather relying on benchmarking approach to set appropriate MTR maxima. Some of the countries included in the benchmark sample of Caribbean countries have MTR rates which are set on the basis of LRIC models of some form (including LRIC+) whereas others have been set using alternative approaches.

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9 As explained in the Initial Consultation Document, LRIC+ or LRIC plus models calculate the cost of providing mobile call termination by considering the costs of an increment of output (often taken to be the total traffic terminated by the operator), irrespective of where it was generated. LRIC+ also includes a mark-up for any common costs.

Given the selection criteria relied on by the Commission to establish its benchmark sample of Caribbean countries together with its associated sensitivity and normalization analysis of the sample data,[10] the Commission is of the view that its benchmark analysis adequately takes into account factors such as the cost of capital and risk specific to TCI in the Caribbean region.

2.1.3 Potential End-User Benefits from Reducing MTR

23. The fourth Initial Consultation Question reviewed in the Second Consultation Document dealt with the question of whether the impact of reducing the MTR in TCI is likely to have a positive, negative or neutral effect on mobile and fixed end-users. Based on Respondents' submissions on this question, the Commission concluded that there was general agreement that there would be positive effects for end-users from a reduction in the MTR, including potential reductions in average mobile-to-mobile retail prices (especially for "off-net" calling), reductions in fixed-to-mobile call prices (as required under the existing price cap regime for regulated fixed-line services) and, to the extent reductions in MTRs translate into lower average retail prices, increased take-up in fixed and mobile wireless services and increased usage of fixed and mobile services.

24. In its Response to the Commission's conclusion on this issue, Digicel noted that it did not dispute that there would be benefits to fixed end-users as a result of lowering the MTR, but rather that the "key way" to benefit consumers of fixed-to-mobile ("FTM") calls would be to reduce what Digicel considers to be the "extremely large fixed call origination retention" associated with FTM calls. Furthermore, Digicel argued that there are negative economic efficiency impacts associated with what it considers to be an excessive FTM rate, including (i) significantly reduced FTM call volumes and, as a consequence, (ii) significantly reduced revenues for mobile operators for terminating such traffic and (iii) significantly reduced funds available for network and service investment purposes on the part of those same mobile operators. As well, Digicel argued that it has clearly demonstrated the existence of a "huge fixed origination retention" and, contrary to the Commission's conclusions, in Digicel's view this warrants a delay in the reduction of the MTR until such time that the FTM rate is significantly reduced.

25. LIME, in its Reply Response, disputed Digicel's claims that the FTM rate is excessive or needs to be reviewed at this time. It quoted an excerpt from the Decision on the Second Price Cap Regime in this respect, noting the schedule of FTM rate reductions included in that Decision and acknowledging that any reductions in the MTR resulting from this proceeding would be automatically passed through in the form of additional rate reductions. It also disputed the notion of "fixed origination retention" and its appropriateness in the context of TCI.

26. The Commission notes that Digicel raised similar concerns regarding the level LIME's FTM rate in response to the Initial Consultation Document. As explained in the Second Consultation Document, FTM calling is one of many fixed-line services subject to the current price cap regime. Under the regime, LIME is required to reduce the FTM rate by roughly 25% in four steps over the course of the current price cap period. The mandated

10 Second Consultation Document, Appendix A and C.

reductions in the FTM rate was part of package of price cap constraints that took into account the overall return on LIME's fixed-line services subject to price constraints. Further reductions in the FTM rate, all else being equal, would require offsetting changes in other price cap service rates or price cap parameters. Therefore, in the Commission's view, it would not be appropriate to make such changes without revisiting the price cap regime as whole. The Commission intends to conduct such a review well before the expiration of the price cap regime in April 2013. Modifying the price cap regime however is not within the scope of the present proceeding.

27. While the Commission agrees that the FTM rate of $0.50 per minute that existed prior to the implementation of the second price cap regime no doubt had a dampening effect on FTM call volumes, the significant reductions in the FTM rate mandated under the price cap regime have very likely had a stimulative effect on FTM call volumes to date, and this stimulative effect can be expected to increase as the balance of the mandated rate reductions are implemented under the price cap regime. In addition, the price cap regime also requires that any reductions in the MTR be passed through in terms of equivalent value FTM rate reductions. Therefore, further significant reductions in the FTM rate will result from the present Decision. Thus, the Commission considers that the concerns raised by Digicel are mitigated to some degree by the fact that the FTM rate is steadily declining under the current price cap regime and will decline further still as a result of this Decision.

28. However, the Commission does not agree that reductions of the MTR should be delayed until such time that the FTM rate is further reduced to some predetermined level. The Commission continues to be of the view that end-users will benefit from immediate reductions in the MTR.

29. Also under the issue of potential benefits to end-users of reducing the MTR, Digicel reiterated its concern that there is "clear and present danger" that LIME could use its fixed line services (specifically FTM calling revenues) to cross subsidize its mobile operations, absent an accounting separations safeguard. Digicel noted that it is not in a position to provide evidence of such cross-subsidies, but for the Commission to investigate such matters itself.

30. The Commission addressed this concern in the Second Consultation Document. As noted therein, "price cap regulation effectively prevents LIME from raising regulated fixed-line service rates in order to fund anti-competitive reductions in unregulated retail mobile rates".[11] In other words, price cap regulation obviates the need for a accounting separations and, indeed, provides a more efficient and effective regulatory mechanism in comparison to an accounting separations mechanism. In establishing the second price cap regime, the Commission conducted a comprehensive examination of the overall return on LIME's regulated fixed-line services (which includes FTM calling). The Commission then established a set of price constraints designed to provide LIME with a reasonable opportunity to earn what the Commission determined to be a fair and reasonable rate of return on its regulated fixed-line services in aggregate. The established pricing constraints prevent LIME from raising price capped service rates (including the FTM

[11] Second Consultation Document, page 10.

rate) in order to generate surplus profit from its fixed-line services to potentially fund anticompetitive mobile service pricing or marketing activities.

31. Therefore, the Commission does not agree with Digicel's contention that there is a significant danger that LIME could use its regulated fixed-line services to cross-subsidize its mobile services absent the implementation of an accounting separations safeguard. The Commission considers that price cap regulation already provides an effective and efficient safeguard against cross-subsidies between regulated and unregulated services.

2.1.4 Alternative Approaches for Setting MTR

32. The fifth Initial Consultation Question reviewed in the Second Consultation Document dealt with parties' comments on the Commission's view that the most cost-effective, timely and proportionate approach to set the MTR is a detailed and comprehensive benchmarking study rather than fully allocated cost ("FAC") or LRIC-based costing approaches. In this respect, both Digicel and Islandcom supported the use of benchmarking to set the MTR, subject in both cases to various qualifications regarding the implementation of the approach. On the other hand, LIME was opposed to the use of benchmarking and, moreover, suggested that the Interconnections Regulations mandated the use of a costing approach to set the MTR. If a benchmarking approach were used, however, LIME raised a number of issues relating to how it should be implemented, including the need to adjust or normalize for demographic, environmental and market factors across countries included in the benchmark sample.

33. In the Second Consultation Document, the Commission maintained its preliminary view that benchmarking represents the most practical and cost-effective approach to set the MTR in TCI and also concluded that following such an approach is fully consistent with the Interconnections Regulations. However, the Commission modified its benchmarking methodology to take into account the comments and suggestions of the Respondents.[12]

34. In its Response, without prejudice to its preference for a LRIC-based approach to determining the MTR, LIME expressed appreciation for the extent of the consideration given by Commission to the concerns of service providers in using benchmarks to set the MTR. In particular, LIME acknowledged that the Commission had established a "fairly coherent set of criteria for selecting the benchmark sample" and had also "modified the sample to better ensure that the selected jurisdictions are reasonably comparable to TCI." LIME also acknowledged that the Commission established a "normalization (adjustment) factor" for the benchmark MTR to take into account demographic, socio-economic, and other environmental differences between the group of Caribbean jurisdictions included in the Commission's revised benchmark sample.

35. Moreover, that in light of the adjustments made by the Commission, LIME stated that it "... is of the opinion that a reasonably robust approach has been applied by the Commission to mitigate the shortcomings of applying a benchmark methodology."

36. Based on LIME's comments, the Commission concludes that, like Digicel and Islandcom, LIME now supports benchmarking as a general approach for setting the MTR. The

[12] Second Consultation Document, Section 2.8 and Annex C.

Commission recognizes that all three parties have their respective concerns regarding the implementation of the methodology; however, the Commission has attempted to address these concerns to the greatest extent possible in its revised benchmarking analysis provided in the Second Consultation Document and as further modified in this Decision.

2.1.5 MTR Symmetry

37. The sixth Initial Consultation Question reviewed in the Second Consultation Document addressed parties' comments on whether the upper limit (maximum) on the MTR should be set on a uniform or symmetric basis for all mobile operators. All Respondents agreed with the Commission's view that that the MTR should be set symmetrically.

38. No further comments on the matter were provided by Respondents. However, as in its submission on the Initial Consultation Question, in this respect, Digicel once again raised its concern that the transit fee it pays to LIME over and above the MTR, where applicable, is in its view excessive and should be reduced. In addition, Digicel expressed its concern that by modifying the MTR through the present consultation process, the Commission would undermine its ability to negotiate a lower transit rate with LIME. As a result, Digicel suggested that the Commission undertake an investigation of the transit rate, if the Commission decides to reduce the MTR.

39. For its part, LIME noted in its Reply Response that the transit service is separate from mobile termination and it also pointed to the Commission's conclusion in the Second Consultation Document that the transit rate is outside the scope of the current proceeding.

40. As noted in sub-section 2.1.1 above, the Commission does not agree that reducing the MTR though the present proceeding necessarily removes LIME's incentive to commercially negotiate a mutually agreeable revised transit rate with Digicel. To the extent such an agreement cannot be reached, parties' have the option of filing a formal dispute with the Commission. Again, that said, if a new agreement cannot be reached, the Commission may consider that a review of this and possibly other interconnection rates is necessary.

2.1.6 Caribbean MTR Trends and Levels

41. The eighth Initial Consultation Question reviewed in the Second Consultation Document dealt with parties' views on observed levels and downward trends in MTRs in the Caribbean and whether they are generally indicative of the underlying cost of terminating mobile calls in TCI. In addition, parties were also asked to provide any additional benchmarking information they considered of relevance to setting the MTR in TCI.

2.1.6.1 Sample Average Selection for Benchmarking Purposes

42. In this respect, Digicel raised concerns with the methodology used by the Commission to calculate the benchmark sample MTR averages which are, in turn, used by the Commission to set benchmark MTRs for TCI. It is worth recalling that in the Initial Consultation Document, the Commission relied on both the "best practice" and "all

sample" benchmark sample MTR averages to develop its Initial Proposal.[13] The "best practice" average is calculated using a subset of overall benchmark sample jurisdictions (i.e., those with the lowest MTRs), whereas the "all sample" average, as its name suggests, is calculated using the entire set of benchmark sample MTRs. In its Revised Proposal, the Commission relied solely on the "all sample" average to establish benchmark MTRs and, as a result, the benchmark MTRs under the Revised Proposal are substantial higher than those in the Initial Proposal.[14]

43. Rather than using either the "best practice" or "all sample" average, Digicel argued in its Response that the Commission should rely on a sub-sample of the benchmark sample jurisdictions representing the "highest" MTRs. Digicel suggested that such an approach is necessary to account for the fact that in Digicel's view unit costs and investment risk levels are higher in TCI than in the other Caribbean jurisdictions included in the benchmark sample. Digicel also took issue with the Commission's conclusion in the Second Consultation Document that reliance on the average of the "highest" MTRs would necessarily be inconsistent with the objective of establishing MTRs that are closer to LRIC rather than stand-alone cost. In support, Digicel asserted that LRIC-based costs in TCI are likely higher than those in the 13 Caribbean jurisdictions included in the benchmark sample.

44. In contrast, in its Response, LIME noted that both itself and Digicel were concerned with the use of a "best practice" average to set a benchmark MTR for TCI. However, it acknowledged that the Commission addressed this concern by moving to the use of an "all sample" average. Moreover, LIME stated that it is of the view that the Commission's modification in this regard, along with others, has resulted in the establishment of a "reasonably robust" benchmark methodology.

45. The Commission notes that it adopted a set of benchmark sample selection criteria that would allow it to create as large a benchmark sample as possible while maintaining a reasonable degree of comparability between all of the jurisdictions in the benchmark sample and TCI as well as to minimize the influence of any one jurisdiction on the benchmarking results. The Commission also conducted a comprehensive qualitative and statistical analysis of the resulting benchmark sample to determine the extent to which demographic, socio-economic and other environmental factors affect the level of jurisdiction-specific MTRs and, to the extent they do, the size of any required adjustment of normalization factor.[15] The factors considered in this respect included population, population density, land area, mobile subscribers, mobile density, the number of competitors and the basis for setting the MTR (cost-based versus other), among others. The inclusion of such factors in the sensitivity analysis was dependent on the availability of a readily quantifiable measure of each factor under consideration.

46. The Commission notes that investment risk was not a factor that was investigated in its sensitivity analysis. While Digicel argued that it is an important factor that may support setting the MTR in TCI above the "all sample" average MTR, it did not provide any data

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13 Initial Consultation Document, Chapter 5, pages 25–27.

14 Second Consultation Document, Chapter 3, pages 26-29.

15 The data and analysis associated with this exercise is summarized in Annex C of the Second Consultation Document.

or information on investment risk levels or differentials across the Caribbean jurisdictions included in the benchmark sample to support or quantify the magnitude of any such adjustment. It only asserted that in smaller island states such as TCI investment risk is higher than in larger countries. As well, no evidence was provided as to whether any such suggested risk differential would necessarily be significant compared to the other 13 Caribbean jurisdictions included in the benchmark sample, all of which can be characterized as small island jurisdictions in their own right. Therefore, the Commission has no basis to readily quantify investment risk levels in the TCI and the 13 benchmark sample jurisdictions. More importantly, it has no reason to believe or evidence before it to suggest that investment risk is necessarily higher or lower in TCI relative to the other Caribbean jurisdictions included in the benchmark sample.[16]

47. The results of the Commission's sensitivity and normalization analysis suggest that no more than a small upward adjustment of 0.25 to 0.75 cents relative to the "all sample" average MTR is warranted in the case of TCI. Yet, to be highly conservative, the Commission decided to set the benchmark MTRs at just over 1.5 cents above the projected "all sample" average MTRs. As already noted, the "all sample" average MTRs are also significantly higher than the "best practice" average MTRs which has the effect of further increasing benchmark MTR maxima relative to the Initial Proposal. These methodological modifications were adopted in response to the concerns raised by both Digicel and LIME in their comments with respect to the Initial Proposal.

48. As a further measure to ensure that the benchmark MTRs are above LRIC (plus a contribution to fixed and common costs), the Commission also set the end-point benchmark MTR (i.e., 8.25 cents as of April 2013) above the average MTR of those jurisdictions in the benchmark sample with MTRs set on the basis of a cost study (the average for which came to 8.1 cents). It is important to note that cost-based MTR average used for this purpose is based on costing data that dates back to mid 2007 on average. The Commission would expect average costs to be lower, perhaps significantly lower, were they updated using current or, for that matter, 2013 data. Moreover, the statistical sensitivity analysis of the cost-based MTR jurisdictions conducted by the Commission indicated that, at best, no more than an upward adjustment of 0.1 cents would be warranted to account for demographic, socio-economic and other environmental differences between the cost-based MTR jurisdictions and TCI.[17] Thus, here again, the Commission took a highly conservative approach to setting the benchmark MTR maxima under its Revised Proposal.

49. Therefore, the Commission continues to be of the view that it would not be appropriate to rely solely on the subset of jurisdictions in the benchmark sample with the highest MTRs to set benchmark MTR maxima for TCI. Doing so would accomplish little more than delaying much needed reductions in the current MTR and, as concluded in the Second

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[16] Indeed, it is worth noting that in the context of setting the price cap parameters associated with the current price cap regime, the Commission determined what it considered to be a fair and reasonable target rate of return for LIME's regulated fixed-line services. That rate was determined by the Commission based on an average of weighted average cost of capital studies for a variety of Caribbean jurisdictions. No additional adjustment was made for country-specific risk differences between the group of Caribbean jurisdictions relied on in this respect. See Telecommunications Decision 2009-4, *Decision on the Second Price Cap Regime*, 18 February 2009, paragraph 41.

[17] Second Consultation Document, Annex C, pages 50-54.

Consultation Document, would not be consistent with the objective of moving rates closer to LRIC than to stand-alone costs.

2.1.6.2 Selection of Jurisdictions and MTRs for Benchmarking

50. In Section 2.8.4 of the Second Consultation Document, the Commission explained the changes it made to the benchmark sample based on the comments and suggestions it received from Respondents on the Initial Consultation Document.

51. In its Response, Digicel took issue with two matters in this respect. The first related to the inclusion of the British Virgin Islands ("BVI") in the benchmark sample. As in its comments on the Initial Consultation Document, Digicel argued that BVI should be excluded from the benchmark sample because in its view the BVI MTR appears to be a "clear outlier". In this respect, Digicel claims that the MTR in BVI is markedly lower than the rate in other small countries. As well, Digicel questioned the circumstances under which the rate was initially set in 2007, attributing it to "clever commercial marketing" just prior to its entry in BVI. Moreover, Digicel claimed that the regulator in BVI did not have sufficient information at the time to determine if the rate was below cost, and that had it been found to be below cost the regulator would not have approved it. For all of these reasons, Digicel proposed that BVI should be excluded from the Commission's benchmark sample.

52. In its Reply Response, LIME took issue with Digicel's characterization of the circumstances under which the MTR was set in BVI. LIME stated that at the time the rate was set, its sister company was also a new entrant in BVI mobile wireless sector. LIME suggested that the incumbent mobile wireless operator in BVI had "every commercial incentive to try to impose artificially high MTRs", yet LIME noted that the incumbent accepted the current MTR which, in LIME's view "speaks volumes to the reasonableness of that price."

53. The Commission notes that it addressed this same concern of Digicel's in the Second Consultation Document.[18] As noted therein, the Commission is familiar with the BVI situation and has been in direct contact with the regulator in BVI who has confirmed that the current domestic MTR was the result of commercial negotiations and that it has duly approved the rate. Moreover, the regulator indicated that it has not determined that the domestic MTR is below cost. In the Commission's view, Digicel has provided no new information that would support the exclusion of BVI from the benchmark sample.

54. The second matter raised by Digicel related to the treatment of the French West Indies ("FWI") in the benchmark analysis. As explained in the Second Consultation Document, the Commission treated the FWI jurisdictions of Martinique and Guadeloupe as one benchmark observation and St. Martin and St. Bartholomew as a second benchmark observation. Digicel contended that FWI should be treated as a single observation in that all of the above-noted jurisdictions within the FWI are subject to the same regulator and that by splitting the FWI jurisdictions, excessive weight is given to the views of a single regulator.

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18 Second Consultation Document, Section 2.8.4, page 20.

55. Further still, Digicel took issue with the "pure LRIC"[19] costing approach used by the regulator in FWI to set MTRs. Digicel considers the pure LRIC costing approach to be fundamentally flawed and, where applied, inimical to competition. On this basis, Digicel proposed that FWI should be excluded altogether from the benchmark analysis.

56. Addressing the later proposal first, the Commission notes that the pure LRIC costing approach is a well established and accepted means for setting cost-based rates. As Digicel itself notes, pure LRIC is the costing approach recommended by the European Commission ("EC") for setting MTRs. As such, the Commission does not consider the approach to be flawed, nor does the Commission consider that competition has been undermined in jurisdictions where the approach has been applied.

57. In any event, the Commission notes that the MTRs in FWI have not been set equal to the FWI regulator's current pure LRIC cost estimates (of 0.01 to 0.02 Euros), but rather well above those levels (i.e., currently varying, depending on the operator, from 0.055 to 0.120 Euros in 2010).[20] Further, while the FWI regulator has mandated further MTR reductions over the course of 2011 and 2012, all operator-specific MTRs in FWI will continue to be above estimated pure LRIC cost levels by 2012 (at which time mandated MTRs in FWI will vary, depending on the operator, from 0.025 to 0.050 Euros).[21] The FWI regulator has indicated that, pursuant to EC rules on the matter, it shall set 2013 MTRs equal to updated estimates of pure LRIC. However, in its benchmarking analysis, the Commission has only taken into account MTRs up to and including 2012 because the 2013 have not been set yet.[22] Thus, Digicel's concern that the MTRs in FWI are too low simply because they are currently or will be (within the benchmark observation period) set equal to estimated pure LRIC costs is unfounded.

58. Moreover, it is important to bear in mind that a costing methodology adopted in one jurisdiction may not be followed in another. Indeed, the costing methodologies used in the jurisdictions included in the Commission's benchmark sample which have cost-based MTRs do in fact vary considerably (from FAC to LRIC+ to pure LRIC). In the Commission's view there is no reason to limit the jurisdictions included in the sample based on the nature of the costing methodology used, as long as the costing methodology used is commonly used and accepted. Therefore, the Commission does not agree with Digicel's proposal to exclude FWI simply because the FWI regulator has adopted a pure LRIC approach to setting the MTR.

59. As to Digicel's proposal to combine all FWI jurisdictions into a single observation, on further reflection, the Commission agrees with Digicel that for the purpose of calculating the "all sample" MTR average, treating FWI as two rather than a single jurisdiction places an excessive weight on this jurisdiction for benchmarking purposes. Therefore, the Commission has decided to treat FWI as a single observation in its calculation of the “all

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19 A pure LRIC approach calculates the cost that could be avoided by the operator by no longer providing termination services to third parties.

20 Second Consultation Document, Annex A, pages 41-42.

21 Second Consultation Document, Annex A, pages 41-42.

22 The Commission notes that the MTR proposals for 2011 and 2012 (noted in Second Consultation Document, Annex A, page 41) have now been formally approved and adopted by the FWI regulator.

sample" MTR average. There are a number of approaches to calculating the average MTR for FWI, given the different MTRs for each of the islands. One approach is to average the MTRs for each of the islands and then average the four islands. Another approach, which was advocated by Digicel and selected by the Commission, was to take the simple average of the MTRs of all five mobile operators in FWI. As described in further detail in Chapter 3 below, this modification has the effect of raising the "all sample" MTR average and, therefore, the benchmark MTRs for TCI.

60. The Commission, however, continues to consider that the two FWI island groupings (Martinique and Guadeloupe versus St. Martin and St. Bartholomew) can be treated separately for benchmark sample sensitivity and normalization analysis purposes, given the significant differences between them in terms of average MTRs and demographic, socio-economic and environmental characteristics.[23] Therefore, the Commission considers that the results of the benchmark sensitivity analysis contained in Annex C of the Second Consultation Document to be unaffected by modification in treatment of FWI for MTR benchmarking purposes.

2.2 Revised MTR Proposal

61. In the second Consultation Question in the Second Consultation Document,[24] parties were asked to comment on the Commission's Revised Proposal. Comments in relation to the benchmarking methodology are discussed sub-section 2.1.6 above. Questions related to normalization and sensitivity issues underlying the Revised Proposal are discussed below.

62. The Commission notes that LIME reiterated in its Response that while LRIC would be its preferred approach to setting the MTR, it considered the revised benchmarking analysis conducted by the Commission to be "reasonably robust". On the other hand, Digicel raised concerns with a number of specific elements of the Commission's benchmarking methodology, each of which is addressed above. As already indicated, with respect to the inclusion of FWI in the benchmarking analysis, the Commission agrees with Digicel that FWI should be treated as one rather than two benchmark observations for the purpose of calculating the "all sample" average benchmark MTRs. The effect of this modification is described in Section 3.1 below.

2.2.1.1 Benchmark Sensitivity and Normalization Analysis

63. Digicel also took issue with several aspects of the sensitivity analysis conducted by the Commission as it pertained to those benchmark sample jurisdictions with cost-based MTRs.

64. First, Digicel disagreed with the Commission's conclusion that were the cost studies conducted in the cases of the eight jurisdictions included in the benchmark sample which have cost-based MTRs updated using current data, that the resulting updated cost estimates would necessarily be lower. Digicel suggested that the recent global downturn may well have resulted in decreased traffic volumes in the jurisdictions in question

23 As is illustrated in the Second Consultation Document, Annex C, Table 10, page 47.

24 Second Consultation Document, page 30.

(therefore, holding all other variables constant, increasing the unit costs of MTRs), although no evidence was offered in support of this claim.

65. As noted in the Commission's sensitivity analysis summary,[25] the average vintage cost data used in the cost studies of the eight jurisdictions with cost-based MTRs is mid-2007. In the Commission's view, given the rate of technological change and the existence of scale effects associated with traffic growth in the wireless sector, one would normally expect that, on average, costs would be declining rather than increasing over time in the mobile wireless sector. Indeed, Figure 1 in Chapter 3 of the Second Consultation Document clearly shows that MTRs in the Caribbean rates have been declining and, in the Commission's opinion this trend is consistent with the view that costs have also been declining. Moreover, evidence suggests that subscriber and mobile density levels and, therefore, overall mobile network traffic levels, have in fact continued to increase since 2007 in the Caribbean despite the recent global downturn.[26] Therefore, the Commission does not agree with Digicel's assertion that MTR unit costs would not have declined over the course of the last three years.

66. Second, Digicel suggested that in the MTR is the case of Trinidad & Tobago is effectively not based on a cost model and, as a result, should not be included among those jurisdictions with cost-based rates. It noted that two competing cost models were put before the interconnection dispute arbitration panel established by the Trinidad & Tobago regulator to resolve a dispute over the MTR; however, Digicel claimed that the panel rejected both models. Moreover, Digicel claimed that the rate in Trinidad & Tobago is extremely low and, in its view, likely below cost. In Digicel's opinion, the excessively low MTR has had the effect of negatively impacting investment and competition in Trinidad & Tobago.

67. In its Reply Response, LIME disagreed with Digicel characterization of the derivation of the MTR in Trinidad & Tobago. LIME provided a quote from the Trinidad & Tobago's dispute arbitration panel's decision wherein it states that the panel took into account the results of both cost models submitted for its consideration in setting the MTR. LIME claimed that the cited statement by the dispute arbitration panel contradicts Digicel's suggestion the MTR is not based on cost model results.

68. The Commission is well aware of the fact that the MTR in Trinidad & Tobago was set by the dispute arbitration panel on the basis of the information provided in both of the alternative cost models submitted before it. The Commission's understanding is that the competing cost models were not rejected, but rather modified or averaged by the panel. Thus, the Commission considers the currently approved MTR in Trinidad & Tobago to be effectively cost-based. As such, the Commission does not agree that the rate is either too low or otherwise below cost, nor does it agree with Digicel's proposal that Trinidad & Tobago should be excluded from the benchmark analysis.

69. Third, Digicel questions certain aspects of the ECTEL cost modeling approach used to set the MTRs in the five ECTEL member states. It notes that, among other considerations,

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[25] Second Consultation Document, Annex C, Table 11, page 50.

[26] For the 10 benchmarking jurisdictions for which historical data is available from the ITU, subscribership increased on average about 14% from 2007 to 2008 and about 6% from 2009 to 2008.

the ECTEL cost model estimates include the cost of a single mobile switch serving all five ECTEL countries. Digicel considers this to be a "highly unusual" approach since only a regional operator would be able to match such costs, not an entrant choosing to operate in only one ECTEL country. Consequently, Digicel considers that the ECTEL approach understates the mobile termination costs that would be incurred by an efficient ECTEL country–specific operator and, at best, would provide a "minimum possible cost floor" estimate. While Digicel questions the costing approach adopted by ECTEL, it did not propose that the observations be excluded from the benchmark sample.

70. The Commission notes Digicel's concerns in this respect. Costing methodologies and/or the data and assumptions relied on for their implementation can always be questioned and potentially improved. That said, in the Commission's view, the costing approach followed in the case of the ECTEL member states is not unreasonable. It represents one of several costing approaches included in the Commission's benchmark sample. As such, there is no reason to use the ECTEL member state results as a cost floor and in the process exclude the results of all other available costing approaches. In any event, the Commission has conducted a benchmarking sensitivity and normalization analysis to adjust the benchmark MTRs for TCI for differences across benchmark jurisdictions, including specific consideration of those jurisdictions that relied on cost-based approaches to set the MTR. Thus, the Commission considers that the current inclusion and treatment of the ECTEL member state benchmark MTRs remains appropriate.

2.3 Proposed Recommendation and Directive

71. In the third and fourth Consultation Questions in the Second Consultation Document,[27] parties were asked to comment on and, if deemed necessary, propose changes to the Commission's Proposed Recommendation to the Government to make the necessary changes to the Interconnection Regulations so that the final MTR reductions set out in this Decision can be implemented commencing 1 April 2011 or as soon as possible thereafter. Parties were also asked to comment on and, if deemed necessary, propose changes to the Proposed Directive the Commission's would issue to mobile operators immediately following enactment of the recommendation (assuming it is enacted) to put into effect the MTR reductions set out in this Decision.

72. Only Digicel provided comments on these questions and, in doing so, limited its comments to the issue of the Commission's Proposed Recommendation. In this respect, Digicel first clarified that it believes that the Commission has the authority to modify the MTR on its own motion. However, given that the Commission stated that it intends to ask the Government to amend the Interconnection Regulations to modify the MTR, Digicel suggested that the Commission simultaneously ask that the Interconnection Regulations also be amended to grant the Commission the power to modify the FTR and transit rates on its own motion. To this end, Digicel provided proposed wording of a new clause it suggested be added to the Interconnection Regulations (after Section 19) to clearly provide this power to the Commission.[28]

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[27] Second Consultation Document, page 32 and 33, respectively.

[28] Digicel, Response, 7 December 2010, page 6.

73. As indicated in the Second Consultation Document, the Commission was already ruled that consideration of modifications to the FTR and transit rate falls outside of the scope of the present proceeding.[29] In view of this fact, the Commission equally views consideration of any specific modifications to the Interconnection Regulations that may be necessary to effect changes to those rates to also be outside of the scope of the proceeding. In any event, were Digicel or some other operator to file a dispute with the Commission regarding any interconnection rate (including the FTR and/or transit rate), it would be within the Commission's power and authority to modify the rate or rates in response under the current Interconnection Regulations. No modifications to the Interconnection Regulations are required in such a case.

3 MTR Maxima Determination

74. This Chapter sets out the Commission's determinations regarding the appropriate reductions to the current MTR in TCI, which are to be implemented in three-steps over the course of the next three years.

3.1 Methodology

75. As discussed, the Commission adopted a benchmarking approach to determine a fair and reasonable upper limit (maximum) on the MTR in TCI, while also ensuring that the MTR moves closer to an efficient rate level (i.e., LRIC plus a proportionate contribution to fixed and common costs) in keeping with Section 14(3) and (4) of the Interconnection Regulations. Complete details of the benchmarking analysis and results under the Commission's Revised Proposal are provided in the Second Consultation Document and, therefore, need not be repeated in this Decision.

76. However, the Commission has made two changes to that approach which result in the final MTR maxima increasing slightly relative to the Revised Proposal. First, as discussed in Section 2.1.7 above, the Commission has modified the treatment of FWI for the purpose of calculating the "all sample" average benchmark MTRs, by treating it as one rather than two benchmark observations, as suggested by Digicel. All other aspects of the benchmarking methodology described in the Second Consultation Document otherwise remain unchanged.

77. Second, the Commission notes that the collection of much of the benchmark sample MTR data relied on by the Commission for the preparation of both the Initial and Second Consultation Documents took place in the second quarter of 2010. Foreign exchange rates were also collected at the same time to convert national currency-based MTRs into US dollars for benchmark comparison purposes. While the underlying MTR data remains valid, the US / national currency exchange rates are now out of date and as such may not be the best predictors of exchange rates for the period during which the new MTR maxima would apply. Therefore, for the purpose calculating the final MTR maxima set

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[29] Second Consultation Document, page 25 and pages 14 & 24, respectively.

out in this Decision, the Commission has updated all US / national currency exchange rates relied on in its benchmarking analysis.[30]

78. Thus, with the one methodology modification noted and the US / national currency exchange rate updates, the key elements of the Commission's benchmarking approach can be briefly summarized as follows:

- The Commission's first developed a set of six selection criteria to determine benchmark sample jurisdictions and ensure a reasonable degree of comparability between the selected jurisdictions and TCI (Annex A of the Second Consultation Document).
- The resulting benchmark sample consisted of 15 Caribbean jurisdictions, some of which were aggregated resulting in 13 actual benchmark observations (Annex A of the Second Consultation Document).[31] As a result of the Commission's decision to treat the four FWI islands as a single observation, as noted above, the number of benchmark observations reduces to 12.
- "All sample" average MTRs were calculated for each month of the period April 2008 to March 2012 based on available actual and projected MTR estimates (converted into US dollars using updated US / national currency exchange rates). These MTR rates were then statistically extrapolated out to March 2014. The "all sample" MTR averages were then recalculated on the basis of fiscal years ("FY") for the six-year period FY2008-09 to FY2013-14 (Chapter 3, Annex A and Annex B of the Second Consultation Document).
- A comprehensive sensitivity and normalization analysis of the benchmark sample data was conducted to determine the extent to which any adjustments were warranted to account for demographic, socio-economic and other environmental differences between the benchmark jurisdictions and TCI for

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30 Specifically, for the three currencies that are formally recognized to be "fixed exchange rates" in relation to the US dollar (the Eastern Caribbean Dollar ("XCD"), the Cayman Island Dollar ("KYD") and the Aruba Florin (AWG)), the official exchange rate was used (XCD $2.70 = US $1.00; KYD $1.00 = US $1.20; AWG 1.79 = US $1.00). Market rates may be slightly different from these official exchange rates based on day-to-day or other market variations and whether they are for "buy" or 'sell", depending on "buy/sell" spreads and other considerations. In this context, the official exchange rates are more representative for benchmarking purposes because they are not subject to such variations.

The Trinidad and Tobago dollar ("TTD") is formally recognized as a "managed floating exchange rate" that has fluctuated around a number of plateaux in recent years, including at TTD $6.25 = US $1.00 for much of the 2007-2008 period. Since then, however, no clear trading pattern or plateau has emerged and most recently, it has been trading at TTD $6.45 = US $1.00. For benchmarking purposes, therefore, the average daily exchange rate for the period from October 1, 2010 to January 12, 2011 was used (TTD $6.35 = US $1.00), based on publicly-available foreign exchange data from the IMF.

The Euro is the national currency for the FWI and is formally recognized as a "free floating exchange rate" that has fluctuated significantly since 2008, with highs of around EUR 1.00 = US $1.60 and lows of about EUR 1.00 = US $1.20. Most recently, it has been trading in a range between EUR 1.00 = US $1.30-1.40. For benchmarking purposes, therefore, the average daily exchange rate for the period from October 1, 2010 to January 12, 2011 was used (EUR 1.00 = US $1.35), based on publicly-available foreign exchange data from the IMF.

31 The 15 Caribbean benchmark sample jurisdictions include: Anguilla, Aruba, British Virgin Islands, Cayman Islands, Dominican Republic, the five ECTEL Member States (Dominica, Grenada, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines), the four French West Indies islands (Guadeloupe, Martinique, St. Martin and St. Bartholomew), and Trinidad & Tobago. In the case of the French West Indies, Guadeloupe and Martinique was aggregated to form a single benchmark observation as was St. Martin and St. Bartholomew.

the purpose of determining benchmark MTRs (Annex C of the Second Consultation Document).

- Based on the results of the sensitivity and normalization analysis along with other considerations, the Commission established proposed MTR maxima for FY2011-12, FY2012-13 and FY2013-14 and beyond (Chapter 3 of the Second Consultation Document, Table 1).

79. Because of the modification to the treatment of FWI benchmark and US / national currency exchange rate updates, the final "all sample" average benchmark MTR results are slightly lower in the first half of the benchmark observation period (FY2008-09 to FY2011-12), but slightly higher during the projection period (FY2012-13 and FY2013-14) relative to the Revised Proposal set out in the Second Consultation Document. The modification to the treatment of FWI has the effect of increasing the "all sample" average MTRs slightly, while the US / national currency exchange rate updates have the effect of decreasing the "all sample" average MTRs very slightly. As noted, with both changes in place, the net effect is that the "all sample" average MTRs increase slightly during the projection period relative to the Revised Proposal.

80. Line a) of Table 1 provides the final actual and projected "all sample" average benchmark MTR results for the full benchmark observation period, FY2008-09 through to FY2013-14. Overall, the final "all sample" average MTRs have declined from over 16 cents in FY2008-09 to roughly 10.5 cents this fiscal year, FY2010-11. Over the next three fiscal years, it is projected to decline further to close to 9 cents, then close to 8 cents and finally drop slightly below 7 cents by FY2013-14.

81. To determine the final MTR maxima for TCI, the Commission has decided to increase the MTR maxima in the Revised Proposal to account for the fact that the final "all sample" average benchmark MTRs have increased slightly during the projection period relative to the Revised Proposal.[32] Specifically, since the end-point FY2013-14 final "all sample" average MTR increased by almost 0.25 cents relative to the Revised Proposal, the Commission has decided to increase each of the final MTR maxima for FY2011-12, FY2012-13 and FY2013-14 by precisely 0.25 cents relative to the Revised Proposal. Thus, as shown in line c) of Table 1, the final MTR maxima are 11.00 cents, 9.75 cents and 8.50 cents, respectively, each of which is 0.25 cents higher than the Revised Proposal.

Table 1: Final Benchmark Results and MTR Maxima (Fiscal Year Periods)

	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
a) All Sample Average Benchmark Results	$0.1638	$0.1286	$0.1043	$0.0911	$0.0812	$0.0684
b) TCI MTR	$0.1500	$0.1500	$0.1500			
c) Final TCI MTR Maxima				**$0.1100**	**$0.0975**	**$0.0850**
d) Difference (c – a)				$0.0189	$0.0163	$0.0166

32 To compare these results with the Revised Proposal, see Second Consultation Document, Section 3.2, Table 1, page 28.

82. As in the Revised Proposal, the final MTR maxima remain considerably above the "all sample" average benchmark MTRs. Indeed, the difference between the two, shown in line d) of Table 1, is now slightly greater than under the Revised Proposal. As discussed in detail in the Second Consultation Document, the Commission considers that an upward adjustment or normalization factor of between 0.25 to 0.75 cents to the all sample average MTR is warranted to take into account demographic, socio-economic and other environmental differences between TCI and the group of Caribbean jurisdictions included in the benchmark sample. The adopted adjustments of roughly 1.63 to 1.89 cents far exceed the contemplated upward adjustment range. For this reason, the Commission considers the final MTR maxima to be fair and reasonable.

83. In developing the Revised Proposal, the Commission added a further end-point MTR floor constraint to help ensure that the proposed MTRs are not below LRIC including a proportionate contribution towards the recovery of fixed and common costs. Specifically, the Commission determined that the end-point MTR maximum should be 0.10 cents above the average MTRs for all benchmark jurisdictions with MTRs set on the basis of a cost study of one form or another. The 0.10 cent "normalization" adjustment factor was determined based on the qualitative and statistical sensitivity analysis of the benchmark results described in Annex C of the Second Consultation Document.[33]

84. Given that the regulator in FWI relied on a costing methodology to set MTRs, FWI falls into the subset of jurisdictions with cost-based MTRs. The Commission's decision to treat FWI as a single observation for MTR averaging purposes has the effect of increasing the final average cost-based MTR to 8.23 cents from 8.08 cents under the Revised Proposal. With the increase in the final MTR maxima relative to the Revised Proposal, the gap between the final MTR maximum of 8.5 cents in FY2013-14 exceeds the final average cost-based MTR to 8.23 by more than the required 0.1 cent "normalization" adjustment. As a result, the Commission considers that the final MTR maxima of 11.00, 9.75 and 8.50 cents are not below the corresponding LRIC including a proportionate contribution towards the recovery of fixed and common costs in the case of mobile operators in TCI for each of FY2011-12, FY2012-13 and FY2013-14, respectively.

85. Figure 1 provides a graphic illustration of the final MTR maxima as determined in this Decision for FY2011-12, FY2012-13 and FY2013-14 and beyond relative to the final all sample average MTR.

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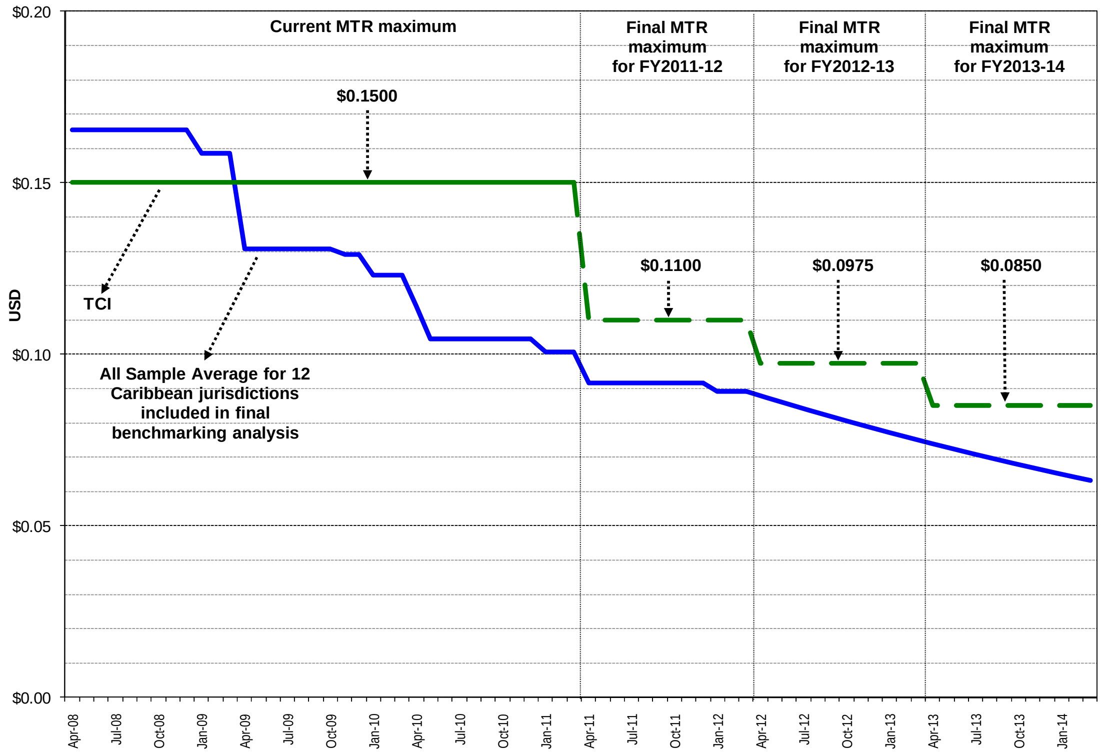
33 Second Consultation Document, pages 28-29 and Annex C, pages 50-54.

Figure #1: Final MTR Maxima



3.2 MTR Maxima Determination

86. Therefore, based on its conclusions in the Second Consultation Document and those above in this Decision, the Commission determines that the current MTR maximum of $0.150 in TCI should reduced in a phased manner over the course of the next three years. Specifically, the Commission determines that the MTR maxima for all mobile operators in TCI should be as follows:

i) After March 31, 2011: **$0.1100**.

ii) After March 31, 2012: **$0.0975**.

iii) After March 31, 2013: **$0.0850**.

3.3 Linkage to Price Cap Regime

87. Under the Decision on the Second Price Cap Regime, LIME is required to reduce its FTM rate in lock-step with any reductions in the MTR.[34] The Commission notes that LIME confirmed the fact in paragraph 6 of its Reply Response.

88. Thus, upon implementation of the Commission's final MTR maxima determination set out in Section 3.2 above, LIME would be required to simultaneously implement the following equivalent reductions in its FTM rate:

    i) After March 31, 2011 and concurrent with the first mandated reduction in the MTR maxima, LIME's FTM rate is to be reduced by **$0.0400** (= $0.1500 - $0.1100).

    ii) After March 31, 2012 and concurrent with the second mandated reduction in the MTR maxima, LIME's FTM rate is to be reduced by **$0.0125** (= $0.1100 - $0.0975).

    iii) After March 31, 2013 and concurrent with the third mandated reduction in the MTR maxima, LIME's FTM rate is to be reduced by **$0.0125** (= $0.0975 - $0.0850).

    For greater certainty, the above-noted FTM rate reductions are incremental to any FTM rate reductions mandated under the current price cap regime.

4 Recommendation and Directive

89. As indicated in the Second Consultation Document, the Commission intends to issue a Recommendation to the Government requesting that modifications be made to Section 19(2) of the Interconnection Regulations in order to implement the Commission's MTR maxima determination reached in this Decision. The Commission intends to issue the Recommendation immediately following the release of this Decision.

90. The wording of the Recommendation in view of the determinations reached in this Decision is as follows:

    Whereas the Turks and Caicos Islands ("TCI") Telecommunications Commission (the "Commission") has conducted a comprehensive examination and public consultation of the current Mobile Termination Rate ("MTR") maximum of US $0.15 per minute charged by mobile carriers in TCI and found that the MTR should be reduced in keeping with the objectives of the Telecommunications Ordinance and the Interconnection and Access to Telecommunications Facilities Regulations (the "Interconnection Regulations").

[34] Telecommunications Decision 2009-4, *Decision on the Second Price Cap Regime*, 18 February 2009, page 17, footnote 15.

Whereas the Commission has determined that the MTR maximum be reduced to US $0.1100 per minute after March 31, 2011, US $0.0975 per minute after March 31, 2012 and US $0.0850 per minute after March 31, 2013.

Whereas the rationale and supporting evidence for these specific MTR maxima reductions is provided in the Commission's Decision on the Mobile Termination Rate Review, dated January 24, 2011, which resulted from the two written public consultation processes the Commission conducted on the matter.

Whereas, the first consultation was initiated by the Commission's Review of Mobile Termination Rate Consultation Document issued July 19, 2010. In response to same, the Commission received Initial Responses from the three licensed mobile carriers 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 LIME and Digicel.

Whereas, the second consultation was initiated by the Commission's Second Review of Mobile Termination Rate Consultation Document issued November 10, 2010. In response to same, the Commission received Initial Responses from LIME and Digicel. In addition, the Commission also received a single Reply Response on those Initial Responses from LIME.

Therefore, the Commission recommends that Government amend the Interconnections Regulations, as soon as practical so that the first reduction in the MTR can be implemented by April 1, 2011 or as soon as possible thereafter, by replacing Section 19(2) of the Interconnections Regulations, which currently reads as follows:

> *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 US $0.15 per minute (adjusted pro rata for units of less than a minute).*

With the following:

> *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) US $0.1100 per minute (adjusted pro rata for units of less than a minute) after March 31, 2011;*
>
> *(ii) US $0.0975 per minute (adjusted pro rata for units of less than a minute) after March 31, 2012; and*

(iii) US $0.0850 per minute (adjusted pro rata for units of less than a minute) after March 31, 2013.

91. As soon as the above-noted Recommendation is given legal force by Government, the Commission intends to immediately issue the following Directive to LIME, Digicel and Islandcom:

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 MTR 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.