



ICT Decision 2013-1

Grand Cayman, 30 July 2013

Decision on Assignment of 700 MHz Spectrum

Summary

In this Decision, the Authority determines that LIME is assigned the use of Block B Lower (704-710 MHz, 734-740 MHz 12MHz paired) and Block C Lower (710-716 MHz, 740-746 MHz 12 MHz paired) bands in accordance with its 700 MHz Spectrum application.

Background

1. On 13 December 2012, the Authority issued its ICT Decision 2012-4, *Decision on a Policy for the Assignment of 700 MHz Spectrum* ("ICT Decision 2012-4")¹. In that decision, the Authority determined that, "... applications for spectrum within the 700 MHz band may be submitted during the 60 day period from **2 January 2013** to **4 March 2013**."
2. Further, the Authority determined that, "[a]ny application for spectrum within the 700 MHz band should address the Authority's spectrum allocation criteria as set out at paragraph 45 of ICT Decision 2008-1, *Policy for the Management and Allocation of Spectrum in the Cayman Islands*², and should include in particular the:
 - a. proposed network build out timeframe,
 - b. technical specifications of the proposed network,
 - c. proposed 700 MHz band, and
 - d. proposed network layout for the Cayman Islands."
3. The Authority also determined that, if it received multiple applications for the same spectrum within the 700 MHz band, it would hold a Beauty Contest.
4. On 4 March 2013, the Authority received two applications for the same 700 MHz blocks of spectrum, one from Cable and Wireless (Cayman Islands) Ltd (T/A LIME) ("LIME")³

¹<http://www.icta.ky/docs/Decisions/2012-4%20700%20MHz/ICT%20Decision%202012-4%20Assignment%20of%20700%20MHz%20Spectrum.pdf>

²<http://www.icta.ky/docs/Decisions/ICT%20Decision%202008-1%20Spectrum%20Management.pdf>

³http://www.icta.ky/docs/Decisions/Followup/700%20MHz%20Spectrum/2013_03_04%20LIME%20Response%20to%20Cayman_700MHz_Spectrum_Decision%20Redacted.pdf

and one from Digicel Cayman Ltd ("Digicel")⁴. Each applicant applied for Block B Lower (704-710 MHz, 734-740 MHz 12 MHz paired) and Band C Lower (710-716 MHz, 740-746 MHz 12 MHz paired) bands (the "requested spectrum").

5. The Authority sent a letter⁵ to the applicants on 12 March 2013 advising them that a Beauty Contest was to be held, as per ICT Decision 2012-4.⁶ Attached to that letter was an interrogatory to both applicants. Each was asked to provide the information requested by 12 April 2013. In addition both applicants were permitted to submit any further information, in addition to their applications already received by the Authority, in support of their applications.

Initial applications

Applications Received 4 March 2013

6. In summary, LIME⁷ and Digicel⁸ provided the following information regarding the Authority's spectrum allocation criteria as set out at paragraph 45 of ICT Decision 2008-1:

The spectrum will be used to provide, directly or indirectly, new or enhanced ICT services which will be of benefit to the Cayman Islands.

7. In response to this criterion, both applicants provided very similar information relating to new and enhanced services that the applicants proposed for the use of this spectrum using LTE (Long Term Evolution) technology⁹. This included faster broadband speeds.

The new or enhanced services will be commercially launched within a timescale acceptable to the Authority.

8. In response to this criterion, both applicants provided a description of their intended roll-out plans. However, the exact dates and time frames of both roll-out plans were unclear to the Authority. As a consequence, each applicant was requested to clarify its proposed roll-out timetable. The question and the replies to that question are discussed below at paragraphs 20 to 28.

Efficient use will be made of the spectrum.

9. In response to this criterion, both applicants provided similar technical information about the LTE technology they planned to use. The Authority considers that both applicants proposed to use the spectrum efficiently, within the boundaries of the technology.

⁴http://www.icta.ky/docs/Decisions/Followup/700%20MHz%20Spectrum/13.03.04_4G%20Expression%20of%20Interest%20Cayman%20-%20redacted%20version.pdf

⁵http://www.icta.ky/docs/Decisions/Followup/700%20MHz%20Spectrum/2013_03_12ICTA_to_Digicel_LIME_re_700MHz_BeautyContest.pdf

⁶Paragraph 25 of the Decision <http://www.icta.ky/docs/Decisions/2012-4%20700%20MHz/ICT%20Decision%202012-4%20Assignment%20of%20700%20MHz%20Spectrum.pdf>

⁷http://www.icta.ky/docs/Decisions/Followup/700%20MHz%20Spectrum/2013_03_04%20LIME%20Response%20to%20Cayman_70MHz_Spectrum_Decision%20Redacted.pdf

⁸http://www.icta.ky/docs/Decisions/Followup/700%20MHz%20Spectrum/13.03.04_4G%20Expression%20of%20Interest%20Cayman%20-%20redacted%20version.pdf

⁹A typical example <http://news.verizonwireless.com/news/2013/03/4G-LTE-global-roaming.html>

His use of the spectrum will not cause interference with the systems of other Licensees or third parties.

10. In response to this criterion, both applicants stated that the equipment to be used would conform to *3rd Generation Partnership Project* ("3GPP") standards.¹⁰ As this is a recognised industry based standard, the Authority is satisfied that applying such a network standard would not cause interference with systems of other Licensees or third parties.

His use of the spectrum is consistent with the allocations recommended for ITU Zone 2.

11. In response to this criterion, both applicants stated that their use of the spectrum would be consistent with the allocations recommended for ITU (International Telecommunication Union) Zone 2. The Authority concurs with the responses.

The assignment will not adversely impact the development of competition in the ICT sector.

12. In response to this criterion, LIME submitted that, as Digicel had more mobile spectrum than it did, the assignment of the requested spectrum to Digicel would "foreclose competition" in the mobile market in Cayman.
13. Digicel was of the view that the assignment of LTE spectrum would not adversely affect competition in the Cayman Islands and, in fact, would spur growth in the development of the ICT sector. Digicel was also of the view that, even after the initial assignment of the Block B Lower and Block C Lower spectrum, the Cayman Islands would have sufficient spectrum in the 700 MHz band to provide spectrum to at least one additional operator (for example the 22 MHz paired Block C Upper).
14. The Authority addresses the comments regarding this criterion in paragraph 37 below.
15. The Authority also required potential applicants to include, as part of their application, comments addressing the following:

Proposed network build out timeframe

16. While each of the applicants provided some information related to this item in their respective 4 March 2013 applications, as described at paragraph 8 above, the Authority requested further information on the build out timeframe from both applicants.

Technical specifications of the proposed network

17. Each of the applicants provided the technical specifications of their proposed network.

Proposed 700 MHz band

18. Each of the Licensees applied for the same spectrum bands for a total of 24 MHz of spectrum in the 700 MHz band.

¹⁰<http://www.3gpp.org/About-3GPP>

Proposed network layout for the Cayman Islands

19. Each of the applicants provided detailed network layouts for the Cayman Islands.

Beauty Contest

Authority Request, 12 March 2013

20. As mentioned, in a letter from the Authority to the applicants, dated 12 March 2013,¹¹ Digicel and LIME were advised that they had both applied for the same spectrum bands and that the Authority would hold a Beauty Contest "process to determine who should be licensed to use the requested spectrum" and that that letter commenced that process.
21. Further, in the same letter the Authority stated that, "the Authority does not consider it needs to reassess the spectrum allocation criteria it has already determined at paragraph 45 of the Authority's ICT Decision 2008-1, *Policy for the Management and Allocation of Spectrum in the Cayman Islands*" and that, as a result, "both applications will be considered as against those criteria".
22. The applicants were each requested to provide a response to the interrogatory that was attached to the Authority's letter by 5 p.m., 12 April 2013. In addition, by that same date, the Authority allowed Digicel and LIME to submit any further information in support of their applications that related to the selection criteria, beyond what had already been submitted.
23. The interrogatory that was attached to the Authority's letter requested the applicants to provide specific information regarding the coverage details and the completion dates for each phase of the roll-out of their respective proposed LTE networks.

Beauty Contest Responses, 12 April 2013

LIME

24. LIME provided a detailed roll-out timetable as requested.
25. However, the Authority notes that in addressing LIME's proposed coverage for the Sister Islands, LIME stated, among other things that, while its network would provide 100% coverage to the resident population by 31 January 2014, "there may be a few areas of the Sister Islands that might not be covered, but our expectation is that the population and households in the area without coverage will be reduced once our vendor moves beyond a 'desktop RF study'".

Digicel

26. Digicel provided a detailed roll-out timetable as requested.

¹¹http://www.icta.ky/docs/Decisions/Followup/700%20MHz%20Spectrum/2013_03_12_ICTA_to_Digicel_LIME_re_700MHz_Beauty_Contest.pdf

27. In relation to Digicel's timetable, the Authority notes that its network build out is significantly longer than the timetable proposed by LIME. In its 12 April 2013 submission, Digicel stated that it "intends to have a complete overlay of its current 900 MHz network and will ensure 98% population coverage with this LTE network over all three (3) islands namely Grand Cayman, Cayman Brac and Little Cayman."

Comparative roll-out schedules

28. The following chart provides the percentage of the population that would be covered by each proposed phase of both LIME's and Digicel's roll-out plans:

<u>Completed by</u>	<u>LIME</u>	<u>Digicel</u>
30-Nov-13	70%	
31-Dec-13	90%	
31-Jan-14	100%	75%
30-Apr-14		98%

LIME's roll-out plan would provide coverage to 70% of the population two months before Digicel's plan would provide similar coverage and LIME's plan would complete the project three months before Digicel's plan.

Authority's Analysis

29. In making the Decision, the Authority is guided by its statutory remit in particular as set out in the Information and Communications Technology Authority Law (2011 Revision) (the "Law").
30. Section 9 (1) of the Law states that:

[...] the Authority has power to do all things necessary or convenient to be done for or in connection with the performance of its functions under this Law.

31. Section 9 (2) of the Law states that:

For the purposes of this section, the Authority shall –

(a) allocate the electromagnetic spectrum for facilities and specified services within the Islands, or between the Islands and elsewhere; [...]

32. The Authority considers that both applications are very similar in relation to the selection criteria, with the exception of the proposed network roll-out timetable.

Roll-out Timetable

33. The Authority considers that LIME's total project roll-out period of six months is considerably shorter than the nine month roll-out period proposed by Digicel. In addition, LIME's proposed roll-out plan will see a significant portion of the population covered by the new service within four months, whereas Digicel's proposed schedule would see a similar portion of the population covered within six months. Given this, the Authority considers that LIME's roll-out schedule is superior to the Digicel schedule as it will provide the new service to a larger percentage of the population at an earlier date

and will enable customers to have access to the service earlier than under the Digicel schedule.

Network Coverage

34. The Authority notes that, while LIME's stated coverage would be 100% of the population by the end of the roll-out schedule, it also stated that some areas of the Sister Islands not be covered under the preliminary coverage plan but that there would likely be some reduction to the uncovered areas once further studies were done.
35. Digicel's plan would see about 98% of the population covered when the project is completed.
36. Given that both roll-out plans would see near 100% of the population covered, the Authority considers that there is no significant difference between the proposed population coverage of each of the applicant's intended LTE service.

Development of Competition

37. The Authority disagrees with LIME's submission as summarized at paragraph 12 above. The Authority does not consider that providing either LIME or Digicel with the requested spectrum would foreclose competition in the mobile market in Cayman as there is still spectrum available to roll out a network to provide LTE services as well as other mobile services. For example, in the US, spectrum that is currently being used for this technology is available in the following spectrum bands: 700 MHz, 1700/2100 MHz, 1900 MHz and 2300 MHz¹². In addition, as noted by Digicel, even with this initial assignment of 700 Hz spectrum there will still be spectrum available in the 700 MHz band for other applicants. Therefore, considering that significant blocks of spectrum remain available in both the 700 MHz as well as other mobile spectrum bands, the Authority considers that, even after the assignment of the requested spectrum, there will be sufficient spectrum available for additional services and/or service providers to meet the needs of customers in Cayman.

Authority's conclusion

38. Therefore, for the reasons set out above, the Authority allocates Block B Lower (704-710 MHz, 734-740 MHz 12 MHz paired) and Block C Lower (710-716 MHz, 740-746 MHz 12MHz paired) 700 MHz bands to LIME, subject to the following.
 - a) Within seven calendar days of this decision, LIME files a licence amendment request along with the necessary fee for the requested spectrum, such a request to include the LTE network roll-out timeframes as given in its submission of 12 April 2013.
 - b) The Authority is satisfied that such a request properly reflects LIME's 12 April 2013 submission, including the roll-out timeframes given there.

¹²http://niviuk.free.fr/lte_band.php

- c) By no later than 27 August 2013, LIME provides the Authority with a detailed project timeline showing the activities and target dates for the start and completion of each of those activities necessary to meet the roll-out timeframes given in the 12 April 2013 submission.
- d) Every twenty-eight days thereafter, until agreed otherwise with the Authority, LIME provides the Authority with a status report with sufficient supporting documentation to demonstrate, in particular:
 - the actual LTE network roll-out progress that has been made since the last report;
 - a comparison of that actual LTE network roll-out progress made against the project timeframes referred to in c) above; and,
 - an explanation of how any missed target dates for the activities referred to in c) above will be addressed to ensure the completion of each phase of the roll-out of LIME's LTE network across the Cayman Islands by the dates specified in the roll-out timeframes.