

# ICT Decision 2012-4

Grand Cayman, 13 December 2012

# Decision on a Policy for the Assignment of 700 MHz Spectrum (CD 2012-2)

### Summary

In this Decision, the Authority determines that:

- a. it is appropriate at this time to harmonize 700 MHz spectrum assignments with the United States of America ("US") FCC assignments;
- b. it is appropriate to assign up to a maximum of 24 MHz per applicant at this time:
- c. 60 days is a sufficient amount of time for an applicant to prepare an application for this spectrum; and
- d. in the event that more than one applicant applies for the same block(s) of spectrum, the Authority will use a "Beauty Contest" to determine which applicant should be assigned that spectrum.

#### **Background**

- In the proceeding initiated by Public Consultation Document CD 2009-3, Policy for the Assignment of 700 MHz Spectrum<sup>1</sup>, the Authority received responses from Cable and Wireless (Cayman) Ltd. ("LIME") and Digicel Cayman Ltd. ("Digicel"). At that time neither licensee had definitive plans for the use of the 700 MHz spectrum and a determination for the assignment of the spectrum was not completed by the Authority.
- 2. In the proceeding initiated by Public Consultation Document CD 2011-1, *Policy for the Assignment of 700 MHz Spectrum*<sup>2</sup>, the Authority received responses from LIME, Digicel, OFTEL and TeleCayman. The Authority published

<sup>&</sup>lt;sup>1</sup> http://www.icta.ky/docs/700MHz/CD%282009%293 700 MHz Spectrum.pdf

http://www.icta.ky/docs/700MHz\_2/CD%202011-

<sup>1%20</sup>Policy%20for%20the%20Assignment%20of%20700%20MHz%20Spectrum3.pdf

- ICT Decision 2011-23 in December of 2011 in which it determined that it was premature to come to a conclusion on the assignment policy for the 700 MHz spectrum at that time for the reasons set out in that Decision.
- 3. However, subsequent to the Authority's issuing its ICT Decision 2011-2, the technology for use in the 700 MHz band has changed rapidly throughout the world and particularly in the US. The Authority therefore initiated a third Public Consultation, (CD 2012-2, A Policy for the Assignment of 700 MHz Spectrum⁴) ("CD 2012-2"), on 27 September 2012 inviting industry participants and the general public to provide their views, along with supporting information, documentation, and detailed rationale, on how the Authority should assign the 700 MHz spectrum band.

#### Responses

- 4. In addition to requesting general feedback, CD 2012-2 posed four specific questions. These questions and the responses received are detailed in the following paragraphs.
- 5. The Authority received submissions from LIME<sup>5</sup> and Digicel<sup>6</sup>.

**Question 1:** Should the Authority use the FCC spectrum allocation model for the 700 MHz spectrum in the Cayman Islands?

6. Both respondents agreed with the Authority's proposal to use the FCC spectrum allocation model for the allocation of 700 MHz spectrum in the Cayman Islands.

Question 2: Should the Authority limit the maximum bandwidth allocation to 12 MHz (paired) at this time?

LIME stated that it was unsure what the Authority meant by "12 MHz paired" and 7. that if the Authority meant 2x12 MHz then it agreed with the Authority's position. However, if the Authority meant 2x6 MHz then it was not in agreement. LIME

<sup>&</sup>lt;sup>3</sup> http://www.icta.ky/docs/Decisions/ICT\_Decision\_2011-2\_Assignment\_of\_700\_MHz\_Spectrum.pdf

http://www.icta.ky/docs/Decisions/2012-2%20700%20MHz/CD%202012-

<sup>2%20</sup>Policy%20for%20the%20Assignment%20of%20700%20MHz%20Spectrum.pdf

http://www.icta.ky/docs/Decisions/2012-

<sup>2%20700%20</sup>MHz/12\_10\_25\_LIME\_Response\_ICTA\_700\_MHz\_Spectrum\_Policy%20-%20Final.pdf

<sup>6</sup> http://www.icta.ky/docs/Decisions/2012-2%20700%20MHz/12\_10\_25\_Digicel%20Comments%20on%20the%20Policy%20for%20the%20Assign ment%20of%20700MHz%20Spectrum.pdf

- submitted that an allocation of less than 2x12 MHz would not provide adequate bandwidth to meet the public's expectation for quality of service.
- 8. LIME further stated that it was its "understanding" that AT&T's 2x12 MHz assignment "appears however to be insufficient" and "AT&T are planning deployments in other spectrum bands with the same technology".
- 9. Digicel stated that "the allocation of bandwidth within the 700 MHz spectrum should be based on the types of services and products that each operator will be rolling out" and that limiting the bandwidth to "12x2 MHz in [Digicel's] view undermines its usefulness".

**Question 3:** Is 60 days an appropriate amount of time to accept applications for the initial assignment of this spectrum upon conclusion of this consultation proceeding?

- 10. In LIME's response it agreed that 60 days was "sufficient time for the preparation and submission of applications for 700 MHZ spectrum".
- 11. In Digicel's response it stated that "90 days would be more appropriate".

**Question 4:** Is it appropriate for the Authority to make a decision on multiple applications applying for similar or conflicting bands by holding an applicant "beauty contest"?

- 12. Both respondents agreed with the general principle proposed by the Authority that, in the event that more than one applicant applies for the same block(s) of spectrum, the Authority will use a "Beauty Contest" to determine which applicant should be assigned that spectrum.
- 13. In LIME's response it further proposed that the Authority should consult on any Beauty Contest rules.
- 14. In Digicel's response it further proposed that "the criteria that will be used to analyse the responses [be] consulted on first and subsequently published" and that a minimum of an additional 90 days be given to provide a further application.

## **Authority Analysis and Determination**

- 15. In relation to the 700 MHz band allocations, the Authority determines that the 700 MHz spectrum band allocations in the Cayman Islands should be identical to those adopted by the FCC in the US.
- 16. The 700 MHz band allocations for the Cayman Islands are therefore:

Block A (Lower)		Bandwidth Total	<u> </u>	Block A (Upper)		Bandwidth Total
698-704	728-734	12 MHz Paired		757-758	787-788	2 MHz Paired
Block B (Lower)				Block B (Upper)		
704-710	734-740	12 MHz Paired		775-776	805-806	2 MHz Paired
Block C (Lower)				Block C (Upper)		
710-716	740-746	12 MHz Paired		746-757	776-787	22 MHz Paired
Block D (Lower)				Block D (Upper)		
716-722		6 MHz		758-763	788-793	10 MHz Paired
Block E(Lower)				Public Safety		
722-728		6 MHz		763-768	793-798	10 MHz Broadband Us
				769-775	799-805	12 MHz Narrow band U

- 17. In LIME's response it was unsure what the Authority meant by 12 MHz paired. For clarity, the Authority used this term in the same manner the FCC used in its 700 MHz band allocation chart (see above) where it refers to 2 groups of 6 MHz that are paired together as channels for uplink and downlink (eg. Block B Lower 2x6 MHz).
- 18. The Authority notes that both LIME and Digicel stated in their submissions that 2x12 MHz ("24 MHz"), in their opinion, was an inadequate amount of bandwidth. However, neither has provided the Authority with any of the required information, detailed rational or documentation to support those claims.
- 19. The Authority has further reviewed the FCC allocations of spectrum for the 700 MHz band in the US and has found that there are no contiguous block allocations greater than 22 MHz in this band (see above table, Block C Upper). In addition the Authority notes that the FCC has not assigned greater than 24 MHz (2 -12MHz allocations) of contiguous spectrum in this band to any licensee, at this time.
- 20. Further, the Authority is generally supportive of licensees' introduction of new and innovative technologies and services to address customers' needs. Based on

what the Authority has seen in other jurisdictions, the use of LTE technology in this spectrum band will allow mobile operators to provide theoretical download and upload speeds that would be a significant improvement over speeds that are available in the Cayman Islands market today.

- 21. In light of the above, the Authority has determined that its initial allocation of spectrum will be increased from a maximum of 12 MHz per applicant to a maximum of 24 MHz per applicant.
- 22. In relation to the appropriate amount of time to accept applications, Digicel did not provide any supporting information, documentation, or detailed rationale for its view that 90 days was more appropriate. The Authority therefore determines 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. Any applications submitted after the closing date will not be considered by the Authority as part of this first application process.
- 23. Any 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*<sup>7</sup>, and should include in particular the:
  - a. proposed network build out timeframe,
  - b. technical specifications of the proposed network,
  - c. proposed 700MHz band, and
  - d. proposed network layout for the Cayman Islands.
- 24. Both LIME and Digicel agreed with the Authority on how to treat multiple applications for the same spectrum. The Authority therefore determines that it will hold a Beauty Contest in the event of multiple applications for the same spectrum.
- 25. Both LIME and Digicel have commented on the need to consult on the selection criteria in the event a Beauty Contest is required. The Authority will review this issue if a Beauty Contest is necessary.

- 5 -

<sup>&</sup>lt;sup>7</sup> http://www.icta.ky/docs/Decisions/ICT%20Decision%202008-1%20Spectrum%20Management.pdf