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June 15, 2009

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Sent via email: spectrum.operations@ic.gc.ca

Re: *Canada Gazette*, Part I, March 14, 2009, Gazette Notice No. DGRB-005-09, Consultation on the Transition to Broadband Radio Service (BRS) in the Band 2500-2690 MHz

Rogers Communications Inc. (Rogers), on behalf of Rogers, Bell Canada and Inukshuk Wireless Partnership, appreciates the opportunity to provide comments on the above-noted consultation.

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

Yours very truly,

Barry Chapman
Vice President - Regulatory Affairs
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Don Falle
General Manager
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Kenneth G. Engelhart
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Attach.

Comments of

Bell Canada,
Inukshuk Wireless Partnership &
Rogers Communications Inc.

Canada Gazette Notice No. DGRB-005-09

Consultation on Transition to Broadband Radio Service (BRS)
in the Band 2500-2690 MHz

Published in the Canada Gazette, Part I
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Introduction

1. The Department has issued a consultation paper titled **Consultation on Transition to Broadband Radio Service (BRS) in the Band 2500-2690 MHz – DGRB-005-09** ("the Consultation Paper"). In the Consultation Paper, the Department has invited comments on its proposals for establishing eligibility criteria for conversion of Multipoint Communication System ("MCS") and Multipoint Distribution Service ("MDS") authorizations to BRS licences in the band 2500-2690 MHz ("the Band"). The Department has also invited comments regarding the conditions of licence that will apply to converted BRS licences, subject to a final policy and licensing framework which may include additional conditions. Separately, the Department is conducting a Stakeholder Proposal Development ("SPD") process with licensees in the Band in order to develop proposals for the band plan and the transition to BRS.

2. Bell Canada, Inukshuk Wireless Partnership, and Rogers Communications Inc. (collectively "Inukshuk") are pleased to provide the following comments regarding the issues under consideration in the Consultation Paper.

3. Inukshuk has taken significant risks and made substantial investments in developing the Band so that the benefits of fixed wireless broadband services can be extended across Canada. Inukshuk's fixed wireless broadband network is the largest of its kind in Canada if not the world. We have invested several hundred million dollars in extending our network to approximately 7.5 million Canadian households, or about 63% of the households in our MCS licence areas. Significantly, we provide fixed wireless broadband service (up to 3 Mbps) in 45 cities and over 200 rural markets.

4. This extensive network was built on the basis of a unique shared network model that has allowed for the rapid and economically efficient expansion of

our network, while at the same time providing for vigorous competition at the retail service level between our two partners. This approach, which was pioneered in Canada, has allowed Inukshuk to serve markets that are not large enough to justify the investment that would be required to implement multiple competing broadband wireless networks.

5. Significantly, Inukshuk exceeded the implementation of spectrum usage condition of its MCS licences, despite the substantial risk and ongoing uncertainty surrounding the final policy, technology and band plan. We are committed to making further substantial investments in the Band in order to leverage all of the advantages of an internationally compatible band plan for advanced new broadband mobile services.

6. Inukshuk therefore is the principle licensee in the Band and is an important stakeholder in this consultation. We believe that our views regarding the issues under consideration warrant the Department's careful consideration so that Canadians will be able to fully realize the benefits of transitioning to BRS.

7. It is important for the Department to understand that, while there is much promise in making the transition to BRS in Canada, success is by no means guaranteed. It will depend in large part on the Department's final decision regarding the band plan and the extent to which incumbent licensees such as Inukshuk will be licensed with the BRS spectrum they require to fully unlock the benefits of a globally harmonized band for broadband mobile services.

8. Harmonization will be essential if Canadians are to benefit from the global ecosystem for wireless network technology and consumer devices that is already developing for the Band. Restricting Inukshuk's access to wideband blocks of contiguous BRS spectrum frequencies will only limit the extent to which we will be able to offer new bandwidth-intensive services and applications to Canadians. We therefore encourage the Department to take

the steps that are necessary for success by incorporating the following comments in its policy for transitioning to BRS licensing.

9. As outlined in greater detail below, Inukshuk supports the Department's proposal to adopt March 31, 2011 as the firm transition date for BRS licensing, while at the same time providing incumbents with adequate flexibility to transition their technology to the new band plan. BRS licences should have a 15-year term since this will provide licensees with greater certainty for corporate planning and funding purposes.

10. All MDS licences and certificates should be eligible for conversion to BRS. The Department should use Tier 2 licence areas for conversion of MDS authorizations since this would be more consistent with the wide area and mobile nature of BRS services than the use of Tier 3 and Tier 4 licence areas.

11. We believe that the Manitoba school boards and licence-exempt broadcasting systems should not be eligible for conversion to BRS. These licensees should be grandfathered on a no-protection, no-interference basis and subject to displacement as required to allow for the introduction of BRS.

12. We do not support the proposed introduction of a condition of licence regarding research and development ("R&D"), which no other country imposes as a condition of licence.

13. The Department must not impose a spectrum cap in the Band. Licensees such as Inukshuk must not be restricted in their ability to offer new and innovative bandwidth-intensive services and applications.

14. Lastly, spectrum licence fees should be limited to a level that is required to recover the Department's administrative cost of managing the spectrum.

15. Following are Inukshuk's detailed comments regarding the issues outlined in the Consultation Paper.

The Department is seeking comments on its proposal to adopt a firm transition date to BRS rather than renew MCS and MDS licences.

Should a firm transition to BRS be adopted, the Department is proposing March 31, 2011, as the transition date to BRS, as it coincides with the end of licence term for the current MCS licences.

16. Inukshuk supports the date of March 31, 2011 for BRS licensing and for the implementation of the new band plan. The Department should not renew any MCS and MDS licences when they expire on March 31, 2011. A firm transition date will be required, among other things, because existing high power services will make it impractical for other licensees to introduce new low power BRS systems in the Band.

17. Setting a firm transition date will provide licensees with a necessary degree of certainty for planning purposes and will also allow for an orderly transition to BRS. We believe that this date would strike an appropriate balance between the need for incumbent licensees to realize an adequate return on their sunk cost, and the objective of introducing new and advanced broadband mobile services in the Band. Incumbent licensees will also have the option of voluntarily transitioning to BRS before the firm transition date.

The Department seeks comments on the options that should be applied to the Manitoba school boards and the commercial MCS licensee:
- **Option 1 − Eligible for conversion to BRS;**
- **Option 2 − Subject to a transition policy; or**
- **Option 3 − Grandfathered.**

18. Inukshuk believes that the Manitoba school boards should not be eligible for conversion to BRS. We believe that it would not be appropriate for the Department to allow non-commercial educational services to convert to licences for commercial mobile services in a globally harmonized mobile

band. However, Inukshuk believes that these licensees should be grandfathered on a no protection, no interference basis and transitioned out of the band on an as required basis to accommodate new BRS licensees. This approach would provide the school boards with adequate flexibility to transition out of the band.

19. If necessary, the Department should consider funding the displacement of the school boards using proceeds from the upcoming spectrum auction for available and liberated spectrum in the Band.

Industry Canada invites comments on which component(s) (i.e. CRTC Decision, Industry Canada broadcasting certificate, and CRTC licence) should be required for licensed MDS in order to qualify for conversion to BRS in a given area.

20. In the Consultation Paper, the Department invites comments regarding the criteria that will be used to determine the extent to which MDS authorizations will qualify for conversion to BRS licences. The following three components to the authorization of CRTC-licensed MDS systems are noted by the Department in the Consultation Paper:

    a) a CRTC Decision;
    b) an Industry Canada broadcasting certificate; and
    c) a CRTC broadcasting licence.

21. The Department also notes that MDS operators are permitted to use up to 50% of their MDS spectrum for non-broadcasting purposes and that this usage requires a separate spectrum licence from Industry Canada. Further, the Consultation Paper states that spectrum licences used for non-broadcasting services are subject to the same considerations regarding conversion to BRS licensing.

22. Inukshuk notes that certain MDS licensees have all three components identified by the Department in some geographic areas, but not in all cases. Inukshuk believes that all MDS-related licences and certificates should be eligible for conversion to BRS, not just those that have been granted by the Department.

23. Further, since it is possible for MDS operators to use up to 50% of their licensed spectrum for non-broadcast services, we believe that limiting the eligibility criteria to the components listed in paragraph 20 above would be unnecessarily restrictive. The components used for determining eligibility should be broadened to include radiocommunication licences that have been granted for non-broadcast services.

24. Inukshuk also believes that a further refinement is required to deal with the regional broadcasting licences that are issued by the CRTC. The Department will already know that, when the CRTC licenses MDS operators to provide broadcasting services, it authorizes them either to serve a specific market or to serve a region.

25. While the issue of geographic service areas is addressed more fully below, Inukshuk believes that the policy should provide that the CRTC regional broadcasting licences of MDS operators will be eligible for conversion to BRS throughout a given region if their MDS network coverage reaches minimum portion (e.g. 10% to 50%) of the population in the area defined in their regional broadcast license. We believe that this should be the case irrespective of whether some specific communities are not currently served or if some markets are not fully covered.

26. Inukshuk recommends therefore that the Department use the following criteria to determine the extent to which MDS authorizations will be eligible for coversion to BRS licences.

    MDS authorizations that will be deemed eligible for conversion to BRS must have one or more of the following components:

    a) a CRTC Decision;
    b) at least one Industry Canada broadcasting certificate or radiocommunication license;
    c) a CRTC regional broadcasting license.

26. The eligibility criteria proposed above by Inukshuk recognize and reasonably balance the authorizations granted to MDS operators by Industry Canada and the CRTC. We do not believe that eligible authorizations should be limited to authorizations that have been granted by the Department. Our proposed eligibility criteria recognize that MDS operators have faced significant technological challenges due to the limitations of the line-of-sight technology available at the time of their network implementation, and that they cannot be expected to cover 100% of the region across which they have been authorized for MDS.

27. We would note in this regard that the Department has recently renewed licences and waived spectrum licence fees in the 24 and 38 GHz bands despite the fact that the licensees failed to satisfy their implementation of spectrum usage conditions of licence on the basis of technology limitations.[1] We urge the Department to exercise the same degree of flexibility in converting MDS authorizations to BRS licences.

[1] *Decision on the Renewal of 24 and 38 GHz Spectrum Licences and Consultation on Spectrum Licence Fees for 24, 28 and 38 GHz Bands (DGRB-004-09)*, March 2009, p. 3.

28. We would also note that establishing a minimum coverage threshold for a MDS operator's CRTC authorized service region would be consistent with the approach take by the Department with respect to other commercial and high-mobility spectrum bands. For example, the Department has required auctioned PCS licensees to implement service coverage to at least 50% of the population within their licensed Tier 2 service areas.[2] More recently, the Department has required AWS licensees to satisfy "roll-out targets" whereby coverage must be provided to a portion of the population within their Tier 2 and Tier 3 service areas, ranging from 10% to 50% depending on the area in question.[3]

Should MDS stations that do not meet the eligibility criteria be protected through a transition policy (notification period prior to displacement) in the event that a firm transition date to BRS is adopted?

28. MDS systems that do not meet the eligibility criteria should be subject to a transition policy whereby they will be displaced from the band on an as required basis to accommodate new BRS licensees. This approach is justified since, as noted above, existing high power systems will overwhelm, and therefore preclude the introduction of, new low power BRS systems in the Band.

Comments are also sought on whether CRTC licence-exempt systems that serve small, rural and remote communities having small populations should be treated differently from the CRTC-licensed systems.

29. Inukshuk understands that all CRTC licence-exempt systems are located in isolated areas (south-east of James Bay) and, therefore, we believe that

[2] *PCS Auction Licence Conditions*, November 2005.
[3] *Licensing Framework for the Auction for Spectrum Licences for Advanced Wireless Services and other Spectrum in the 2 GHz Range*, November 2008, Appendix C.

these systems should be grandfathered on a no-protection, no-interference basis. These systems should be subject to displacement as required to avoid interference with licensed BRS systems.

Should these undertakings not be eligible for conversion and a firm transition date to BRS is adopted, the Department seeks comments on what would constitute a suitable notification period for these stations to retune to available frequencies or cease operating. Notification would be given only if the MDS station would prevent the deployment of a BRS system.

30. Inukshuk believes that licence-exempt systems should not be eligible for conversion to BRS. A notification period of 6 months would be appropriate, in light of the fact that these systems are licence-exempt and relatively small, and that transitioning these systems out of the band should be straightforward from a practical perspective.

Industry Canada seeks comments on whether Tier 3 or Tier 4 licence areas are the most appropriate for the conversion of site-specific MCS licences to BRS spectrum licences, where applicable, and for conversion of MDS authorizations, including Industry Canada spectrum licences issued in the 2596-2690 MHz band.

31. In the Consultation Paper, the Department has invited comments regarding whether Tier 3 or Tier 4 licence areas are the most appropriate for converting site-specific MCS licences and MDS authorizations to BRS spectrum licences.

32. Inukshuk notes the Department's view that "only one MDS authorization in a given Tier service area is required to qualify in order to obtain a BRS licence

for that Tier".[4] Inukshuk understands that the term "MDS authorization" includes MDS authorizations granted by the CRTC in the form of a CRTC Decision or a CRTC broadcasting licence. Inukkshuk therefore supports this proposal.

33. For the reasons outlined below, Inukshuk believes that, when converting from site-specific MCS licences and MDS authorizations, the Department should use Tier 2 service areas to the maximum extent possible, subject to certain limited exceptions.

34. Inukshuk recommends this approach since larger service areas are more suitable for the licensing of spectrum that is used for mobile services. In this regard, we agree with the Department that larger Tiers "would facilitate the planning and implementation of large scale, high-mobility systems".[5] However, we do not agree with the Department's proposal that the service areas used for converting to BRS should be limited to Tier 3 and Tier 4. Inukshuk strongly recommends that Tier 2 service areas be used since these areas would be more suitable for high-mobility systems. We would also note that the use of Tier 2 service areas would be consistent with the manner in which the Department has licensed other commercial mobile spectrum blocks.

35. For example, the Department used Tier 2 service areas when licensing auctioned PCS spectrum in the 2001 spectrum auction.[6] The Department also used Tier 2 service areas when licensing AWS spectrum that was set-aside for "new entrants" in the 2008 spectrum auction.[7]

[4] *DGRB-005-09*, p. 8.
[5] *DGRB-005-09*, p. 8.
[6] *Policy and Licensing Procedures for the Auction of Additional PCS Spectrum in the 2 GHz Frequency Range*, June 2000, p.10.
[7] *Licensing Framework for the Auction for Spectrum Licences for Advanced Wireless Services and other Spectrum in the 2 GHz Range*, November 2008, p.3.

36. The use of large service areas for BRS licensing is important for a number of reasons. For example, high-mobility services are intended to be used by customers over a wide area, as they travel from one location to another. BRS licensees must be licensed to use BRS spectrum over the same wide area, or they will not be able to deliver uninterrupted service as customers travel. Using Tier 3 or Tier 4 service areas will increase the risk that licensees will not be able to assemble the contiguous spectrum licences they need to provide wide area coverage.

37. The use of Tier 4 areas in particular will increase the risk that large numbers of Tier 4 licences will remain unlicensed following the upcoming licensing process for available and liberated spectrum in the Band. This is inevitable for the simple reason that, if less profitable areas are not included in the same licence with more profitable areas, the less profitable areas will remain unassigned. Including less profitable areas in a Tier 2 licence will increase the likelihood that they will be licensed and eventually implemented.

38. Further, since the use of smaller areas will make it more difficult for licensees to assemble the same frequency blocks in each area, it will make co-ordination between licensees more complex and the implementation of services more cumbersome. It will also be less efficient since, of necessity, more spectrum will be consumed for guard bands.

39. As noted above, in issuing broadcasting licences, the CRTC authorizes MDS licensees to provide broadcasting services across a particular region. Unfortunately, as the Department has noted in the Consultation Paper, these regions do not directly correlate to the Tiers that are used by the Department when issuing spectrum licences. In any event, the CRTC's use of regional broadcasting licences is generally analogous to the Department's use of spectrum licensing, whereby MCS licensees are authorized to serve a wide area (in the case of MCS licences, Tier 2 licence areas are used).

40. Inukshuk supports the use of Tier 2 service areas for conversion to BRS in circumstances where the licensee's CRTC authorized MDS service region is substantially equivalent to the associated Tier 2 service area, and especially if coverage is provided to at least, for example, 10% to 50% of the population in the licensee's CRTC authorized MDS service region. If the system satisfies the minimum requirement, all market areas included in the CRTC licence should be eligible for conversion to a Tier 2 BRS licence. Otherwise, Tier 3 service areas should be used. Tier 4 service areas should only be used as a last resort, where more than one incumbent MDS operator is authorized in the same Tier 3 area. The use of Tier 4 areas would allow the Department to equitably resolve any such conflicts.

Industry Canada seeks comments on these licence conditions proposed for voluntarily converted BRS licences.

Learning Plans

41. Inukshuk agrees with the Department that the condition of licence regarding Learning Plans should be eliminated when MCS licences are replaced with BRS licences. The Learning Plan condition was imposed as part of the comparative licensing process and policy for MCS and no such condition has ever applied to other mobile spectrum licences, such as, for example, cellular, PCS or AWS licences.

Licence Term

42. Inukshuk does not support the Department's proposal that the BRS licences should expire on March 31, 2021. We believe that the licence term for BRS licences should expire later than March 31, 2021 and that BRS licences should have a high expectation of renewal. Granting longer terms and a high

likelihood of renewal would provide licensees with a greater degree of certainty with respect to the ongoing viability of their operations, for corporate planning purposes and in order to secure additional funding for their substantial investments.

43. The use of longer terms would also be consistent with licence terms in other jurisdictions. The UK's Office of Communications ("Ofcom"), for example, uses indefinite licence terms for 2G spectrum licences[8] and 21-year terms for 3G spectrum licences.[9] Ofcom will use indefinite terms with initial terms of 20 years for spectrum licences that it will award in the 2500-2690 MHz band.[10] The Australian Communications and Media Agency ("ACMA") uses 25-year terms for 2G licences and 15-year terms for 3G licences.[11] Inukshuk believes that a 15-year licence term for BRS licences would be a reasonable first step in the direction of the much longer or indefinite licence terms that are used elsewhere in the world.

44. Inukshuk notes that the Consultation Paper is silent with respect to the likelihood of renewal for BRS licences. We understand that the Department intends to establish a common process for renewal of all spectrum licences by addressing these issues in a separate consultation regarding the *Framework for Spectrum Auctions in Canada* (the *Auction Framework*).[12] We also note that, in the consultation regarding the *Auction Framework*, the Department has proposed that auctioned licences will continue to have a high expectation of renewal.[13]

[8] Ofcom, *Application of Spectrum Liberalisation and Trading to the Mobile Sector*, Feb 2009, Section 1.8.
[9] Ibid, Section 9.6.
[10] Ofcom, *Auction of Spectrum: 2500-2690 MHz, 2010-2025 MHz Information Memorandum*, April 2008, p.33.
[11] ACMA, *Five Year Spectrum Outlook: 2009-2013*, March 2009, p. 23.
[12] *Consultation on Transition to Broadband Radio Service (BRS) in the Band 2500-2690 MHz (DGRB-005-09)*, p. 9.
[13] *Consultation on Revisions to the Framework for Spectrum Auctions in Canada (DGRB-001-09),* April 2009, p.7.

45. For the reasons provided above, Inukshuk believes that it would be appropriate for the Department to clearly state in the conditions of licence for BRS that BRS licences will have a high expectation of renewal.

Licence Transferability and Divisibility and Subordinate Licences

46. Inukshuk supports the Department's proposal that BRS licensees will be given the right to transfer their licence in whole or in part and to apply to use a subordinate licensing process.[14] We believe that these provisions will enable the development of a secondary market that will provide interested parties with the ability to obtain spectrum in unserved and underserved areas of the country.

47. We note that the Department has made reference to the need for licence transfers and subordinate licences to comply with a "spectrum cap" if any such cap will be implemented in the Band. For the following reasons, Inukshuk believes that the Department should not consider a spectrum cap for the Band.

48. First, mobile data traffic is currently forecasted to double every year between 2009 and 2013.[15] This is largely due to the combined availability of advanced new mobile broadband networks and consumer smartphone devices and lap-top computer modems that are capable of exploiting the new networks. The combined effect of these factors is explained by a notable industry expert as follows:

> The use of smartphones, phones that incorporate computer and lnternet capability and that can run a wide range of data applications, is surging. This is because an

[14] *DGRB-005-09*, p. 10.
[15] *Cisco Visual Networking Index: Global Mobile Data Traffic Forecast Update*, January 29, 2009. http://www.cisco.com/en/US/solutions/collateral/ns341/ns525/ns537/ns705/ns827/white_paper_c11-520862.pdf

> expanding **3G** network footprint can now fully support their capabilities and, with rising volumes and economies of scale, they are much more affordable…[16]

49. As the broadband capabilities of networks and consumer devices increases, the adoption of mobile data services and use of mobile data applications will continue to accelerate. This in turn will drive further investment and innovation in broadband mobile networks. Clearly, this trend can only be sustained if licensees can continue to deliver a satisfying broadband experience to their customers. This "virtuous cycle" is explained in the following terms:

> A greater number of users with **3G** devices engaging in more data applications directly translates to greater spectrum usage. A satisfying mobile broadband experience in which applications are fast and responsive encourages subscribers to use more data applications. This, in turn, drives operators to expand their **3G** network deployments, as well as to enhance network capability, which then encourages developers to build new mobile-data applications. For example, there are already more than 10,000 applications for the iPhone, even though the developer tools were only made available for it this year.'
>
> According to Nielsen, faster speeds, as made available with **3G** and other emerging wireless technologies, translate directly to user satisfaction, "As with PC lnternet use, faster data transfer speeds closely relate to consumer satisfaction and will help to drive overall interest and adoption of the platform."" With **"4G** platforms"soon to be deployed, user experiences will continue to improve, further stimulating usage.[17]

50. Data-intensive applications that were not even contemplated several years ago are driving significantly higher volumes of usage than traditional mobile voice services. This global phenomenon is illustrated by the following examples:

> Popular applications such as mobile video are particularly data intensive. For example, watching a YouTube video on a mobile phone or laptop consumes almost one hundred times the data bandwidth of a voice conversation. Downloading a Microsoft Powerpoint file of five-megabyte (Mbyte) size to view

[16] *Mobile Broadband Spectrum Demand*, Rysavy Research, December 2008, p.8.
[17] Ibid, pp. 7-8.

> it on a phone or laptop consumes the same amount of data on the downlink as speaking on a phone for more than an hour.[18]

51. Understandably, the growth in mobile data usage and its profound effect on the volume of traffic carried on wireless networks is compelling carriers to consume more radio spectrum than ever before. Therefore, restricting a licensee such as Inukshuk from harnessing an adequate amount of BRS spectrum will impair its ability to deliver the network performance and user experience that are necessary to further stimulate mobile data adoption and usage. The interdependence of these issues has been described in the following terms:

> We are witnessing the culmination of massive network investment, technology innovation and development, spectrum deployment, and user sophistication. Continued growth, however, depends on operators' ability to keep providing users with satisfying network performance. If networks become overloaded, the result is slower and more erratic throughput speeds, packet delays, unreliable application behavior, and disconnects.[19]

> While today's mobile networks have sufficient capacity to address current active subscribers and current usage behavior, emerging multimedia applications will impose significant additional bandwidth demands. The amount of data that these applications can consume is likely to exceed the capacity of many existing mobile networks once usage becomes widespread.[20]

52. If Canada is to fully benefit from the globally harmonized spectrum in the Band, incumbent licensees such as Inukshuk will need access to adequate BRS spectrum so that they will be able to support bandwidth-intensive applications for an increasing number of Canadians, while maintaining the reliability of their network. It is critical therefore that the Department not impose a spectrum cap in the Band.

[18] Ibid, p. 6.
[19] Ibid, p.8.
[20] Ibid, p.17.

Research and Development

53. Inukshuk opposes the R&D condition of licence. As the Department has noted elsewhere, "Initially, this condition of licence was established to stimulate R&D in the telecommunications sector" and more than a billion dollars has been invested in R&D since the first cellular licences were issued by the Department in the mid-1980's.[21] This condition therefore has served its purpose and should be eliminated.

54. Inukshuk agrees with the Telecommunications Policy Review Panel Final Report and the OECD Telecommunications Regulatory Institutional Structures and Responsibilities report that cautioned against the mix of regulation and industrial development strategy.[22] The Department has other alternatives for encouraging R&D in Canada. We would also note that the US, UK and Australia do not impose an R&D condition of licence and Inukshuk is not aware of any other jurisdiction that imposes such a condition of licence. In any event, market forces will ensure that wireless equipment manufacturers and licensees will invest heavily in R&D to enhance their competitive position.

Lawful Interception

55. The Department has proposed the introduction of a condition of licence regarding lawful interception. It is important to note that, in the context of cellular and PCS services, Inukshuk's partners have a long history of cooperation with law enforcement and security agencies, subject to appropriate legal process and judicial oversight.

[21] *Consultation on Revisions to the Framework for Spectrum Auctions in Canada (DGRB-001-09),* p.9.
[22] Ibid, p.10.

56. Inukshuk believes that any lawful interception requirements imposed as a condition of licence should be limited to circumstances where commercially available standards-based technology is available to satisfy the requirements. Where such technology is not available, the implementation by licensees of non-standards-based solutions should be funded by the Federal government. This approach would be entirely appropriate given the substantial benefit accruing to the Canadian public.

57. Inukshuk also believes that it would not be reasonable for the Department to impose this condition on the current network technologies and services of MCS and MDS licensees since these technologies and services were implemented at a time when the requirement did not exist and existing technologies may not have the necessary capabilities.

58. We recommend that the Department state in the conditions of licence or final policy that lawful access requirements will be limited to those that can be met using industry standards-based equipment, and will not apply to the current network technology and services of MCS and MDS licensees.

Implementation of Spectrum Usage

59. As noted above, Inukshuk has exceeded the requirements of its implementation of spectrum usage condition of licence and it currently provides service to about 63% of the households within its MCS licence areas. This extensive coverage was achieved despite considerable risk and uncertainty with respect to the Band, and in the absence of industry-standardized technology.

60. In light of the extensive coverage we have implemented, Inukshuk agrees with the Department's proposal that a specific spectrum usage implementation requirement will not be imposed and that the extent to which

licensees have implemented their spectrum usage will be taken into account when considering the eventual renewal of BRS licences.

61. We believe that this approach would be consistent with the *Spectrum Policy Framework* which directs the Department to rely on market forces to the maximum extent feasible.[23] The Department should allow market forces to determine the extent to which BRS licensees will continue to roll out their services and the timeframes in which they will do so.

Licence Fees

62. The Department indicates in the Consultation Paper that it will be consulting on a new licence fee applicable to all BRS licences issued to incumbents through either the voluntary conversion process or the transition policy.[24] With respect to the future consultation regarding fees, we note that the Department states that the new licence fee "should reflect the market value of the spectrum to the extent possible".[25] The Department also states that, in the meantime, radio authorization fees established in Canada Gazette Notice DGRB-013-99 will be used for all BRS licences issued pursuant to the conversion or transition processes until such time as a new fee order has been established.[26] Inukshuk notes that the current fee is set at $1.30 per 1 MHz per 1,000 households within a given service area.

63. With respect to fees, and the suggestion that a new fee should reflect the "market value" of the spectrum, we note that US BRS licensees are required to pay a "Regulatory Fee" that is intended to recover no more than the cost of the US Federal Communications Commission's (FCC's) regulatory activities on behalf of the wireless industry. This fee is re-calculated on an annual

[23] *Spectrum Policy Framework for Canada*, June 2007, p.9.
[24] *DGRB-005-09*, p. 9.
[25] Ibid, p. 16.
[26] Ibid, p. 9.

basis to reflect the expected level of the FCC's costs in a given year.[27] As of April 2009, the Regulatory Fee that is applicable to BRS was set at $295.00 per call sign (equivalent to a BRS site).[28] Clearly, the US FCC's BRS Regulatory Fee is set at a nominal level and is not intended to reflect the "market value" of the spectrum. This fee is also substantially lower than the fee currently paid by MCS licensees.

64. If the Department intends to consult separately regarding a new licence fee for BRS licences, we respectfully submit that any such fee proposed by the Department should be set at a nominal level to only recover the Department's administrative costs, as is the case in the US. To do otherwise would place Canadian BRS licensees at a significant disadvantage relative to their peers in other jurisdictions, such as the US.

65. Further, it is important for the Department to understand that spectrum licence fees, like all costs, are passed on to consumers and that higher spectrum licence fees will raise the prices for wireless services in Canada. If the Department expects Canadian wireless prices to more closely resemble wireless prices in the US, then it should harmonize its BRS spectrum licence fee with the US FCC's BRS Regulatory Fee. Lower spectrum licence fees will result in more affordable services and greater investment in BRS networks and services.

Conclusion

66. As explained above, Inukshuk supports the Department's proposal to adopt March 31, 2011 as the firm transition date for BRS licensing, while at the same time providing incumbents with adequate flexibility to transition their technology to the new band plan. BRS licences should have a 15-year term

[27] Title 47 of the *Code of Federal Regulations*, Part 1 § 1.1163.
[28] *Federal Communications Commission Wireless Telecommunications Bureau Fee Filing Guide, April 2009*, Part C.

since this will provide licensees with greater certainty for corporate planning and funding purposes.

67. All CRTC and Industry Canada authorizations related to commercial MDS should be eligible for conversion to BRS. The Department should use Tier 2 licence areas for conversion of MDS authorizations since this would be more consistent with the wide area and mobile nature of BRS services than, for example, the use of Tier 3 or Tier 4 licence areas.

68. We believe that the Manitoba school boards and licence-exempt broadcasting systems should not be eligible for conversion to BRS. We believe that it would not be appropriate to permit these systems to convert to spectrum licences using globally harmonized commercial mobile spectrum.

69. We do not support the proposed introduction of a condition of licence regarding R&D, which no other country imposes as a condition of licence.

70. The Department must not impose a spectrum cap in the Band. Licensees such as Inukshuk must not be restricted in their ability to offer new and innovative bandwidth-intensive services and applications.

71. Lastly, spectrum licence fees should be limited to a level that is required to recover the Department's administrative cost of managing the spectrum.

72. Inukshuk appreciates this opportunity to share its views with the Department regarding the transition to BRS.

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