

# **ICT Decision 2012-2**

Grand Cayman, 17 May 2012

### Decision for the FLLRIC (Phase III) follow-up proceeding

#### Overview

The ICT regulatory regime in the Cayman Islands requires that Cable & Wireless (Cayman Islands) Ltd. ("LIME") adopt a Forward-Iooking Long-run Incremental Costing ("FLLRIC") methodology when it performs cost studies for regulatory purposes. FLLRIC costs are calculated using the least cost technology currently available and ignore historical costs or technologies.

In this decision, the Authority makes determinations on the FLLRIC model for the purpose of calculating the Mobile Termination Rate ("MTR") and provides guidance on the FLLRIC model's use going forward.

This decision results from the follow-up process initiated by the Authority's ICT Decision 2011-3 (the FLLRIC Phase III implementation decision). Prior to that the Authority had published ICT Decision 2008-2 (the FLLRIC Phase II decision on the Costing Manual Consultation) and ICT Decision 2005-4 (the FLLRIC Phase I decision on the Principles and Guidelines). The reader may find it beneficial to review all three previous decisions for more background information.

In this Decision, the Authority determines that with the exception of one item which is addressed in this decision, the changes LIME has made to the FLLRIC model comply with the directions in the Authority's ICT Decision 2011-3 and directs the 3G module be used for determining the MTR. However, as previously determined in ICT Decision 2011-3, the potential use of the FLLRIC model for both fixed and mobile costing when those results are used in imputation testing, determination of an access deficit or the determination of wholesale rates other than the MTR may require further review of the inputs and methodology assumptions.

The Authority also specifies follow-up processes related to the implementation of the MTR and to determine whether a proceeding to review the Fixed Termination Rate ("FTR") and the transit rate is necessary.

## **Table of Contents**

Introduction	3
Process	4
FLLRIC Model and MTR	5
Background	5
Authority's Analysis and Decision on Changes – All Modules	5
Authority's Analysis and Decision on Changes – Fixed Module	6
Authority's Analysis and Decision on Changes – 2G Module	7
Authority's Analysis and Decision on Changes – 3G Module	7
Authority's Analysis and Decision on MTR	8
Digicel's letter dated 29 March 2012	9
Implementation of the MTR	11
Guidelines for future use of the model	12
Process on FTR and transit rates	13

#### **INTRODUCTION**

- 1. The Information and Communications Technology Authority ("the Authority") has used a three phase process for the development of a Forward-looking Long-run Incremental Costing model:
  - Phase I establish model foundation:
  - Phase II evaluate model implementation; and
  - Phase III final model implementation and use.
- 2. The FLLRIC development process was prompted by the terms set out in licence in which it was required to build a FLLRIC model.
- 3. Phase I was initiated by a public consultation on 24 May 2004 and dealt with the economic and regulatory costing principles and parameters for a FLLRIC model. Phase 1 was concluded with the issuance of an Authority decision on 22 July 2005 entitled "ICT Decision 2005-4 Decision for the Forward-looking Long-run Incremental Costing Consultation (CD 2004-1)" ("Decision 2005-4").
- 4. On 27 October 2005, after receiving input from interested parties concerning the process for the Phase II proceeding, the Authority launched the Phase II proceeding by issuing a public consultation on a costing manual to be used by LIME to develop FLLRIC for its services. Phase 2 was concluded with the issuance of an Authority decision on 31 July 2008 entitled "ICT Decision 2008-2 Decision for the Costing Manual Consultation (CD 2005-1)" ("Decision 2008-2").
- 5. On 22 December 2011, in conclusion of a process that began on 15 January 2009, the Authority issued its Phase III decision "ICT Decision 2011-3 Decision for the FLLRIC Implementation Consultation (CD 2009-1)" ("Decision 2011-3"). In that decision, a thorough analysis of the FLLRIC model was conducted and a number of directions to LIME were provided relating to the finalisation of the FLLRIC model for the purpose of calculating a cost oriented Mobile Termination Rate ("MTR"). The Authority determined that, subject to those revisions, it was satisfied that the FLLRIC costing methodology proposed by LIME for the purpose of costing the MTR and that the Authority was also generally satisfied with the overall costing methodology for the fixed network.
- 6. In this Decision, the Authority specifically makes determinations on the implementation of directions given in Decision 2011-3, including a FLLRIC based MTR and provides directions on how the final costing model may be used in the future. In addition, two follow-up processes are specified: 1) to implement the MTR and 2) to determine if a proceeding to review a cost oriented Fixed Termination Rate and a cost oriented transit rate is necessary.

#### **PROCESS**

- 7. On 7 February 2012, LIME filed information pursuant to the Authority's directions on the further process as set out in paragraphs 365 to 370 of Decision 2011-3. LIME stated that the filing was complete except for documentation related to the Authority's determination in paragraph 330 of Decision 2011-3 which would be filed within a few days.
- 8. On 21 February 2012, LIME filed the additional information and filed a revised FLLRIC model.
- 9. On 13 March 2012, in response to the Authority's directions in a letter dealing with a disclosure request by Digicel, LIME filed information that it had mistakenly excluded from its previous filings and a redacted FLLRIC model with functioning links as directed by the Authority.
- 10. In a letter dated 29 March 2012 and received by the Authority on 30 March 2012, Digicel Cayman Limited ("Digicel") submitted what it characterized as "comments on LIME's FLLRIC model, MTR and other information filed by LIME in response to the Authority's decision on 22 December 2011."
- 11. On 4 April 2012, LIME filed a reply to Digicel's letter dated 29 Mach 2012.
- 12. The full public record for the proceeding is available for viewing on the Authority's website at: <a href="http://www.icta.ky/da\_fllric.php">http://www.icta.ky/da\_fllric.php</a> or by selecting "Public Consultation" from the menu across the top of the www.icta.ky homepage and then selecting the "The Public Record of FLLRIC Phase III" link.

#### **FLLRIC MODEL AND MTR**

#### Background

- 13. LIME's submitted FLLRIC model consists of the following three cost modules:
  - a fixed network cost module;
  - a 2G network cost module; and
  - a 3G network cost module.
- 14. In this section the Authority makes determinations regarding LIME's compliance with the directions provided in Decision 2011-3 and subsequent changes to the FLLRIC model. The changes are subdivided into those belonging to all the modules and then the specific modules. Specific reference is made to the paragraph number from Decision 2011-3.

#### Authority's Analysis and Decision on Changes – All Modules

- 15. In Decision 2011-3 LIME was directed to:
  - Paragraph 121: In the mobile modules, remove the calculations that gross up the LIME demand by two and then divide by three; that is, use its unadjusted demand inputs.
  - Paragraph 125: Use the asset lives as set out in Authority's Decision 2008-2
  - Paragraph 126: Remove the asset life Excel links in mobile modules where direct mobile interconnection has been implemented.
  - Paragraph 132: Update the model to reflect the current applicable duty rate.
  - Paragraph 136: Amend the cost modules to apply a monthly cost of capital (used in the Excel PMT function).
  - Paragraph 159: Correct the identified duplication of formulas in cells AX1 and AY1 of the 'Reval Assets' sheet and any associated input.
  - Paragraph 159: Review whether cell BH4 of the 'overhead\_exp' sheet should be empty and make appropriate corrections in the event this is an error.
  - Paragraph 159: Review the names used in the 'Expense Factors' sheet and the 'FAC input' sheet in all modules to ensure all appropriate matches are made and costs only are excluded when this is relevant.
  - Paragraph 165: Show bad debt costs separately for each modelled service, i.e. remove bad debt costs from the retail costs and have one row for retail costs and another for bad debt.
  - Paragraph 165: Remove links to retail costs sourced from "Appendix IV-FAC-TD Values 10\_09\_01.xls" and instead link to column D in the 'FAC Input' sheet.
  - Paragraph 171: Remove all macros in all modules.

- 16. The Authority has reviewed LIME's submission and is satisfied that LIME has implemented the directions set out above subject to the following comments.
- 17. In its response, LIME provided references to asset lives used in the model showing that these matched those in table 1 of Decision 2011-3. The Authority has reviewed these references and is satisfied that the asset lives used match those determined by the Authority. However, upon inspection of the model the Authority found asset life inputs in sheets not referenced by LIME. In particular, asset life assumptions are made in the Transmission Links sheet of both 3G and 2G modules. Here LIME uses assets lives of 10 years for "Signalling, Cards and ADM Mux", 20 years for "Civils/Ducts Cost" and 6 years for "Billing Cost".
- 18. For duct costs the asset life should be 40 years according to table 1 in the Decision 2011-3. The Authority has tested the impact of changing the asset life for "Civils/Ducts Cost" and notes that it only affects service costs to a decimal place that has no influence on the determination of the MTR. For billing costs an equivalent asset category is not provided in table 1 of Decision 2011-3. Based on an evaluation of assets categories of a similar nature the Authority determines that a 6 year life is a reasonable assumption. "Signalling, Cards and ADM Mux" contains a number of different asset classes. In the Authority's view these assets may be classed as belonging to the transmission equipment asset category in table 1. This category has an asset life of 10 years and hence is in line with LIME's assumption.
- 19. For any future updates of the FLLRIC model LIME is directed to change the asset life of "Civils/Ducts Cost" in the Cost Assumptions sheet.

#### Authority's Analysis and Decision on Changes – Fixed Module

- 20. In Decision 2011-3 LIME was directed to:
  - Paragraph 202: Correct the fixed module to correctly capture the operating costs of the national submarine link by applying the 3.5% charge rate to the capital costs of domestic international transmission.
  - Paragraph 202: Remove the link to the 2G and 3G modules by pasting the value in cell C36 (Allocation to Fixed) of the 'International TX Cost' sheet.
  - Paragraph 213: Ensure there is no inconsistency in the application of spare percentages. That is, where a spare percentage is estimated with reference to equipment costs alone excluding any installation costs, then this percentage is applied only to equipment costs in the module and not to both the cost of equipment and installation.
- 21. The Authority has reviewed LIME's submission and is satisfied that LIME has implemented the directions provided.

#### Authority's Analysis and Decision on Changes – 2G Module

- 22. In Decision 2011-3 LIME was directed to:
  - Paragraph 249: Remove the link to the fixed module by pasting the value in cell J56 (Fixed Network Requires) of the 'Transmission Links' sheet.
  - Paragraph 330: Use direct investment costs from the 'FLLRIC Interrog 13 attachment2 10 11 10 Conf.xls' to account for civil work costs.
  - Paragraph 330: Provide detailed documentation for the inclusion of a 60% mark-up to equipment cost to account for direct mobile interconnection planning considering the planning costs included in 'FLLRIC Interrog 15 attachment 10 09 01 Conf.xls'.
  - Paragraph 330: Confirm the reasonableness of the '400-GSM: Interconnect Specific Links' operating costs as shown in the 'Expense Factors' sheet given the operating costs provided in 'FLLRIC Interrog 13 attachment2 10\_11\_10 Conf.xls' and that no additional operating costs have been added to account for direct mobile interconnection.
- 23. The Authority has reviewed LIME's submission and is satisfied that LIME has implemented the directions provided noting the following.
- 24. No detailed documentation for the inclusion of a 60% mark-up to equipment cost to account for direct mobile interconnect planning was provided by LIME. However, the Authority notes that the mark-up has been set to zero in the module. Further, the Authority notes that an operating expenditure ratio of 4% of investment cost has been used in line with the ratio in 'FLLRIC Interrog 13 attachment2 10\_11\_10 Conf.xls'. The Authority considers this to be a reasonable assumption. LIME did not provide confirmation that no additional operating costs have been added to the mobile 2G module to account for direct mobile interconnection. However, based on the Authority's review of the model none have been identified. Accordingly, the Authority is satisfied that no additional operating costs have been added to account for direct mobile interconnect.

### Authority's Analysis and Decision on Changes - 3G Module

- 25. In Decision 2011-3 LIME was directed to:
  - Paragraph 266: Evaluate the use of cells C7, C8, C11 and C12 in the "Radio Network" sheet. If the values in these cells are not needed they should be removed.
  - Paragraph 286: Correct the allocation of the HLR –call sensitive costs.
  - Paragraph 297: Remove the link to the fixed module by pasting the value in cell J67 (Fixed Network Requires) of the 'Transmission Links' sheet.
  - Paragraph 330: Use direct investment costs from the 'FLLRIC Interrog 13 attachment2 10\_11\_10 Conf.xls' to account for civil work costs.

- Paragraph 330: Provide detailed documentation for the inclusion of a 60% mark-up to equipment cost to account for direct mobile interconnection planning considering the planning costs included in 'FLLRIC Interrog 15 attachment 10\_09\_01 Conf.xls'.
- Paragraph 330: Confirm the reasonableness of the '400-GSM: Interconnect Specific Links' operating costs as shown in the 'Expense Factors' sheet given the operating costs provided in 'FLLRIC Interrog 13 attachment2 10\_11\_10 Conf.xls' and that no additional operating costs have been added to account for direct mobile interconnection.
- 26. The Authority has reviewed LIME's submission and is satisfied that LIME has implemented the directions provided subject to the same comments provided for the 2G module.

#### Authority's Analysis and Decision on MTR

- 27. Based on an evaluation of the directed changes to the FLLRIC model the Authority is satisfied that LIME has made the necessary adjustments.
- 28. In paragraph 77 of Decision 2008-2 the Authority determined that it would select the technology to be used in the FLLRIC model based on which technology provides the lowest MTR. Correcting the asset life of "Civils/Ducts Cost" in each module results in a MTR of CI\$0.0351 per minute for 2G technology and CI\$0.0284 per minute for 3G technology. The technology with the lowest MTR is the 3G module. Accordingly, the Authority determines that 3G technology is to be used as a basis for calculating the cost of mobile termination and that a cost oriented MTR is CI\$0.0284 per minute.

#### DIGICEL'S LETTER DATED 29 MARCH 2012

- 29. The Authority notes that the directions on the further process in paragraph 368 of Decision 2011-3, stated that "[t]he Authority stresses that the parties' submissions in this follow-up process should relate solely to the changes to the model pursuant to this decision and must not attempt to reargue items on which the Authority has already made determinations in this or previous decisions." The Authority repeated that instruction in its 8 March 2012 letter to the parties when it stipulated the remaining process for this follow-up proceeding.
- 30. As previously noted, Digicel, in the letter dated 29 March 2012 and received by the Authority on 30 March 2012, characterized the content of that submission as being "comments on LIME's FLLRIC model, MTR and other information filed by LIME in response to the Authority's decision on 22 December 2011."
- 31. In reviewing Digicel's letter, the Authority notes that Digicel has not addressed any of the changes to the model that were made pursuant to the Authority's directions in Decision 2011-3. Instead, Digicel's listed what it characterized as concerns with the model.
- 32. In the paragraph numbered "1" of the letter, Digicel alleged that the process is fundamentally flawed because, in its view, contrary to what it claimed is all international experience, the model indicated that PSTN termination is more costly than mobile termination. The Authority notes that the PSTN termination rate was not within the scope of this follow-up proceeding and the Authority has made no determination on an appropriate rate for that service.
- 33. In the paragraph numbered "2", Digicel claimed there has been a failure during the process to allow Digicel a fair opportunity to put its case forward as a result of a failure to give Digicel access to the necessary information to make its case. Digicel alleged that this is a breach of the principles of natural justice.
- 34. In terms of the process issue raised in the paragraph numbered "2", the Authority considers that Digicel's claim is without merit as the disclosure determinations in this proceeding followed the process stipulated in the ICTA (Confidentiality) Regulations, 2003 whereby parties are permitted to provide information in confidence to the Authority, other parties are permitted to request disclosure of that information, and the Authority is required to assess the relative weight of the specific direct harm to the party providing the confidential information of disclosing the requested information as against the broader public interest in disclosing such information. In the Authority's view, following the process stipulated in the ICTA Confidentiality Regulations ensured that the appropriate level of disclosure was provided and parties were therefore given a fair opportunity to make their case.
- 35. In addition, when looked at in terms of the level of disclosure raised in the paragraph numbered "2", the Authority also considers Digicel's claim is without merit. The level of disclosure in this follow-up proceeding is the same as was determined by the Authority in the previous proceeding as summarized in paragraph 13 of ICT Decision 2010-2 as being, "except for a limited number of identified instances, if the data is used to determine the cost of mobile termination, it should be disclosed". As the exception of the expense factors was addressed by the Authority requiring LIME to paste the values of the intermediate calculation

from the confidential version of the model in the public model, the only two input values used for the MTR calculation that were not disclosed were the number of postpaid subscribers and number of prepaid subscribers. The Authority considers that Digicel was reasonably able to comment on the substance of the MTR calculations in the model given this level of disclosure.

- 36. In the paragraphs numbered "3", "5" and "6", Digicel alleged that the demand figures used by LIME are not consistent with market reality and therefore the models as they currently stand are in breach of principles 2, 3 and 9 as outlined by the Authority in paragraphs 374, 376 and 388 of Decision 2011-3. The Authority notes that the demand estimates were subject to extensive review in the previous proceeding and in Decision 2011-3, where the Authority determined that LIME's unadjusted demand inputs can reasonably be used for the purpose of determining a FLLRIC based MTR. Contrary to Digicel's allegation, the Authority determined that the model does satisfy the Authority's principles 2, 3 and 9. In paragraphs 375, 377 and 389 of Decision 2011-3 respectively, the Authority explicitly determined that LIME's submission did satisfy those requirements. As Digicel is now attempting to reargue items on which the Authority has already made determinations, it is outside the scope of the follow-up process and therefore denied.
- In the paragraph numbered "4" of its letter, Digicel suggested that if it were to enter 37. into an interconnection agreement with LIME based on MTR rates calculated using the demand profiles used by LIME, this would constitute a breach of section 36 of the ICTA Law. (Section 36 of the ICTA Law states that agreements between Licences which may affect trade in the Islands and has as their object or effect the prevention, restriction or distortion of competition relating to any ICT Service or ICT network are prohibited.) The Authority considers that this argument has no merit. Section 65(6) of the ICTA Law states that "the Authority shall prescribe the cost and price standards and other quidelines on which the reasonableness of the rates ...will be determined". In addition, Section 10(1)(f) of the ICTA Interconnection and Infrastructure Sharing Regulations. 2003 explicitly states that charges for interconnection services are to be "based on a forward looking longrun incremental cost methodology once it is established by the Authority following a public consultative process." As the MTR determined in this proceeding meets these requirements, it is illogical to argue that an Authority approved cost-oriented rate is inconsistent with section 36 of the ICTA Law.

#### IMPLEMENTATION OF THE MTR

- 38. The Authority notes that the MTR is typically one of the rate components specified in the interconnection agreements between licensees and that those agreements are required to be filed with the Authority for publication in the Authority's interconnect agreement register at: <a href="http://www.icta.ky/da\_interconnect.php">http://www.icta.ky/da\_interconnect.php</a>. The Authority notes that the most current agreements it has on file are: Digicel and LIME from April 2011, Logic and LIME from October 2009, and TeleCayman and LIME from May 2004.
- 39. In order to take this process forward, the Authority wishes to ensure that there are no interconnection agreement terms or conditions that will conflict with the ICTA approved rate.
- 40. Therefore, from an operational need, the Authority will make the MTR rate interim as of the date of this decision and direct that the four licensees identify to the Authority if there are any terms or conditions in their interconnection agreements that conflict with the use of an ICTA approved rate.
- 41. The Authority therefore directs that:
  - the current MTR rates charged by Digicel and LIME to each other and other licensees are made interim effective the date of this decision;
  - LIME and Digicel are to keep detailed records of the quantities and rates used to bill for this service to enable any adjustments to be applied retroactively to the date of this decision;
  - Each of Digicel, LIME, Logic and TeleCayman are to identify by 31 May 2012 to the Authority and copied to the other party to their agreement, either that the necessary changes will be made to their interconnection agreements to change the MTR going forward from the date of this decision to the above determined rate or whether there are any terms and conditions in the agreement that conflict with the immediate use of the ICTA approved MTR on a going forward basis. If there are any such clauses, the specific reference and a detailed explanation of why the clause is in conflict with the immediate use on a going forward basis of the approved MTR should be provided to the Authority and to the other party to the agreement. Upon receipt of these submissions, the Authority will determine if any further steps are necessary.

#### **GUIDELINES FOR FUTURE USE OF THE MODEL**

- 42. Regarding the future use of the FLLRIC model the Authority directs that:
  - No changes are allowed to be made without the Authority's approval.
  - When using the model data for service filing or cost study purposes, LIME must submit the relevant fully working modules to the Authority, identifying any changes to the modules. This includes any appendices or spreadsheets that are directly linked to the main cost modules. All proposed changes must be documented by listing the excel file name, the spreadsheet name, the specific cell references, a description of the changes that were made and a rationale for each such change. All supporting spreadsheets must contain a description of the overall purpose of the spreadsheet, a description of each tab and list the main information sources.
  - Where LIME is required to submit a public version of the model, this must be a working copy of the model with any confidential information noted and replaced with dummy data. The replacement of confidential data with dummy date must, at a minimum, be made in accordance with the Authority's determinations in CD 2009-1 proceeding. All formulas and calculations and non-confidential data are to be left intact. For greater certainty, the above is not meant to indicate that the Authority will not require any further disclosure in any future proceedings. Disclosure requests in any future proceedings will be dealt with in accordance with the process stipulated in the ICTA Confidentiality Regulations.
  - As the Authority has selected 3G technology as the appropriate technology for FLLRIC costs, for any future FLLRIC modelling exercises, LIME is not required to submit the 2G module.
  - In submissions (such as imputation tests) where LIME is using the model as a source of input data, LIME should clearly indicate which data from the model are used to support its submission by providing specific file name, work sheet name, and cell references for any referenced data.
- 43. The Authority stresses that its acceptance of the FLLRIC model for the purposes of calculating the cost of the MTR does not mean that the model has been accepted for costing of other services or that certain parts or calculations in the model may be used directly to support future submissions without further scrutiny. As previously determined in ICT Decision 2011-3, depending on the nature of any future proceeding, the Authority may conduct further review of source data, methodology assumptions, and calculations in the submitted module(s).

#### PROCESS ON FTR AND TRANSIT RATES

- 44. In a 24 December 2009 decision in a proceeding related to an interconnection dispute resolution between LIME and Digicel, the Authority determined that the FTR and transit rate for interconnection traffic between Digicel and LIME were made interim effective from the date of that decision. In ICT Decision 2010-5 the Authority noted that the parties may be reluctant to have interim rates and may prefer to have final rates with no potential retroactive adjustments. The Authority determined that, if after receipt of that decision, the parties were able to agree on final rates, the Authority would remove the requirement for interim rates. Otherwise, if the parties were unable to agree to cost-oriented rates, then after the FLLRIC model is approved, the Authority could have a follow-up proceeding to review those rates.
- 45. By 31 May 2012, LIME and Digicel are directed to indicate in writing to the Authority and copying the other party whether these rates have been agreed or if they would prefer to have a proceeding to review the FTR and the transit rate. Upon receipt of these submissions, the Authority will determine if any further steps are necessary.