



**Rogers Communications**  
333 Bloor Street East  
Toronto, Ontario M4W 1G9  
Tel. (416) 935-2525  
Fax (416) 935-2523  
[ken.engelhart@rci.rogers.com](mailto:ken.engelhart@rci.rogers.com)

**Ken Engelhart**  
Vice-President - Regulatory

May 16, 2011

Sent via email: [spectrum.planning@ic.gc.ca](mailto:spectrum.planning@ic.gc.ca)

Manager, Mobile Spectrum Planning  
Engineering Planning and Standards Branch  
Industry Canada  
300 Slater Street  
Ottawa, ON  
K1A 0C8

**Re: *Canada Gazette, Part I, February 12, 2011 Decisions on a Band Plan for Broadband Radio Service (BRS) and Consultation on a Policy and Technical framework to License Spectrum in the Band 2500-2690 MHz (SMSE-005-11)***

---

Pursuant to procedures outlined in the above noted document and subsequent Industry Canada Gazette Notice No. SMSE-006-11 dated March 4, 2011, attached are Reply Comments of Rogers Communications Partnership ("Rogers").

The documents are being sent in Adobe PDF Version 8.0. Operating System: Microsoft Windows XP.

Yours very truly,

A handwritten signature in blue ink, appearing to read "Ken Engelhart".

Kenneth G. Engelhart  
Senior Vice President – Regulatory  
KE/jt

Attach.

**Reply Comments of**  
**Rogers Communications Partnership**

Decisions on a Band Plan for Broadband Radio Service (BRS)  
and Consultation on a Policy and Technical Framework to  
Licence Spectrum in the Band 2500-2690 MHz (SMSE-005-11)

May 16, 2011

## Table of Contents

Executive Summary	1
Introduction	4
Characterization of Incumbent BRS Licensees	4
Block Sizes	11
Tier Sizes	12
Promoting Competition	
Spectrum Set-asides	14
Spectrum Caps and Auction Caps	18
Other Mechanisms to Promote Competition	19
Rollout Requirements	20
Promoting Service Deployment in Rural Areas	24

## **Executive Summary**

1. As a proven leader in the Canadian telecommunications industry, Rogers continues to make significant investments to ensure that Canadians will have access to the most advanced mobile technology and services in the world. We are using all of our available mobile spectrum, including our 2500 MHz spectrum, to implement 4G Long Term Evolution (“LTE”) technology in Canada’s top markets. Rogers would like to bid for additional 2500 MHz spectrum so that we will be able to provide Canadians with the unprecedented mobile broadband speeds that will be enabled by LTE and future technologies such as LTE-Advanced.
2. The upcoming auction of 2500 MHz spectrum presents Canada with an important opportunity. The relatively large amount of spectrum in this band can be used to create wider spectrum blocks than is possible in other mobile spectrum bands. Wider blocks can be used to provide Canadians with significantly faster mobile broadband speeds and higher quality services.
3. Through its 50% ownership stake in Inukshuk Wireless Partnership (Inukshuk), Rogers has taken significant risks and made substantial investments in developing the 2500 MHz band so that the benefits of fixed wireless broadband services can be extended across Canada. Inukshuk has invested several hundred million dollars in extending its network and it provides fixed wireless broadband service (up to 3 Mbps) in 45 cities and over 300 rural markets.
4. Since Inukshuk’s spectrum is shared between Rogers and Bell their individual entitlement amounts to 50% of the total amount of 2500 MHz spectrum licensed to Inukshuk. This means that, in some areas, Rogers will have access to 20+20 MHz of paired spectrum, while in other areas it will have access to 10+10 MHz of paired spectrum. Rogers will require additional BRS spectrum in order to create wider blocks and offer faster mobile broadband services.

5. There is absolutely no need or justification for special measures such as caps or set-asides to promote competition. The Canadian wireless market has gone from being highly competitive to hyper-competitive. AWS new entrants have entered the wireless market and are already making inroads in major Canadian cities.
  
6. Several parties, including AWS new entrants, complain that incumbents have an unfair advantage because of the amount of spectrum that they hold. Yet most of these parties actually passed on a number of opportunities to acquire mobile spectrum, including 2500 MHz spectrum, as recently as 2010. Now these parties are seeking government assistance to offset their failure to take the risk and make the required investments when spectrum was readily available. They are asking the government to reward them with discriminatory auction rules and to punish incumbents such as Rogers for taking the risk and making the necessary investments in the wireless market. This is a proposal that the Department should reject.
  
7. The Department should license 2500 MHz spectrum in blocks of 5+5 MHz in the paired portion of the band and in blocks of 5 MHz in the unpaired portion, using Tier 3 service areas. In order to allow for the introduction of exceptionally fast mobile data speeds, bidders should be permitted to assemble multiple blocks into wider blocks. Otherwise, Canada will miss the enormous opportunity made possible by this band, and all of the economic and social benefits that will accrue from it.
  
8. In light of the fact that 2500 MHz spectrum will be an important enabler of mobile broadband services and unprecedented data speeds, Canada cannot afford to let 2500 MHz spectrum lie underutilized in the hands of spectrum speculators. Successful bidders should be required to roll out service in accordance with the Tier 3 five-year roll-out targets that were used for the licensing of Advanced Wireless Services (AWS) spectrum.

## Introduction

9. The following is Rogers' reply to the comments received by Industry Canada from interested parties on Gazette Notice SMSE-005-11 *"Decisions on a Band Plan for Broadband Radio Service (BRS) and Consultation on a Policy and Technical Framework to License Spectrum in the Band 2500-2690 MHz"* ("the Consultation Paper").
10. Rogers stated its positions on all of the issues raised in the Consultation Paper in its initial comments of April 19, 2011. This reply is therefore limited to comments on proposals made by other parties.

## Characterization of Incumbent BRS Licensees

11. In their comments, a number of parties have complained that incumbent BRS licensees such as Inukshuk are the beneficiaries of an unfair spectrum "windfall" and that they have too much BRS spectrum. For example, Telus claims that the transition from fixed to mobile services in the Band "has resulted in an unprecedented windfall in terms of mobile spectrum for the incumbent fixed service licence holders".<sup>1</sup> MTS Allstream claims that "the principle policy challenge is that one party, namely Inukshuk partnership consisting of Bell and Rogers, holds much more than the lion's share of spectrum in this band".<sup>2</sup> Shaw claims that "each of the BRS Incumbents already holds more than sufficient spectrum in the band" and it complains that this spectrum was awarded through a comparative review process whereby the licensees were not required to pay for the spectrum through an auction.<sup>3</sup>
12. In response, Rogers would note the following. Inukshuk was licensed with Multipoint Communications Systems (MCS) spectrum in the band 2500-2690 MHz (the Band) through a comparative licensing process that was set in motion by the Department in

---

<sup>1</sup> Telus Comments, para. 4.

<sup>2</sup> MTS Allstream Comments, para. 14.

<sup>3</sup> Shaw Comments, para. 14 and 39.

the 1999 timeframe.<sup>4</sup> At that time, the mobile and fixed wireless services markets were in their infancy and it was common for the Department to use this form of process since there was considerable risk associated with the development of the spectrum bands in question. Inukshuk competed with other parties in the comparative licensing process and it proposed to use MCS spectrum to provide high-speed Internet services. Based on its merits, Inukshuk's application was selected by the Department in March 2000 and MCS licences were issued to Inukshuk. There was no unfair advantage conferred on Inukshuk in the MCS licensing process.

13. Subsequently, in the 2006 timeframe, the Minister of Industry elected to add a mobile allocation to the Band and the Department issued a policy whereby incumbent licensees in the Band were required to return about one third of their licensed spectrum in order to be granted mobile BRS licences. Presumably, in its 2006 policy, the Department felt it necessary to offset the benefit arising from the addition of a mobile allocation with the requirement that incumbents return one third of their licensed spectrum. As a result of the 2006 policy, Inukshuk returned about one third of its spectrum and converted its licences to BRS. Contrary to Telus' claims regarding a spectrum "windfall", Inukshuk actually lost one third of its licensed spectrum as a result of the 2006 policy.
14. It is important to note that, in contrast to Industry Canada's approach to licensing this spectrum for mobile services, the U.S. Federal Communications Commission (FCC) did not require BRS licensee Clearwire to return any of its licensed spectrum in the Band and Clearwire was permitted to offer mobile services at will. As a result, Clearwire holds approximately 120 MHz of BRS spectrum in about 100 major metropolitan areas and it is already using its spectrum to provide mobile broadband services.
15. In any event, with respect to Telus' claims about Inukshuk's alleged spectrum "windfall", it is important to note that Telus was awarded cellular and PCS spectrum in

---

<sup>4</sup> 2500 MHz Multipoint Communications Systems Policy and Licensing Procedures (DGRB-006-99), June 1999. [http://www.ic.gc.ca/eic/site/smt-gst.nsf/vwapj/MCS.PDF/\\$FILE/MCS.PDF](http://www.ic.gc.ca/eic/site/smt-gst.nsf/vwapj/MCS.PDF/$FILE/MCS.PDF)

its operating territory following similar, if not identical, comparative selection processes that were completed in 1985 and 1995 timeframes. In fact, Telus and other incumbent local telephone companies were not required to file an application for the cellular spectrum that they were licensed and instead received their cellular licences by default, subject to a simple application process.<sup>5</sup>

16. Telus and most of the AWS new entrants, including Eastlink, MTS Allstream, Public Mobile, Quebecor (Quebecor), and Shaw have all complained that Inukshuk, Bell and Rogers have an unfair advantage because of the amount of spectrum that they hold. Yet all of these parties actually passed on a number of opportunities to acquire mobile spectrum, including BRS spectrum, as recently as 2010. Their claims that they have been unfairly excluded from the Band are disingenuous.

17. As noted by Bell in its comments, Quebecor Media (Quebecor) and Shaw each partly owned Microcell in its early days.<sup>6</sup> In July 1995, both companies were reported to have increased their respective ownership stakes in Microcell to 10% with an option to increase their stakes to 15%.<sup>7</sup> However, in March 1998, Shaw decided to sell its 10% stake for a profit of \$11.6 million, saying that the sale would allow Shaw to focus on its core operations.<sup>8</sup> Quebecor attempted to sell its stake in Microcell but they were unsuccessful and eventually wrote-down their investment in 2002.<sup>9</sup>

18. Subsequently, in the 2004 timeframe, when Rogers and Telus were bidding for Microcell, Eastlink, MTS Allstream, Public Mobile, Quebecor and Shaw showed no interest in Microcell and its spectrum assets. Meanwhile, Telus chose not to out-bid Rogers.

---

<sup>5</sup> See *A Brief History of Cellular and PCS Licensing*, October 2004, p. 1, and *Policy Discussion Respecting Third Party Cellular Service Provision* (DGTP-002-96), February 1996, Background.

<sup>6</sup> Bell Comments, para. 42.

<sup>7</sup> *Le Groupe Videotron Enters Into PCS Market Through an Equity Position in Microcell 1-2-1*, Business Wire, July 13, 1995. *Shaw Communications Inc. Increases its Stake in Microcell 1-2-1 Inc.*, Business Wire, July 21, 1995.

<sup>8</sup> *Shaw Sells Investment in Microcell*, Business Wire, March 5, 1998.

<sup>9</sup> Bell Comments, para. 43.

19. MTS Allstream actually owned one third of Inukshuk and its 2500 MHz spectrum when Inukshuk was owned by MTS Allstream, Microcell and NR Communications in November 2003.<sup>10</sup> However, in January 2005, MTS Allstream elected to sell its stake to Inukshuk's two remaining shareholders: Rogers and NR Communications.<sup>11</sup>
20. In contrast to the unwillingness of these parties to invest in wireless services, Inukshuk was fully prepared to take the necessary risks and to make substantial investments. As noted above, Inukshuk was licensed with 96 MHz of 2500 MHz MCS spectrum following the completion of a comparative licensing process. Inukshuk was licensed in several provinces and invested several hundred million dollars to build an extensive fixed wireless Internet network. Subsequently, Inukshuk's MCS spectrum licences were converted to BRS and Inukshuk was required to return about one third of its spectrum to the Department. Following is a summary of Inukshuk's initial licences which have been adjusted to reflect spectrum that has been returned to the Department.

<b>Province</b> <sup>12</sup>	<b>Bandwidth</b> <sup>13</sup>
Alberta	20+20 MHz
British Columbia	20+20 MHz
New Brunswick	20+20 MHz
Newfoundland/ Labrador	20+20 MHz
Nova Scotia	20+20 MHz
Ontario	20+20 MHz
Prince Edward Island	20+20 MHz
Quebec	20+20 MHz
Yukon	20+20 MHz

21. Inukshuk again took the risk and invested in additional geographic coverage and capacity in 2009 and 2010 when it acquired the 2600 MHz MDS spectrum held by Look TV, Craig Wireless and Yourlink. Following is a summary of these investments:

---

<sup>10</sup> MTS Annual Report 2004, pp. 46-47.

<sup>11</sup> *Ibid*, p. 47.

<sup>12</sup> Inukshuk transferred its MCS spectrum in Northwest Territories and Nunavut to SSI Micro.

<sup>13</sup> The bandwidth is shared equally by Rogers and Bell. Only paired spectrum is shown.

<b>Transaction</b> <sup>14</sup>	<b>Cost</b>	<b>Bandwidth</b>	<b>Location</b>
2009 Look TV Spectrum	\$80 million	20+20 MHz	Ontario, Quebec
2010 Craig Wireless Spectrum	\$80 million	20+20 MHz	British Columbia, Manitoba
2010 YourLink Spectrum	\$14 million	20+20 MHz	Saskatchewan

22. It is important to note that this spectrum was very affordable. Any of the new entrants, as well as Telus, could have purchased this spectrum but they chose not to or were not prepared to pay the fair market value like Inukshuk was prepared to do. Inukshuk actually spent less on these spectrum blocks than most of the new entrants paid for AWS spectrum.

23. It is clear that all of the new entrants had the opportunity to purchase spectrum in the Band, but they were unwilling to do so. In the case of MTS Allstream, they actually had 2500 MHz spectrum, but they sold it to Inukshuk's remaining shareholders. These parties did not want to make the investments and take the risk of developing this spectrum. Inukshuk did take the risk and make the investments. Now these parties are seeking government assistance to offset their failure to invest when spectrum was readily available. They are asking the government to bail them out with discriminatory auction rules and to punish Inukshuk for taking the risk and making the necessary investments in the Band. This is a proposal that the Department should reject.

24. In comments that it filed, Eastlink asserts that "Inukshuk has built out its network only as far as necessary to ensure that it would not lose its 2500 MHz license" and that "Inukshuk has not used the spectrum to launch or promote advanced wireless services".<sup>15</sup> On the basis of these claims, Eastlink proposes that the Department mandate "shared network access" and require "Inukshuk to allow other carriers access to Inukshuk's spectrum".<sup>16</sup>

---

<sup>14</sup> The cost and bandwidth of these transactions are shared equally by Rogers and Bell. Only paired spectrum is shown.

<sup>15</sup> Eastlink Comments, para. 13.

<sup>16</sup> *Ibid*, para. 11 and 14.

25. The Department should disregard these proposals since Eastlink's claims are simply not true. As we explained in our comments, Inukshuk has invested several hundred million dollars in extending its network to 45 Canadian cities and over 300 rural communities. In building its extensive network, Inukshuk exceeded the detailed roll-out requirements that were imposed on Inukshuk by the Department. Moreover, Rogers plans to use its portion of Inukshuk's BRS spectrum to implement advanced new mobile broadband services using LTE technology. Contrary to Eastlink's claims, Inukshuk has made significant investments to utilize its licensed spectrum and to extend fixed wireless Internet services to Canadians in urban and rural communities despite the considerable uncertainty surrounding the Band over the past several years. Canadians will enjoy significant additional benefits once Rogers introduces world leading LTE technology in the Band. Eastlink's claims are ironic given that it has not implemented any services in the set-aside spectrum that it acquired nearly three years ago in the AWS auction.
26. Rogers also respectfully submits that Eastlink's call for mandatory wholesale access to Inukshuk's network in the context of the highly competitive broadband Internet and mobile services markets is unnecessary and is at odds with the Department's stated objective of encouraging facilities-based competition in the mobile services market.<sup>17</sup>
27. Other parties have made similar erroneous allegations that Inukshuk is a "monopoly" that must be restricted and barred from the upcoming auction of available spectrum in the Band. They would have the Department believe that the 2500 MHz band is a "market" dominated by Inukshuk and that they therefore need the Department's assistance to enter that "market" so that they can compete with Inukshuk.
28. For example, Telus claims that a critical issue in this Consultation is "market power and band monopolization" and it asserts that the Band is "primarily monopoly

---

<sup>17</sup> See *Policy Framework for the Auction of Spectrum Licences for Advanced Wireless Services and other Spectrum in the 2 GHz Range*, November 2007, p. 4, and *Order Issuing a Policy Direction to the CRTC on Implementing the Canadian Telecommunications Policy Objectives* (P.C. 2006-1534), December 14, 2006, sect. 1(c)(ii).

controlled”.<sup>18</sup> Shaw makes similar claims as Telus where it states that BRS incumbents such as Inukshuk “are highly incented to acquire all of the available 2500 MHz spectrum in the auction in order to foreclose new entrant access and market entry”.<sup>19</sup> MTS Allstream complains that the BRS band is “monopolized spectrum”<sup>20</sup> while Eastlink asserts that Inukshuk has a “hold on the market”.<sup>21</sup> The analogy presented by these parties is a fiction and should be disregarded by the Department for the following reasons.

29. First, it is important to note that the BRS spectrum licensed to Inukshuk is one of many spectrum bands and is not a “market” in the economic sense. Inukshuk’s spectrum is currently used to provide fixed wireless broadband Internet services. These parties have not only operated and effectively competed in the broadband Internet market for many years, but many of them also dominate this market in their respective traditional operating territories.
  
30. Further, Rogers’ portion of Inukshuk’s BRS spectrum will be used to provide mobile broadband services using LTE technology. Telus and MTS Allstream have effectively competed in the mobile services market for many years and they actually dominate this market in their respective operating territories. As a national mobile service provider, Telus also holds about one third of the national mobile services market. With respect to the new entrants, they have already acquired mobile spectrum in the 2008 AWS spectrum auction and most of them have already entered the mobile services market. Shaw and Eastlink have acquired AWS spectrum in order to enter this market, but they have elected to not use their spectrum at this time. The fact that none of these parties are currently licensed with BRS spectrum hasn’t prevented them from entering the market and competing and their lack of this spectrum is not a barrier to market entry.

---

<sup>18</sup> Telus Comments, para. 3, 11.

<sup>19</sup> Shaw Comments, para. 46.

<sup>20</sup> MTS Allstream, para. 4.

<sup>21</sup> *Ibid*, para. 11 and 14.

31. Moreover, Telus' claim that Inukshuk enjoys an unfair and "invaluable head start" with respect to the introduction of "wideband mobile data services" is false and should be dismissed by the Department.<sup>22</sup> In fact, together with Bell, Telus has access to 30 MHz of national contiguous spectrum in the AWS spectrum band and Telus is free to use this spectrum to implement wideband mobile data services at any time. Neither Inukshuk nor Rogers enjoy an unfair advantage over Telus in this regard.

### **Block Sizes**

32. The majority of parties have noted that 2500 MHz spectrum presents an opportunity for the creation of wider blocks, the introduction of faster data speeds and the provision of urban coverage.<sup>23</sup> Rogers agrees with these parties and we will require access to additional BRS spectrum in the upcoming auction so that we will be able to exploit this significant opportunity and enhance the services that we provide to the 9 million Canadians that we currently serve. As we noted in our comments, Rogers will only have access to 50% of the spectrum that is licensed to Inukshuk and we will require additional BRS spectrum in order to create wider blocks of spectrum and unlock the full promise of technologies such as LTE and LTE Advanced.
33. Rogers believes that the Department should auction BRS spectrum using paired block sizes of 5+5 MHz and unpaired block sizes of 5 MHz. This will provide an opportunity for several competitors to acquire BRS spectrum. At the same time, the Department should permit licensees to assemble the spectrum into larger contiguous blocks that may be required to support their business plans to offer higher mobile broadband speeds. The determination of the optimal block sizes for BRS spectrum should be made by market forces. Bidders will be in a better position than the Department to determine the block sizes that are necessary to support their business plans in a highly competitive and dynamic market. Several parties, including the RABC, Bell, Huawei, SaskTel and SSI Micro support the same approach.

---

<sup>22</sup> *Ibid*, para. 101.

<sup>23</sup> See e.g. Bell Comments, para. 12; Huawei Comments, p. 2; MTS Allstream Comments, para. 5-6; RABC Comments, pp 4-6; RIM Comments, para 7-8; Shaw Comments, para. 27-29.

34. While Rogers fully agrees with RIM that the licensing of wider contiguous blocks of BRS spectrum will be more spectrally efficient and will yield faster mobile broadband speeds,<sup>24</sup> we believe that this outcome can be achieved through the use of block sizes of 5+5 MHz for paired spectrum and 5 MHz of unpaired spectrum while also ensuring that bidders will be permitted to bid for and assemble these blocks into wider contiguous blocks. This approach would place a greater reliance on market forces in determining the appropriate spectrum block sizes. While RIM is correct in stating that wider blocks have been licensed in other jurisdictions, we would note that, in the vast majority of these cases, the spectrum managers in those countries established 5+5 MHz and 5 MHz for paired and unpaired spectrum as the block sizes to be auctioned and they allowed bidders to assemble these blocks into wider contiguous blocks,<sup>25</sup> as proposed by Rogers and other parties. The size of these blocks that were ultimately licensed was determined by bidders in the auction. Market forces determined the block sizes, not government fiat.

### **Tier Sizes**

35. As we noted in our comments, the use of Tier 3 areas in the auction of BRS spectrum would be more efficient than Tier 2 areas. Rogers also noted that incumbent BRS licensees have already been licensed using Tier 3 areas. In the comments they filed, several parties have also supported the use of Tier 3 areas,<sup>26</sup> although some of these companies have also advocated the use of Tier 2 areas to some extent. Because incumbents such as Inukshuk have already been licensed using Tier 3 areas, they may only want to acquire additional BRS spectrum in certain other Tier 3 areas. If BRS spectrum is auctioned using Tier 2 service areas, incumbents will need to acquire spectrum across an entire Tier 2 area, including Tier 3 areas where they already hold spectrum, regardless of whether they actually want additional spectrum across the entire Tier 2 area. As Rogers noted in its comments, this outcome would be inefficient

---

<sup>24</sup> RIM Comments, para. 7.

<sup>25</sup> Rogers Comments, para. 27.

<sup>26</sup> Including Telus, Bell, Eastlink, Quebecor, RABC, SaskTel, and Public Mobile.

since it would result in the incumbents acquiring more additional spectrum than they require in a given geographical area and it would deny the same spectrum to other bidders. Auctioning BRS spectrum using Tier 3 areas would be more efficient since incumbents could bid for and acquire additional spectrum only in those Tier 3 areas where they would like more spectrum. At the same time, spectrum in the remaining Tier 3 areas would be available for other bidders.

36. This situation exists in a total of seven Tier 2 areas in which Inukshuk has already been licensed using Tier 3 licences.<sup>27</sup> For example, Inukshuk is licensed with 40+40 MHz of paired spectrum in five of the ten Tier 3 areas that comprise the Southern Ontario Tier 2 area (2-08). In the remaining five Tier 3 areas, Inukshuk only holds 20+20 MHz of paired spectrum. In light of this situation, Telus and Quebecor recommend the use of Tier 3 areas in all Tier 2 areas where incumbent BRS licensees have already been licensed using Tier 3 areas.<sup>28</sup>
37. Most parties acknowledged the fact that BRS spectrum is ideally suited for relatively short range coverage and that this spectrum will likely not be used for wide area coverage of sparsely populated areas. It is therefore strange that some of these parties have argued that the use of larger Tier 2 service areas would be appropriate for licensing this spectrum. In Rogers view, the opposite is true. Using larger service areas for spectrum that will be used to provide relatively short range coverage would not be appropriate. The use of smaller service areas, such as Tier 3 service areas, would be a much more sensible approach. Further, as noted in our comments, Tier 3 areas were successfully used to license all of the non-set-aside blocks and some of the set-aside blocks in the auction of similar high band AWS spectrum in 2008.
38. If there is a BRS spectrum cap or auction cap, the use of Tier 2 areas could unfairly preclude incumbents from acquiring spectrum in Tier 3 areas where they are actually under the cap. For example, in the event that the Department elects to establish a cap

---

<sup>27</sup> The affected Tier 2 areas are British Columbia (2-13), Manitoba (2-10), Northern Ontario (2-09), Southern Ontario (2-08), Eastern Ontario & Outaouais (2-06), Southern Quebec (2-05), and Eastern Quebec (2-04).

<sup>28</sup> Telus Comments, para. 49; Quebecor Comments, para. 24 & footnote 5.

that limits BRS licensees to a maximum of 40+40 MHz of paired BRS spectrum in a given Tier 2 area, and an incumbent licensee already holds 40+40 MHz of paired BRS spectrum in one Tier 3 area, but less than this amount in another Tier 3 area within the same Tier 2 area, the cap could prevent this bidder from acquiring spectrum in the Tier 3 area where it is under the cap. This outcome would be unfair since it would permit non-incumbent bidders to acquire 40+40 MHz of BRS spectrum across the entire Tier 2 area, whereas incumbent BRS licensees would be prevented from doing so. On the other hand, the use of Tier 3 areas would avoid this outcome and would permit all bidders to hold the same amount of spectrum within a given Tier 3 area.

### **Spectrum Set-asides**

39. Telus claims that the BRS spectrum that was required to be returned to the Department by incumbent licensees in accordance with the 2006 policy is spectrum that the Department has set-aside for “band entrants”.<sup>29</sup> Telus also asserts that the 2006 policy established an upper cap on the amount of BRS spectrum that licensees such as Inukshuk may hold.<sup>30</sup> As such, Telus argues that incumbent BRS licensees should not be permitted to bid for any returned spectrum in the upcoming auction, irrespective of the level of their BRS spectrum holdings in a given service area.
40. In response, Rogers notes that there is nothing in the Department’s 2006 policy nor any subsequently issued policies or proposals that have designated the returned spectrum as spectrum that has been set-aside for “band entrants”. Moreover, Telus’ “band entrant” concept is without foundation in the policies that govern the use of this spectrum band, or any other mobile spectrum band for that matter. While it is true, for example, that the Department’s 2008 AWS policy and licensing frameworks were designed in part to facilitate new entry into the mobile services market, this is entirely different than Telus’ notion of “band entry”.

---

<sup>29</sup> Telus Comments, para. 11 and 16.

<sup>30</sup> *Ibid*, para. 66.

41. In any event, as noted above, the BRS spectrum licensed to Inukshuk is currently used to provide fixed broadband Internet services and Rogers' portion of Inukshuk's BRS spectrum will be used to provide mobile broadband services using LTE technology. Telus has not only operated and effectively competed in both of these markets for many years, but it also dominates these markets in its traditional operating territory. Telus entered these markets long ago and it has secured its competitive position in these markets without the use of any 2500 MHz spectrum. It does not require special assistance through a spectrum set-aside to acquire 2500 MHz spectrum so that it can compete with Inukshuk.
42. Apart from Telus' claims regarding the status of returned and available BRS spectrum, only Eastlink has called for a set-side. Specifically, Eastlink proposes a set-aside of 30+30 MHz of paired spectrum and 20 MHz of unpaired spectrum in Region A where incumbents hold MCS spectrum.<sup>31</sup> Eastlink proposes a set-aside of 20+20 MHz of paired spectrum in Region B where incumbents hold MCS and MDS spectrum.<sup>32</sup> Eastlink justifies its set-aside proposals on the basis that they would ensure that at least two new entrants "could enter the market" in any particular region.<sup>33</sup> Eastlink asserts that this is necessary to "encourage competition".<sup>34</sup>
43. The Department should reject Eastlink's proposals for the following reasons. First, under Eastlink's proposals, the Department would devote the majority of available BRS spectrum to new entrants, some of which, including Eastlink, have not yet implemented services in the spectrum that was set-aside for them in the 2008 AWS auction. Clearly, the risk in setting aside BRS spectrum that will be used to provide Canadians with unprecedented mobile broadband speeds is that companies such as Eastlink will allow the spectrum to lie fallow. This outcome would not be consistent with the Department's objectives of increasing the adoption of ICT, enhancing productivity and promoting the

---

<sup>31</sup> Eastlink Comments, para. 20.

<sup>32</sup> *Ibid*, para. 21.

<sup>33</sup> *Ibid*, para. 20.

<sup>34</sup> *Ibid*, para. 21.

*Digital Economy*<sup>35</sup> and it would deny Canadians all of the economic and social benefits associated with the use of mobile spectrum.<sup>36</sup>

44. Second, as noted already, the 2500 MHz band is not a market and new entrants such as Eastlink have already been licensed with mobile spectrum so that they can enter the Canadian mobile services market. Most new entrants, with the exception of Eastlink and Shaw, are using their spectrum to implement services and compete in the market. There is nothing preventing Eastlink and Shaw from doing the same. The setting aside of BRS spectrum for new entrants is therefore completely unnecessary. In any event, as Bell notes in its comments, these are well capitalized firms:

*The “new entrants” from the AWS auction are large, well capitalized entities and are more than financially capable of participating in the auction without government assistance. For example, the enterprise values for the recent wireless entrants are: (i) Quebecor – approximately \$7.5 billion; (ii) Shaw – approximately \$15 billion; and (iii) Orascom – now that it is part of VimpleCom is approximately \$33 billion. The transfer of wealth from the shareholders of one large company to the shareholders of another large company through the use of entry assisting policies does not improve economic efficiency, nor does it benefit Canadians.*<sup>37</sup>

45. It is significant that other new entrants oppose the use of a spectrum set-aside. While Quebecor simply states that it does not recommend the use of a set-aside,<sup>38</sup> Shaw proposes that a set-aside not be used on the basis that it would impact “auction dynamics” and would permit “gaming opportunities”.<sup>39</sup> Bell summarizes the serious detrimental effects of set-asides in the following terms:

---

<sup>35</sup> Government of Canada, “*Improving Canada’s Digital Advantage - Strategies for Sustainable Prosperity - Consultation Paper on a Digital Economy Strategy for Canada*”, (May 2010). p. 9

<sup>36</sup> OVUM, “*The Benefit of the Wireless Telecommunications Industry to the Canadian Economy*”, (April 2010). See CWTA website.

<sup>37</sup> Bell Comments, para. 72.

<sup>38</sup> Quebecor Comments, Annex 1, p. 2.

<sup>39</sup> Shaw Comments, para. 51.

*In the case of Canada, the set-aside in Canada's AWS auction increased the costs to the industry by hundreds of millions of dollars by artificially reducing the supply of spectrum available for incumbents and by creating gaming opportunities that altered the efficient allocation of spectrum. This resulted in a disproportionate cost burden being borne by the incumbents.<sup>40</sup>*

46. As we explained in our comments, these issues must not be repeated through the use of a set-aside in the upcoming BRS auction.
47. Barrett Xplore and Barrett Broadband Networks (Barrett) asks for the set-aside of BRS spectrum in rural areas. Barrett insists that only new entrants should be permitted to bid for BRS spectrum in rural areas. Barrett's proposal to block incumbents from bidding for 2500 MHz spectrum in rural areas ignores the significant investments that incumbents have made in extending fixed and mobile wireless services to rural Canada. As noted above, Inukshuk's network covers 45 cities and over 300 rural markets and Rogers' mobile network covers about 95% of the Canadian population. These significant accomplishments demonstrate that incumbents such as Rogers are prepared to undertake the risk and investments that are necessary to extend advanced new services to Canadians in all areas, including rural areas. This is in contrast to new entrants that have largely focused their efforts on serving only the already highly penetrated and lucrative urban markets. Rogers' proven track record demonstrates that the Department's objective of extending mobile broadband services to rural Canada is most likely to be met by permitting incumbents such as Rogers to bid for spectrum in rural areas. The Department should therefore reject Barrett's proposal to set-aside rural spectrum for new entrants.

---

<sup>40</sup> Bell Comments, para. 54.

### **Spectrum Caps and Auction Caps**

48. We note that some parties have called for the use of a spectrum cap that will entirely preclude or limit the extent to which incumbent BRS licensees will be able to participate in the BRS spectrum auction.
49. For example, Quebecor has proposed 2500 MHz band cap of 40 MHz, whereby operators would be limited to a maximum of 20+20 MHz of paired spectrum.<sup>41</sup> Quebecor has further proposed that the current spectrum holdings of Inukshuk should be split equally between Bell and Rogers for purposes of applying the cap.<sup>42</sup> MTS Allstream and Shaw also propose the use of a 2500 MHz band cap of 40 MHz which would include unpaired spectrum.<sup>43</sup> These parties have stated that they are not proposing that Inukshuk return any spectrum in areas where it exceeds the proposed cap.
50. Public Mobile calls for the use of a 50 MHz auction cap and a prohibition on bidders that have 20 MHz of unused PCS, Cellular or AWS spectrum.<sup>44</sup> Public Mobile provides no justification for its proposals other than to baldly state that they would “ensure sustainable competition”.<sup>45</sup> While it claims that these measures will provide competitors with “fair and reasonable access to 2500 MHz spectrum”, Public Mobile’s proposals would in fact prevent most of its new entrant and incumbent competitors from having any access to BRS spectrum.
51. While Eastlink has not called for the use of a cap, it has effectively proposed that Inukshuk should be capped at its existing holdings, stating only that new entrants require spectrum in the Band.<sup>46</sup>

---

<sup>41</sup> Quebecor Comments, para. 39-40.

<sup>42</sup> *Ibid*, para. 40.

<sup>43</sup> MTS Allstream Comments, para. 19 and Shaw Comments, para. 13.

<sup>44</sup> Public Mobile Comments, p.11.

<sup>45</sup> *Ibid*.

<sup>46</sup> Eastlink Comments, para. 10.

52. Rogers continues to believe that any form of spectrum cap is unnecessary and potentially harmful. Caps create a situation where one group of companies is given Government assistance at the expense of another group of companies. Further, spectrum caps are arbitrary numbers and, once set, they cannot be adjusted easily. The risk is that caps will not be removed or adjusted quickly enough to allow operators to access the spectrum capacity that they require to cope with dramatic traffic growth or to provide higher data speeds.<sup>47</sup> We reiterate our position that there should be no spectrum caps or auction caps imposed on participants in the 2500 MHz auction.
53. In the event that the Department elects to impose a cap, only 50% of the total amount of BRS spectrum that is licensed to Inukshuk should be counted towards Rogers' spectrum holdings in a given geographic area. We note that this approach is supported by Quebecor in its comments.<sup>48</sup>

#### **Other Mechanisms to Promote Competition**

54. Shaw and Eastlink have used this consultation to press for additional artificial measures beyond what the Department has already mandated with respect to roaming and tower sharing. Among other things, Shaw asserts that rates for roaming and tower sharing are "excessive" and it complains that seamless call hand-off should be required for roaming.<sup>49</sup>
55. With respect to Shaw's claim that roaming rates are excessive, Rogers would note that, as required in the *Conditions of Licence*, all new entrants were offered commercial roaming rates by Rogers. In regard to seamless call hand-off, we would note that the Department already studied the matter during the AWS policy consultation and explicitly did not make the provision of seamless hand-off a requirement. That decision is in keeping with the rest of the world where seamless hand-off has been mandated in

---

<sup>47</sup> Leonard Waverman and Kalyan Dasgupta, *Time to Set Aside Caps that Don't Fit: The Limits of Spectrum Policy in Canada*, February 26, 2011, para. 117.

<sup>48</sup> Quebecor Comments, para. 40.

<sup>49</sup> Shaw Comments, para. 61.

almost no countries. The lack of mandatory inter-carrier seamless hand-off in other jurisdictions was confirmed in a study prepared by Gilbert and Tobin which was attached to the reply comments filed by Rogers in response to the Department's 700 MHz consultation. The study concluded that seamless hand-off is not mandated in any of the 23 countries surveyed.<sup>50</sup> Seamless hand-off is simply too difficult, too expensive and too time consuming which is why there are no industry standards for it.

56. As noted above, Eastlink proposes that the Department mandate "shared network access" and require "Inukshuk to allow other carriers access to Inukshuk's spectrum".<sup>51</sup> Eastlink has also complained about the use of commercially negotiated rates for roaming services. These proposals, coupled with Eastlink's lack of support for any roll-out requirements, clearly indicate that Eastlink is only interested in relying on the incumbents' networks at subsidized rates. Eastlink's proposals are at odds with the framework that the Department established in AWS policy and they are contrary to the Department's stated objective of encouraging facilities-based competition.<sup>52</sup> Accordingly, they should be disregarded by the Department.

### **Rollout Requirements**

57. In our comments, we noted that the 2500 MHz band is the largest mobile spectrum band and provides Canada with the opportunity to realize the unprecedented mobile data speeds made possible by LTE and LTE-Advanced. The availability of faster data speeds will allow Canada to maintain its broadband leadership and will promote the development of the *Digital Economy*. Because of its importance, BRS spectrum must not lie fallow in the hands of spectrum speculators who have no intention of implementing services. Licensees should be required to unlock the economic and social benefits associated with this valuable resource by implementing services in accordance with roll-out requirements. Rogers therefore proposed that the Department

---

<sup>50</sup> Gilbert and Tobin, *International roaming and handover practices – Summary Survey Report*, March 30, 2011.

<sup>51</sup> Eastlink Comments, para. 11 and 14.

<sup>52</sup> See *Policy Framework for the Auction of Spectrum Licences for Advanced Wireless Services and other Spectrum in the 2 GHz Range*, November 2007, p. 4, and *Order Issuing a Policy Direction to the CRTC on Implementing the Canadian Telecommunications Policy Objectives* (P.C. 2006-1534), December 14, 2006, sect. 1(c)(ii).

should require licensees to implement services according to the Tier 3 five-year roll-out targets that were used for the licensing of AWS spectrum.

58. Rogers notes that Quebecor supports the use of roll-out targets that are similar to the roll-out targets that were used for the licensing of AWS spectrum.<sup>53</sup> Rogers agrees with Quebecor that the use of such targets would be beneficial since they would balance the economic challenges associated with providing wide area coverage using high band spectrum, with the need to ensure some level of deployment in the Band.

59. Telus also notes the inferior propagation characteristics of BRS spectrum compared to 700 MHz spectrum and recommends that licensees be required to provide coverage to 50% of the population in a given licence area within 5 years.<sup>54</sup> Telus states that this was the approach used by the Department when licensing the PCS and AWS spectrum bands. While it is true that the requirement proposed by Telus was used in the licensing of PCS spectrum, it was not used in the licensing of AWS spectrum. In fact, Telus' proposed requirement would be more onerous than the roll-out targets that were used for licensing AWS spectrum. Rogers believes that this level of implementation would not be reasonable since it does not adequately reflect the challenges of providing wide area coverage using high band BRS spectrum.

60. SaskTel also supports the use of roll-out requirements.<sup>55</sup> While Rogers agrees with SaskTel that roll-out requirements are important since they will ensure that the spectrum is put to use, we would note that SaskTel's proposal that licensees be required to "demonstrate the provision of services beyond Census Metropolitan (CMA's) areas" is vague.<sup>56</sup>

---

<sup>53</sup> Quebecor Comments, pp. 10-11.

<sup>54</sup> Telus Comments, para. 92-94.

<sup>55</sup> SaskTel Comments, para. 22.

<sup>56</sup> *Ibid.*

61. The RABC has noted the different propagation characteristics of 700 MHz and 2500 MHz spectrum and has urged the Department to ensure that any roll-out requirements that it imposes will reflect these differences.<sup>57</sup> Rogers supports the RABC's position.
62. Rogers agrees with Barrett that a significant drawback of the current tier structure, and specifically Tier 4 service areas, is that rural areas have not been unbundled from urban areas. We believe, however, that Barrett's proposed solution to this problem is unnecessarily complex and likely impractical. As Rogers understands Barrett's rather opaque proposal, Barrett proposes that Tier 4 areas should be reclassified using two filters.<sup>58</sup> Using the first filter, Tier 4 areas with less than 100,000 population would become "rural" Tier 4 areas. Areas of 100,000 population or more would become "urban" Tier 4 areas. Using the second filter, "urban" Tier 4 areas would be further subdivided into urban and rural areas based on household (HH) density at the census subdivision (CSD) level. CSDs with less than 25 HH per square kilometre would be classified as "rural" and would be unbundled from their original "urban" Tier 4 area and attached to a nearby "rural" Tier 4 area. Presumably, CSDs with 25 HH and greater would remain "urban" Tier 4 areas. Incumbents would be banned from bidding on "rural" Tier 4 areas where they are already licensed.
63. In short, Barrett's proposal would involve a complex and time-consuming re-distribution of geographic areas and would introduce countless new situations where competing wireless networks would abut one another and potentially interfere with each other. It will therefore introduce considerable delay and risk to the process of licensing BRS spectrum. Further, Barrett has not demonstrated that its proposal will not result in serious and detrimental impacts on inter-carrier frequency coordination and mitigation of inter-system interference.
64. Rogers believes that the alternative approach that we outlined in our comments would be a more straightforward and practical solution to the issue of rural deployment.

---

<sup>57</sup> RABC Comments, para. 4.2.

<sup>58</sup> Barrett Comments, pp. 28-31.

Specifically, we proposed that operators that are not prepared to implement services in certain geographic areas can avail themselves of the Department's subordinate licensing policy such that roll-out in these areas can be achieved by parties that are prepared to implement services in such areas.

65. It is ironic that many of the parties that have urged the Department to license BRS spectrum using larger Tier 2 service areas have also opposed the use of roll-out requirements that would ensure that the BRS spectrum is put to productive use. For example, Shaw opposes roll-out requirements on the basis that BRS spectrum "does not lend itself to cost-effective deployments in rural areas and that the underlying technological ecosystem is still evolving".<sup>59</sup> MTS Allstream also opposes roll-out requirements in light of the difficulty of providing coverage with high band BRS spectrum.<sup>60</sup> Shaw and MTS Allstream want to be licensed across a wider area using Tier 2 areas, and yet they are unwilling to commit to putting the spectrum to use throughout this larger area. While Rogers agrees that BRS spectrum is not suited to wide area coverage, we do not agree with these parties' recommendation against the use of any roll-out requirements. We also do not agree with Shaw's recommendation that Canadian taxpayers fund rural LTE and HSPA+ implementation through the use of auction fee rebates since, among other things, any such rebates would only be of benefit to successful bidders and would unfairly exclude incumbent BRS licensees.<sup>61</sup> Our proposed roll-out requirements would recognize the challenges of deploying high band spectrum while ensuring that the spectrum is put to productive use.

66. We note significantly that the comments of new entrants Eastlink and Public Mobile are silent with respect to the need for roll-out requirements. It appears that these parties are only interested in acquiring as much mobile spectrum as possible, ideally by means of artificially low prices through measures such as spectrum set-asides and caps, so that they can sell it, or themselves, for a profit in the future.

---

<sup>59</sup> Shaw Comments, para. 75.

<sup>60</sup> MTS Allstream Comments, pp. 12-13.

<sup>61</sup> Shaw Comments, para. 76.

### **Promoting Service Deployment in Rural Areas**

67. Barrett claims that it cannot negotiate access to BRS spectrum with the incumbents. It claims that the incumbents have refused to sell or lease their BRS spectrum to Barrett. In response to these claims, Rogers would note that Barrett has never formally proposed any such arrangements to Rogers or Inukshuk. Further, Barrett has made it clear in informal discussions with Rogers that it wants to purchase spectrum and is not interested in leasing it. In light of these facts, the Department should disregard Barrett's claims.
68. As we stated in more detail in the comments we filed in response to the 700 MHz consultation, Rogers believes that the Department should continue to promote and support one of its most successful regulatory policies: the use of subordinate licences. The subordinate licence encourages partnerships between established carriers and local entrepreneurs who have the ideas, the drive and capital to build networks where large carriers might overlook.
69. The subordinate licence policy provides Rogers will the opportunity to extend wireless service across the country where it could not by itself. Despite our size and resources, Rogers simply can not deploy in every location. However, some carriers, mostly with local connections and access to government funding, have put together exciting business plans that can cost effectively deploy and deliver wireless services in some rural parts of Canada.
70. It is for these reasons that Rogers has already entered into a number of subordinate licensing arrangements and we remain committed to working with legitimate partners to continue deploying in unserved areas.

\*\*\* End of Document \*\*\*