

20 September 2016

Cable & Wireless Limited, trading as FLOW (“**FLOW**”) hereby submits the following reply in response to comments made to the Consultation Document “*Principles, methodologies and guidelines for the determination of interconnection rates*”, issued by ECTEL as Consultation Document No. 3 of 2016 on 28 July 2016 (the “**Consultation Document**”). Failure to address any comment made by other stakeholders to the Consultation Document should not necessarily be construed as FLOW’s agreement with the position taken by such stakeholders.

In the below, we begin by responding to other stakeholder comments that do not fit neatly under the questions posed by ECTEL. We then respond to the stakeholder comments to ECTEL questions in the order that the questions appear in the Consultation Document.

Introduction/Non-question specific comments

1. FLOW agrees with the Grenada National Telecommunications Regulatory Commission (NTRC) that the Consultation Document should have included more discussion regarding the BULRIC-based rate implementation. The Grenada NTRC calls for “clear dates with specific objectives/milestones for the BULRIC implementation...” FLOW believes that, in addition to proposing the dates for implementation, ECTEL should be proposing the structure of the rates (peak vs. off-peak, time of day, etc.). We ask that ECTEL confirm that these elements will form part of the consultation on the draft model later in this proceeding.
2. The Grenada NTRC also proposes that an independent third-party verify the cost data submitted by the operators. FLOW has much sympathy with this point of view. However, as the only operator in the region who has been through an independent third party cost validation of the nature that the Grenada NTRC is suggesting, we understand first-hand how time consuming that process is. Such third party cost validation would delay the long overdue implementation of new rates.
3. That said, the cost numbers do need some form of vetting. We understand that ECTEL’s consultants will be checking the cost filings with international benchmarks to confirm they are reasonable and reflect efficiently incurred levels. ECTEL can cross-check one operator’s filing against the other as well.
4. Digicel raises the important issue of treatment of the differences in cost between ECTEL member countries (in “Point 11” of its submission). Digicel is of the opinion that all island cost differences need to be reflected in the modeling. FLOW has a different view. Given that there is a policy objective of achieving similar retail rates across the islands, FLOW believes that, as interconnection rate costs will impact retail rates, ECTEL should lean towards methodologies that would contribute to cost convergence in the modeling. This was a principle used in ECTEL’s the previous LRIC proceeding and, if retail price convergence remains an objective, is worth pursuing today.

5. This is not to say that ECTEL should impose assumptions that unreasonably lead to the same cost outputs. Instead, where an option arises to make a reasonable assumption that is likely to drive the costs closer, ECTEL should take up that option. For example, we believe that a single market share assumption for the reference mobile operator should be adopted across the region. This is reasonable as, in any given country, third mobile operator may come and go over the years as we state in our comments in the first round of this consultation.

Responses to Question 1 on Network Capex, Network Opex, License, and spectrum fees, G&A Expenses and cost of capital.

6. FLOW agrees with the Grenada NTRC that the inclusion of the spectrum fees should reflect the nature of the payment of those fees.

Responses to Question 2 on ECTELs proposal on the treatment of Opex

7. FLOW agrees with the NTRC of St. Vincent & the Grenadines that the calculation of an expense factor for General and Admin expenses should be based on Gross Replacement Value (GRC). However, we believe that, given the nature of the bottom-up approach, the GRC is equivalent to the Gross Book Value (GBV). If not, ECTEL should clarify.

Responses to Question 4 on ECTEL's view to implement tilted annuities

8. FLOW disagrees with Digicel's position (expressed in "Point 6" of its submission) that the tilted annuity approach would cause the model to behave in unpredictable or unrealistic ways. Much of what Digicel has to say relates to a point made regarding the yearly approach to deployment. FLOW discusses this under responses to Question 8 (see below); however, it is worth stating here that the yearly approach to deployment is likely to generate a much more stable and predictable results than what Digicel is proposing.
9. With respect to the tilted annuity specifically, Digicel misleadingly asserts that capex "will be recovered on assets that no longer exist". The value that is represented by the function of a particular asset would not disappear from one year to the next. It is hyperbole to suggest, as Digicel does, that the assets are dropped in an unreasonable way. The costs modeled, including the capital costs arising from the tilted annuity, would represent a stable reflection of an efficiently deployed network at each level of demand over time.

Responses to Question 7 on the suggested treatment of common cost under the LRIC+ standard

10. We disagree with the Grenada NTRC that the Equi-Proportional Mark-up (EPMU) is typically or generally used for the allocation of common cost. It is certainly typical to use it for a subset of common costs; however, as we said in our comments an EPMU approach to *network* common cost allocation could lead to distorted results and would be highly unusual.

11. With respect to Digicel's comments on the allocation of common network costs, FLOW trusts ECTEL will disregard Digicel's puzzlement over the minor inconsistency in use of the words "effective" and "efficiency" in its description of the capacity approach to allocation. This classification of allocation types presented by ECTEL is very standard, and FLOW is at a loss to understand why Digicel is being obtuse.
12. More substantively, we disagree with Digicel that annual volumes, rather than peak volumes, are the more appropriate or more commonly driver used in LRIC modeling. We believe that, where capacity is used for allocation of common network costs, the opposite is the case.

Response to Question 8 on the use of a yearly approach for network optimization

13. FLOW agrees with the Grenada NTRC that the yearly approach has the benefit of reducing the complexity of the modeling.
14. FLOW disagrees with Digicel's position on this score (made at "Point 1" of its submission). In particular, Digicel portrays the ECTEL approach as requiring that "the full cost of an asset must be recovered in a single year". This is description suggests either that Digicel is misleading the reader or has misunderstood what ECTEL is proposing. The value that is represented by the function of a particular asset would not disappear from one year to the next. The approach merely implies that the deployment is always efficient to meet each year's the demand. Thus, FLOW believes that the yearly approach is more consistent with the principle of efficient pricing of interconnection.

Responses to Question 11 on the reference operator and its characteristics (e.g., demand, spectrum, coverage)

15. Regarding how the model allocated blocks of spectrum, we do not believe that enough detail was provided to understand what ECTEL proposes on this matter. However, FLOW agrees with Digicel's view (made at "Point 9" in its submission) that, spectrum requirements generated on a bottom-up basis should be expressed in spectrum blocks purchased in a manner consistent with best international practice in spectrum assignment.

Responses to Question 13 on ECTEL's approach for Mobile Network Modelling

16. FLOW disagrees with Digicel's position (expressed at "Point 2" of its submission) on the scorched earth approach proposed by ECTEL. Digicel exaggerates the effect of the approach in an attempt to secure a different approach that will inflate the costs of network build. Digicel suggests that approach implies that mobile site equipment is moved "a few hundred meters on a yearly basis" and that sites are being "moved around, or being abandoned". This is an over-dramatization of modeling of a hypothetical network, and should not be taken seriously.

17. FLOW also disagrees with Digicel's related statements on the geographical coverage (expressed at "Point 3" of its submission). While the geography in many areas of the islands may be "hostile" to radio propagation, as an overlay of topography and population densities will show, those areas tend to be far less inhabited.
18. FLOW also disagrees with Digicel's view that, simply because ECTEL has proposed a number of geotypes larger than that of typical international practice, "modeling discontinuities" will arise. Digicel does not explain what such discontinuities might be, nor provide evidence why the approach would generate "very few based stations".
19. In fact, ultimately, we cannot know in advance whether ECTEL's proposed geotypes are likely to over-estimate or underestimate the number of sites required in an efficient network deployment. This will depend primarily on the cell radii of the geotypes assumed.
20. FLOW suggests that a far more practical method of dealing with Digicel's concerns is by ECTEL "sense-checking" the modeled site numbers generated by the model against the number of sites actually deployed. This would be usual modeling practice and would safeguard against under- or over-calculation of sites in the model. However, ECTEL should keep in mind that, all things equal, the actually deployed number will exceed the efficiently deployed number by definition.

Responses to Question 15 on the proposed list of services and increments for the BULRIC model for fixed networks

21. We disagree with Digicel's views on the proposed increments for fixed network (expressed at "Point 10" of its submission). Digicel suggests that Axon Partners is being inconsistent in its approach as compared to what it implemented in the Jamaica fixed LRIC proceeding. However, we understand that the Jamaica proceeding differs from this one as Axon was required in Jamaica to adopt a pure LRIC approach. A pure LRIC approach requires a more refined increment list. In this proceeding, there is more flexibility.
22. We also do not believe that the results of the wider increment approach as proposed by ECTEL will necessarily any more "unreliable" model outputs than an approach with narrow increment, but more allocated common costs added on, as proposed by Digicel.

Responses to Question 16 on ECTEL's approach for Fixed Network Modelling

23. Digicel's proposal on the treatment of geotypes in the fixed model (made at "Point 4") appears to be, at best, a misunderstanding of how the nodes are modeled for the purpose of estimating costs of interconnection and, at worst, a thinly disguised attempt to lower the costs of fixed network provision.
24. Digicel appears to be implying that access nodes are irrelevant to the exercise, so one is left with "very few network nodes, with a limited hierarchy". This is simply not the case. In fact, where next generation access nodes are not yet deployed, ECTEL has little choice but to

use a variety of geotypes or other means to estimate number of access nodes that will need to be deployed to service subscribers. The number and location of these nodes will be significant both to the traffic sensitive costs of the nodes themselves and the cost of the transmission connecting the nodes to the rest of the network.