

18 July 2017
Mr. Embert Charles
Managing Director
Eastern Caribbean Telecommunications Authority
Vide Boutielle
P.O. Box 1886
5th Floor Conway Business Centre
Waterfront
Castries, Saint Lucia

RE: Cable & Wireless comments on ECTEL draft cost models for fixed and mobile interconnection rates

Dear Mr. Charles,

Cable & Wireless Limited, on behalf of its affiliates Cable & Wireless (Dominica) Limited, Cable & Wireless (Grenada) Limited, Cable & Wireless (St. Kitts and Nevis) Limited, and Cable & Wireless (St. Lucia) Limited (hereafter, the “**company**” or “**C&W**”), hereby submits the following comments in response to the Consultation Document on “*Draft Cost Models for Fixed and Mobile Interconnection Rates*” (the “**Consultation Document**”), issued by the Eastern Caribbean Telecommunications Authority (“**ECTEL**”) on 30 May 2017.

We respond below to each question posed by ECTEL in the same order they appear in the Consultation Document. Failure to address a given issue raised by ECTEL in the Consultation Document should not necessarily be construed as C&W’s agreement with the position taken by ECTEL on that issue. Confidential statements are highlighted and marked with “#”.

Questions regarding the Mobile Model

Question 1: Do you agree that the demand presented above accurately represents Member States’ mobile market? Please explain your views and support any comment with information.

- 1.1 Considering internal figures regarding C&W’s mobile traffic numbers and publicly available figures on the ECTEL markets, we believe that the demand presented in the Consultation Document reasonably depict the mobile market in the Member States.

Question 2: Do you agree that the demand disaggregation per technology presented above accurately represents Member States’ mobile market? Please explain your views and provide measurements in your network to support your arguments.

- 2.1 We first respectfully disagree with the assertion in the Consultation Document that no operator provided information on traffic by technology. C&W provided the requested information for the year 2015 on 14 October 2016 in its Third Tranche of responses to the ECTEL Data Request – Mobile Model, “Traffic Statistics” sheet. We request that ECTEL consider these figures in subsequent revisions of inputs to the model.

Question 3: Do you agree that the growth rates presented above accurately represent Member States’ mobile market? Please explain your views and provide measurements in your network to support your arguments.

- 3.1 We disagree with the growth rates assumed for data traffic in the mobile model. ## If ECTEL’s underlying assumption is that traditional voice traffic increasingly migrates to data (which its zero percent voice growth assumption suggests), then these growth rates should be higher. A number of recent studies suggest that data growth rates will exceed 15% per year. Ericsson’s most recent Mobility report¹ anticipates annual growth rates of 45% over the period 2015–2021. We do not believe that the Caribbean will necessarily experience the level of growth Ericsson foresees globally, but, under an assumption of continued migration of voice to data, not to mention the advent of new data services, it is highly unlikely that growth would plateau at a low growth level of 15% per year.

Question 4: Do you agree that the statistics presented above are reasonable and accurately represent the demand in the Member States market? Please explain your views and provide own measurements to support your arguments.

- 4.1 C&W considers the demand statistics in table 2.4 reasonable.

Question 5: Do you agree with the formulas used for the calculation of WACC? Please explain your views.

- 5.1 There is an error in the WACC formula. The subscript on the second W should be an “e” not a “d”. We note that this is a typo: the error did not carry through to the actual calculation of the WACC.

Question 6: Do you agree that the parameters above are reasonable for the Member States? Please explain your views and provide information that supports your arguments.

- 6.1 C&W believes the parameters used for the calculation of WACC are generally reasonable. It is true, however, that the gearing will differ from one business unit to another. It is not clear why ECTEL would have a uniform WACC when it differentiates so many other parameters for each Member State in the modelling.

Question 7: Do you agree that WACC presented above is reasonable for mobile operations in Member States? Please explain your views and provide information that supports your arguments.

¹ <https://www.ericsson.com/res/docs/2016/ericsson-mobility-report-2016.pdf>

7.1 C&W believes the proposed figure is a reasonable average value for the WACC for the mobile operations in ECTEL.

Question 8: Do you agree that the coverage presented above is reasonable and accurately represents the coverage in the Member States?

8.1 Considering the figures have been modified with a +/- 10% range we cannot say for certain that the coverage accurately represents coverage in the Member States; we agree, however, that the coverage presented in Exhibit 2.4 is reasonable.

Question 9: Do you think that 2015 coverage is representative of the period 2015-2020? If not, please provide your best estimates, explaining your rationale behind, providing any supporting information and detailing the sources of such information.

9.1 C&W believes that this is a reasonable assumption as further network development is likely to focus on bringing increasing bandwidth to existing sites, rather than increasing the number of sites for coverage or capacity.

Question 10: Do you agree that the spectrum above represents accurately the total spectrum available in the market? Please, explain your views.

10.1 It is not clear what Exhibit 2.5 is intended to represent. For example, does it purport to be actual aggregate bandwidth available for allocation, or not yet allocated to market participants?

Question 11: Do you agree that the spectrum allocation to technologies is reasonable? Please, explain your views.

11.1 See our response to Question 10 above.

Question 12: Do you think it is reasonable to apply the spectrum allocation above to the entire period 2015-2020? If not, please explain your spectrum allocation plans and the rationale behind.

12.1 See our response to Question 10 above.

Question 13: Do you agree that the backbone network considered for each Member State is reasonable? Please explain your views and provide information about your backbone network to support your comments.

13.1 C&W believes that the backbone network depicted in Exhibits 2.6-2.10 are reasonable.

Question 14: Do you agree that the resources obtained are reasonable to satisfy the demand and coverage of the Member States? Please explain your views and provide any information that supports your views.

14.1 We agree that the resources obtained could be reasonable to satisfy the demand and coverage of the Member States.

Question 15: Do you agree that the sites evolution is reasonable and aligned with the demand requirements? Please explain your views and provide any information that supports your views.

15.1 C&W disagrees that the site evolution depicted in Exhibit 2.15 is reasonable. We would not expect that the number of sites would increase at a constant rate as they are depicted in the diagram. Rather we would expect, given the spectrum available and the assumption on constant population coverage, that the number of sites would begin to plateau and the additional traffic would be addressed through increases in capacity on existing sites.

Question 16: Do you agree that the useful lives employed are appropriate? Please explain your views.

16.1 We agree that the useful lives employed are appropriate, although there is additional “access site” facilities, such as generators, that would have a lower life than the tower infrastructure itself. For example, a generator might have a life of 10 years, but other passive infrastructure might have 17 years.

Question 17: Do you agree that the costs obtained are reasonable for an operator with the demand, resources, etc. described above? Please explain your views and provide information supporting your arguments.

17.1 In general, we believe that the costs obtained are generally reasonable for the given demand, resources, etc. described in the Consultation Document. We believe, however, that with the adjustments in our responses above that these costs are likely to be somewhat lower.

Question 18: Do you agree that the services’ unit costs obtained, reasonably represent the costs in Member States? Please explain your views and provide information supporting your views.

18.1 Again, we believe that the services’ unit costs obtained are generally reasonable for the given demand, resources, etc. described in the Consultation Document. We believe, however, that with the adjustments we have proposed these costs are likely to be somewhat lower.

Question 19: Based on the results presented in this and previous sections, what market share do you think should be used for each Member State? Please, explain your views and provide any supporting information required.

19.1 As we have indicated elsewhere in this proceeding we do not believe the assumption of 33% market share for any of the islands is appropriate. It runs contrary to reality, as ECTEL has itself admitted three operator markets are a minority in ECTEL

Member States; moreover, even in those Member States with three operators, it is not at all clear that the market is large enough for three operators in the long-term.

- 19.2 We also note that, as a matter of policy, ECTEL has stated that assuming a smaller market share will make the market more attractive to a possible new entrant in those Member States. As we have stated elsewhere, this is an assertion that, aside from being unsupported, is of dubious validity from a factual or policy point of view. For example, it is quite possible that the artificially high mobile termination rates, which a smaller market share assumption would generate, will lead to a MORE difficult business environment for new entrants, as they will be net senders of traffic during the first critical years of existence. Furthermore, more generally, ECTEL should not be in the business of raising costs in the mobile sector to favor certain operators over others.

Questions regarding the Fixed Model

Question 20: Do you agree that the demand presented above accurately represents Member States' fixed market? Please explain your views.

- 20.1 The retail voice traffic appears reasonable; however the domestic transit call volumes appear exaggerated. Domestic transit as we understand it should include interconnection transited traffic between the fixed and mobile networks and between the mobile networks. It should be a summation of these two types of traffic. ##

- 20.2 With respect to broadband traffic, some of the Member States appear to have reasonable traffic levels, i.e., Dominica, St. Kitts & Nevis and St. Vincent & the Grenadines; whereas others are not. Earlier in this proceeding we provided evidence measured directly from servers at each of our business units and reported in a consistent manner, so it is not clear why some were accepted and others were not. ## Subsequent to our submission, ECTEL never indicated that there were problems with these particular data submissions, so it would appear that the data traffic figures were input in error or were arbitrarily revised.

Question 21: Do you agree that the demand trends presented above accurately represents Member States' fixed market? Please explain your views and provide measurements in your network to support your arguments.

- 21.1 Taking into consideration the adjustments for confidentiality, we believe the demand trends presented in Exhibit 3.2 are reasonable and accurately represent average growth rates in the Member States' fixed market.

Question 22: Do you agree that the statistics presented above are reasonable and accurately represent the demand in Member States? Please explain your views and provide own measurements to support your arguments.

- 22.1 Taking into consideration the adjustments for confidentiality, we believe the demand trends presented in Table 3.3 are reasonable and accurately represent average growth rates in the Member States' fixed market.

Question 23: Do you agree with the formulas used for the calculation of WACC? Please explain your views.

- 23.1 There is an error in the WACC formula. The subscript on the second W should be an “e” not a “d”. We note that this is a typo: the error did not carry through to the actual calculation of the WACC.

Question 24: Do you agree that the parameters above are reasonable for the Member States? Please explain your views and provide information that supports your arguments.

- 24.1 C&W believes that the parameters used for the calculation of WACC are generally reasonable although the gearing will differ from one business unit to another. It is not clear why ECTEL would have a uniform WACC when it differentiates so many other parameters for each Member State in the modelling.

Question 25: Do you agree that WACC presented above is reasonable for fixed operations in Member States? Please explain your views and provide information that supports your arguments.

- 25.1 We believe the proposed figure is a reasonable average value for the WACC for fixed operations in ECTEL.

Question 26: Do you agree that the average distance extracted from the geographical analysis performed, reasonably represents the prevailing average length of the backhaul network in the geography of the Member States? Please explain your views and provide any information that supports your views.

- 26.1 The backhaul distances represent the distance from the access nodes to the backbone network. The locations of the backbone network as well as many of the access node sites (access nodes numbers had to be increased as new nodes are positioned closer to the customer) have been selected for modelling purposes. Verifying the distances that ECTEL has assumed is a difficult task; however, taking for granted that the distances were derived in the manner described in the model documentation, we believe that these average distances should be reasonable for the hypothetical network modeled.

Question 27: Do you agree that the resources obtained are reasonable to satisfy the demand of the Member States? Please explain your views and provide any information that supports your views.

- 27.1 We generally agree that the resources identified in Table 2.6 seem reasonable to satisfy the relevant demand of the Member States. ECTEL has pursued an approach that generates substantially fewer edge nodes than we would expect; however, so long as the capacity of those fewer edge nodes are appropriately larger and the average distances from access node to edge node are correspondingly longer, we can accept this approach as reasonable.

- 27.2 However, this is not to say that we agree with all the capacities generated by the model as we have significant disagreement with the demand volumes employed. See our response to Question 20.

Question 28: Do you agree that the useful lives employed are appropriate? Please explain your views.

28.1 We believe that the useful lives employed are appropriate.

Question 29: Do you agree that the costs obtained are reasonable for an operator with the demand, resources, etc. described above? Please explain your views and provide information supporting your arguments.

29.1 As we have significant disagreement with aspects of the demand figures employed in the model therefore we cannot agree that the costs obtained are reasonable. Please refer to our reply to Question 20.

Question 30: Do you agree that the services' unit costs obtained, reasonably represent the costs in the Member States market? Please explain your views.

30.1 Again, we cannot agree with the services' unit costs obtained reasonably represent the costs as we have serious disagreement with the demand assumed in the model. Please refer to our reply to Question 20.