

SLPB-002-15  
Consultation on a Licensing Framework  
for Residual Spectrum Licences in the  
700 MHz and AWS-3 Bands

Comments of  
Rogers Communications  
May 25, 2015



## Executive Summary

- E1. Spectrum is a critical input for satisfying the growth in demand for mobile broadband services in Canada. Canadians are among the heaviest users of mobile data services globally and their demand for mobile data services is expected to dramatically increase. Rogers serves a very high proportion of smartphone users on its extensive mobile wireless network and therefore requires additional spectrum in order to satisfy its customers' growing demand for mobile data services.
- E2. In particular, Rogers also requires additional spectrum to remain competitive with its primary competitors, Bell and TELUS, who have combined their spectrum in order to provide faster LTE speeds. Rogers' and other operators' ability to effectively compete may be unfairly hindered without additional spectrum and this could negatively impact wireless consumers.
- E3. Rogers supports Industry Canada's plan to remove the set aside and open the AWS-3 spectrum to competitive bidding. Having market forces determine the outcome of spectrum licensing ensures those companies that value the spectrum the most will be able to acquire it and put the spectrum to its highest use. This will also make certain that all bidders pay the true market value of this scarce and valuable resource to the benefit of Canadian taxpayers.
- E4. Rogers further supports the Department's proposal to allow the aggregation of blocks in the AWS-3 band. Spectrum availability in wide channels that allow for contiguous assignment, where possible, is vital to supporting the advanced network speeds and capacity that Canadians have come to enjoy and demand.
- E5. The affiliated and associated entities rules and the rules prohibiting collusion should be integrated into a single framework so that unintended consequences do not benefit one or more bidders.

## Introduction

1. Rogers Communications (Rogers) is pleased to provide Industry Canada (the Department) with the following comments in response to *Consultation on a Licensing Framework for Residual Spectrum Licences in the 700 MHz and AWS-3 Bands* (SLPB-002-15), May 2015 (the Consultation Paper).

2. Rogers welcomes this opportunity to provide its views regarding the licensing of residual 700 MHz and AWS-3 spectrum because increased spectrum is a critical input for all wireless operators in satisfying the continued dramatic growth in demand for mobile broadband services in Canada.
3. Canadians use their mobile devices far more than users in most other countries. For wireless voice usage, Canada is second highest in the world after the U.S. when measured in minutes of usage per capita.<sup>1</sup> Canada's mobile data traffic grew 59% in 2014 and was equivalent to 18 times the volume of mobile traffic just five years earlier (in 2009).<sup>2</sup> The dramatic growth in demand for mobile data services will only continue as Canadian consumers and businesses embrace the Internet of Things.
4. Rogers continues to deliver innovative wireless services, such as being the first provider in Canada to offer Voice over Long Term Evolution (VoLTE). This technology is the next evolution in wireless calling, giving customers with a VoLTE compatible phone clear, natural sounding voice and video calls. Rogers was also the first operator in Canada to launch LTE-Advanced technology, providing customers with an outstanding network experience while maximizing the efficient use of our current spectrum holdings.
5. As a large wireless operator that is focused on the provision of advanced new mobile broadband services, including capacity-hungry mobile video services, such as NHL GameCentre LIVE, Rogers, in particular, will require additional capacity to keep pace with Canadians' demand for mobile data services. According to Catalyst, 68% of Canadians now own a smartphone.<sup>3</sup> For Rogers, smartphone penetration as a percentage of its postpaid customer base stood at 83% as of March 31, 2015.<sup>4</sup> In order to address this dramatic growth in demand for mobile data services, Rogers has already made very significant investments to deploy LTE mobile broadband technology to approximately 87% of the Canadian population.<sup>5</sup>
6. Rogers' need for more spectrum is particularly acute in light of the fact that its principal competitors, Bell and TELUS, have formed a joint network. The unintended consequence of the Department's recent spectrum policies have resulted in Bell and

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<sup>1</sup> Merrill Lynch, *Global Wireless Matrix 4Q 2013*, 08 Jan 2014.

<sup>2</sup> Cisco, *VNI Mobile Forecast Highlights, 2014-2019*.

[http://www.cisco.com/c/dam/assets/sol/sp/vni/forecast\\_highlights\\_mobile/index.html#~Country](http://www.cisco.com/c/dam/assets/sol/sp/vni/forecast_highlights_mobile/index.html#~Country)

<sup>3</sup> Catalyst, *The Evolving Canadian Mobile Landscape*. <http://catalyst.ca/2015-canadian-smartphone-market/>

<sup>4</sup> Rogers, *2015 Q1 Earnings Press Release*, April 2015.

<http://www.rogers.com/web/ir/financial-reporting/quarterly-reports>

<sup>5</sup> Rogers, *2015 Q1 Earnings Press Release*, April 2015.

TELUS being able to take advantage of aggregation limits to contribute twice as much spectrum towards their joint network, impairing Rogers' ability to compete effectively with its primary LTE competitors.

7. The remainder of Rogers' comments will respond to the specific issues raised in the Consultation Paper.

#### **Part 4 – Changes Proposed From Previous Licensing Processes**

**P1 – Industry Canada is seeking comments on its proposals to:**

- a. license the northern 700 MHz and AWS-3 licences on a Tier 4 basis; and**
- b. disaggregate block GHI into three separate blocks of 5 + 5 MHz each for all of the AWS-3 spectrum licences being offered through this auction process (Saskatchewan, Manitoba and the North).**

8. Rogers supports the use of Tier 4 licence areas for the northern 700 MHz and AWS-3 spectrum. Although the smallest of the four tiers used by Industry Canada, they remain relatively large geographic areas in less populated areas of the country. Rogers supports the Department's decision to retain Tier 2 licence areas for Saskatchewan and Manitoba. The use of these relatively large licence areas is consistent with the fact that this spectrum will be used to implement wide area mobile services. This will result in less coordination being required between licensees and will allow for more effective use of the radio spectrum than would be the case if smaller licence areas were used.
9. Rogers generally supports the licensing of spectrum blocks that are wider than 5+5 MHz where possible so that the full benefits of LTE technology can be unlocked and exploited. The licensing of smaller blocks, such as 5+5 MHz blocks, will result in a less efficient use of radio spectrum and slower data speeds. For these reasons, Rogers supports the proposal that would permit bidders to aggregate blocks to create wider radio channels so that they can make more efficient use of the spectrum resource and provide faster mobile broadband speeds.

**P2 – Industry Canada is seeking comments on its proposals to:**

- a. eliminate the competitive measure which set aside block GHI for operating new entrants for all of the AWS-3 licences available in this process; and**
- b. maintain the spectrum caps on the 700 MHz licences.**

10. Rogers supports the elimination of a set aside for operating new entrants for all of the AWS-3 licences available in this process. Rogers does not support set asides or caps that can interfere with the operation of market forces and artificially distort outcomes, providing an unfair subsidy to one or more competitors at the expense of others. In general, Rogers supports the use of open bidding for the licensing of mobile spectrum so that those companies that value the spectrum the most will be able to bid for it and put the spectrum to its highest use. This will also ensure that Canadians will derive the maximum benefits from this scarce and valuable resource.

**P3 – Industry Canada is seeking comments on its proposals to:**

- a. reduce the deployment requirements for the AWS-3 licences in the North to 20% of the Tier 4 service areas;**
- b. reduce the timelines to reach the deployment levels in Saskatchewan and Manitoba from eight years to five years;**
- c. apply the current 20% deployment levels for the 700 MHz licence to each of the Tier 4 licence areas.**

11. Rogers supports the proposal that lower minimum coverage requirements be imposed in the far north for AWS-3 spectrum since it adequately recognizes that it will not be economic for licensees to achieve the same degree of coverage in less populated areas as in those areas that are more densely populated.

12. Rogers does not support the proposal to reduce deployment timelines in Saskatchewan and Manitoba from 8-years to 5-years. While the Department has noted that “the significant investments made by the U.S carriers to acquire this spectrum, along with the deployment requirements imposed by the FCC, may

expedite the development of an equipment ecosystem in this band”,<sup>6</sup> AWS-3 has yet to be standardized by the 3GPP at this time. No device ecosystem exists for the band and commercial deployment is not expected until at least 2016. Further, complications may arise with relocation of incumbent U.S. military users that have estimated that they will require up to 87 months exit from the band.<sup>7</sup>

13. Reducing deployment timelines for residual licences would bestow an unfair advantage upon current AWS-3 licence holders. Just as Industry Canada is proposing to lower the AWS-3 deployment requirements in the far north to be consistent with other northern licences (eg, 2300 MHz and 2500 MHz), the Department should also remain consistent with deployment timelines that were established in the first AWS-3 auction. For these reasons, Rogers recommends that 8-year timelines to reach deployment levels in Saskatchewan and Manitoba be retained, and in no circumstance should the Department mandate timelines shorter than current AWS-3 licences. There is no justification for reducing the deployment timelines by three years when the residual auction is expected to occur in August 2015, which is a mere five months since the initial AWS-3 auction was held.

14. Rogers supports the proposal to apply the current 20% deployment levels for the 700 MHz licence to each of the Tier 4 licence areas. This level adequately reflects the fact that it will not be economical to achieve a higher level of coverage in the far north.

## Part 6 – Auction Format and Rules

**P4 – Industry Canada is seeking comments on its proposal to use the sealed-bid auction format for the auction of residual licences in the 700 MHz and AWS-3 bands and on the timelines proposed in the Proposed Table of Key Dates.**

15. Generally speaking, Rogers fully supports the use of open bidding for the licensing of mobile spectrum. The use of a sealed-bid format, as opposed to an SMRA or CCA, lacks a price discovery mechanism and prevents bidders from switching

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<sup>6</sup> *Consultation Paper*, par. 24.

<sup>7</sup> NTIA, *Notice of Estimated Relocation or Sharing Costs and Timelines for the 1695-1710 MHz and 1755-1780 MHz Bands*.

[http://www.ntia.doc.gov/files/ntia/publications/notification\\_to\\_fcc\\_re\\_est\\_costs\\_for\\_1695\\_and\\_1755\\_bands\\_05\\_132014.pdf](http://www.ntia.doc.gov/files/ntia/publications/notification_to_fcc_re_est_costs_for_1695_and_1755_bands_05_132014.pdf)

between different sets of licences in response to demand expressed by other bidders.

16. Notwithstanding Rogers' support of an SMRA or CCA format, Rogers supports the use of a sealed-bid auction format for the licensing of residual licences in the 700 MHz and AWS-3 bands. Rogers also supports the timelines in the Proposed Table of Key Dates for a sealed-bid auction format. The reduction in complexity for both bidders and the Department is well suited to assigning the small number of residual licences remaining in bands that have been recently auctioned.

**P5 – For the AWS-3 licences, Industry Canada is seeking comments on its proposal to allow package bidding for blocks G, H and I within each service area, with the exception of packages containing the blocks G and I as a combination.**

17. Rogers supports the proposal to allow for package bidding within each service area, which would reduce risk for eligible bidders trying to acquire some combination of spectrum. Rogers also supports the Department's proposal to not permit bids for non-contiguous blocks within a service area. Wide channels of contiguous spectrum are more efficient and desirable to provide higher speeds and capacity to users.

**P6 – Industry Canada is seeking comments on its proposal to use a second-price rule, including bidder-optimal core prices and use of the “nearest Vickery” approach, for the auction of residual licences in the 700 MHz and AWS-3 bands.**

18. Rogers supports the use of a second-price mechanism, including use of the “nearest Vickery” to determine the auctioned licence prices.

**P7 – Industry Canada is seeking comments on the proposed opening bids as presented in tables 4 and 5.**

19. Rogers supports the proposed opening bid prices presented in tables 4 and 5 of the Consultation, as these prices were used in the previous 700 MHz and AWS-3 auctions and the licences will be subject to competitive bidding.

### **Part 7 – Bidder Participation – Affiliated and Associated Entities**

**P8 – Industry Canada is seeking comments on its proposed rules regarding Affiliated and Associated Entities, which would apply to applicants and bidders in the upcoming auction of residual spectrum licences in the 700 MHz and AWS-3 bands.**

20. Rogers believes that the Department should take additional steps beyond the proposed affiliated and associated entities rules to promote a fair and efficient outcome in the 700 MHz and AWS-3 residual auction.

**P9 – Industry Canada is seeking comments on the rules prohibiting collusion, which would apply to bidders in the upcoming auction of residual spectrum licences in the 700 MHz and AWS-3 bands.**

21. Rogers believes that the Department must integrate its policies and auction rules regarding collusion and affiliated and associated entities within a single framework to ensure that unintended consequences do not benefit one or more bidders.

### **Part 8 – Auction Process**

**P10 – Industry Canada is seeking comments on the proposed auction process for the auction of residual licences in the 700 MHz and AWS-3 bands.**

22. Rogers supports the proposed general process for submitting applications to participate in the auction for residual 700 MHz and AWS-3 spectrum. Further,

Rogers supports the Department's Clarification Questions Process as detailed in Part 11.

## **Part 10 – Auction Process Licence Renewal Process**

**P11 – Industry Canada is seeking comments on the proposed renewal process for spectrum licences in the 700 MHz and AWS-3 bands.**

23. Rogers supports the Department's proposal that licensees will have a high expectation of renewal at the end of the initial licence term. It is essential that licensees that comply with their licence conditions have the certainty needed to make the significant investments required to deploy advanced wireless networks.

24. Rogers thanks the Department for the opportunity to participate in this Consultation Process.