



CITY OF NELSON

From the Office of the City Manager

April 5, 2011

Manager, Mobile Technology and Services
Industry Canada
300 Slater Street
Ottawa, Ontario
K1A 0C8

VIA EMAIL: Spectrum.Engineering@ic.gc.ca

Dear Sirs:

RE: Letter of Support in reference to Canada Gazette, Part I, Notice SMSE-018-10 – Consultation on a Policy and Technical Framework for the 700MHz Band.

This is to advise that at its regular meeting of April 4, 2011, Nelson City Council passed a resolution in reference to Gazette Notice No. SMSE-018-10 in support of the Province of British Columbia's position of February 28, 2011, Ref: 64789, Page 2, for the allocation of spectrum blocks on a geographic basis that exclude urban centers, and that spectrum blocks of this characteristic should be made available to proven sustainable small to medium Internet Service Providers who have a proven track record of running successful and sustainable services in challenging rural and remote areas. Nelson City Council also favours incorporation of an affordable license fee which would stimulate greater service availability to our citizens.

Nelson City Council further indicates its support of the Federation of Canadian Municipalities position dated February 16, 2011, in requesting the allocation of the 700 MHz spectrum directly to public safety to accommodate the needs of police officers, firefighters and emergency medical personnel.

Thank you for the opportunity for the City of Nelson to submit its comments on this important allocation of services for rural communities.

Sincerely,

Kevin Cormack, C.A.
City Manager

c.c City Council



File: 0280-30

Ref: 64789

February 28, 2011

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

Dear Sir:

RE: SMSE-018-10 – Consultation on a policy and technical framework for the 700mhz band and aspects related to commercial mobile spectrum

The Government of the Province of British Columbia (the "Province") is pleased to provide comments to Industry Canada in response to the consultation paper referenced above. Our comments have been jointly prepared by Emergency Management BC (EMBC), within the Ministry of Public Safety and Solicitor General, and the Office of the Chief Information Officer (OCIO), within the Ministry of Citizens' Services.

The Ministry of Public Safety and Solicitor General (PSSG) works to maintain and enhance public safety and security in every community across British Columbia. Within the PSSG, EMBC ensures the safety and economic vitality of B.C.'s communities through a variety of programs and is committed to advancing integrated public safety planning and response in the province by coordinating planning and response capabilities among local governments, First Nations, provincial ministries, federal agencies and other public and private sector agencies.

EMBC represents the Province in F/P/T emergency management matters through its participation in SOREM (Senior Officials Responsible for Emergency Management) and has been actively involved in the development and recent approval of the Communications Interoperability Strategy for Canada (CISC) and its associated Action Plan. As identified in the Action Plan, EMBC is establishing a Provincial Interoperability Coordinator function that will coordinate development of interoperable public safety communications within the province.

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Ministry of Citizens' Services

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Province of British Columbia

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The Ministry of Citizens' Services assumes a leading role to ensure excellence and innovation in the delivery of government services for the citizens of B.C., and enables the public service to provide effective and accessible services. Within the Ministry, the OCIO is the government's chief IM/IT strategist; the OCIO plays a leadership role in promoting and guiding the management of information as a strategic business asset, and supporting technology infrastructure as a key component of business transformation. This includes collaborating with ministries, broader public sector organization, communities and private sector suppliers on cross-government initiatives in support of government's objectives. One of the important government objectives is to stimulate the extension of advanced Broadband services to the citizens living in rural and remote locations in B.C.

Industry Canada's spectrum consultation and subsequent auction is very timely as the Province moves forward in implementing its recently announced e-government strategy of "*Citizens' @ the Centre-B.C. Government 2.0*". The availability of spectrum will help in the transformation of citizens' access to their government and public services. The spectrum also plays an important role in initiatives like "The 21st Century Learner", and TeleHealth, as well as providing economic development opportunities.

British Columbia has a land area of 944,735kms² and 27,000kms of coastline. Of the province's land mass, 75 per cent is mountainous, 60 per cent forested, and only about five per cent is arable. The 700 MHz broadband spectrum is particularly suited to our geographic and demographic situation in B.C. due to its favourable propagation characteristics in comparison to other bands. For this reason the majority of our response will focus on the 700 MHz band.

The Province feels that this spectrum allocation may address the frequency exhaustion many service providers in dense urban markets appear to be experiencing, as well as providing the opportunity to assist in bringing services to rural and remote areas of British Columbia.

The fact that a number of low density rural and remote areas have neither competition, nor mobile wireless services, indicates that there is a marginal or extremely difficult business case for service providers. These same areas also lack broadband services.

* In our submission, we introduce the concept of allocating spectrum blocks on a geographic basis that exclude urban centers. We feel spectrum blocks of this characteristic should be made available to proven sustainable small to medium Internet Service Providers, in a manner that would result in spectrum costs that are representative of the local business case. These small to medium sized Internet Service Providers have a proven track record of running successful and sustainable services in challenging rural and remote areas. There are currently over 100 of these service providers in B.C. providing Internet services to rural and remote citizens at prices similar to urban markets.

We also suggest that the mechanism to allocate spectrum to small and medium providers should not be through an auction process but instead should incorporate an affordable license fee, with a reasonable "use it, or lose it" caveat. We feel that a spectrum allocation program of this nature would stimulate greater service availability to citizens in rural and remote areas. *

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British Columbians have identified affordable high-speed telecommunications services as an essential component of a modern economy; affecting their ability to work, operate businesses, acquire resources, receive government services, live safely, and interact socially.

The consultation paper also includes a number of questions focused on public safety use of broadband spectrum. In preparing its response to these questions, the Province has consulted with a wide range of public safety and public service stakeholders in B.C., including other provincial ministries, first responder agencies, critical infrastructure providers, designated Emergency Communications Corporations¹ and medium and small Internet service providers. Although we believe our response accurately reflects the consensus views of all stakeholders consulted, our response should not be construed as making any representation on behalf of organizations external to the government of B.C.

Our consultation with these stakeholders in B.C. has clearly indicated that:

- Demand from public safety and public service agencies for wireless broadband services and the mission critical applications they support will experience growth rates similar to those observed in the broader marketplace (i.e. demand from consumer and business users);
- Commercial wireless broadband services cannot be relied upon by public safety agencies in times of crisis because of the degradation those services experience as a result of excessive demand from commercial users;

The Province, therefore, urges Industry Canada to assign dedicated 700 MHz spectrum for the purpose of building a national, interoperable wireless broadband network for the use of public safety and public sector organizations – those having a mission and mandate to provide critical services for the protection of life and property.

As will be discussed further in the consultation submission, this spectrum assignment must be:

- Sufficient to support projected future bandwidth requirements in major emergency events – a 20 MHz allocation is required based on the analysis discussed in our response;
- Consistent across Canada to enable the construction of a national, interoperable “system-of-systems” based on regionally- or provincially-defined business models and national coordination;
- Harmonized with similar assignments in the United States to enable cross-border interoperability and continental economies of scale in equipment purchase;
- Subject to a governance model that ensures the public safety community can directly control the prioritization and use of spectral and network resources, in the absence of commercial influences;
- Licensed for public safety and mission critical public service use at minimal or no cost – in particular, this spectrum should not be licensed through an auction process.

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¹ This includes E-Comm, Emergency Communications for Southwest British Columbia and CREST – Capital Region Emergency Services Telecommunications. Both organizations are incorporated in British Columbia in accordance with the BC Companies Act and the Emergency Communications Corporations Act. See http://www.bclaws.ca/EPLibraries/bclaws_new/document/ID/freeside/00_97047_01

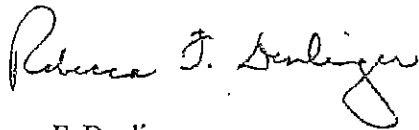
We recognize that allocation of suitable spectrum is only one component of the development of a national wireless broadband network for public safety and that significant work will be needed, once the spectrum is allocated, to develop and implement the required funding and operational models. However, we also believe that the fundamental enablers are in place in Canada and B.C. that will allow such a network to be built and sustained in the long-term:

1. A national governance framework as outlined in the Communications Interoperability Strategy for Canada;
2. The Emergency Communications Corporations Act in B.C.

With the recent announcement by the White House² of its Wireless Innovation and Infrastructure Initiative, the assignment of the D Block to public safety and the allocation of auction proceeds to support network construction seem likely. This announcement provides the Department with additional justification to harmonize the 700 MHz spectrum with the U.S. and apply spectrum allocation mechanisms that will facilitate the development of wireless broadband networks for public safety and remove barriers to spectrum acquisition by organizations providing broadband services in rural and remote locations in Canada.

It is also worth noting that the U.S. federal commitment to Wireless Innovation and Infrastructure Initiative includes substantial funding and resources (~ \$5B) for diminishing and resolving the lack of broadband citizen access in rural and remote locations (often described as the Digital Divide). The stated goal is to insure connectivity is available to 98 per cent of US citizens. Industry Canada may wish to investigate such a program for Canada, using the proceeds obtained through upcoming spectrum auctions.

Respectfully submitted,



Rebecca F. Denlinger
Fire and Emergency Management Commissioner
Emergency Management British Columbia
Ministry of Public Safety and Solicitor General
Province of British Columbia



Dave Nikolejsin
Government Chief Information Officer
Province of British Columbia

Attachment

² <http://www.whitehouse.gov/the-press-office/2011/02/10/president-obama-details-plan-win-future-through-expanded-wireless-access>

(i) Who should be entitled to bid in the set-aside block(s) and should the entitled bidders be restricted to bidding on the set-aside only?

135 Please see question 5-12 and 7-3.

(ii) How much spectrum should be set-aside and which block(s) should be set-aside?

136 Please see question 5-12 and 7-3.

(iii) If the set-aside were to include multiple blocks of spectrum, should they be contiguous?

137 The Province has no comment at this time.

(iv) What restrictions should be put in place to ensure that policy objectives are met (for example, should trading of the set-aside spectrum be restricted for a given time period)?

138 The Province has no comment at this time.

7-7. Are there other mechanisms that should be considered and, if so, how should these be applied?

139 Please reference responses to questions: 5.12, 5.13, 7.1, and 7.3. In addition we would like to suggest that if a model was adopted to promote remote and rural low density customer based areas, that small to medium service providers will require a system that permits ease of use and provides sufficient preparation time to respond.

140 In order for small to medium ISPs to exist sustainably, they must exist with very tight constraints on resources. Access to capital, preparation of business cases, and technical site surveys often put a significant strain on those limited resources. Encouraging the expansion of service in these challenging areas may require some prudent changes in Industry Canada program timing.

7-8. The Government of Canada has undertaken a consultation on potential changes to the foreign investment restrictions that apply to the telecommunications sector. How would the adoption of any of the proposed changes affect your responses to the questions above?

Provide supporting evidence and rationale for all responses.

Note: The possible implementation of a set-aside regarding the 2500 MHz spectrum to be auctioned will be dealt with in a separate consultation.

141 The Province has no comment at this time.

8-1. In the above context, the Department seeks comments on challenges and specific problems affecting the deployment of broadband mobile services to low-density rural and remote areas.

- 142 British Columbia has a land area of 944,735kms², 27,000kms of coastline. Of the Province's land mass, 75 per cent is mountainous, 60 per cent is forested, and only about 5 per cent is arable. British Columbia has a population of 4,419,974 citizens, with approximately 2 million residing in the Lower Mainland. Population densities in rural and remote areas are sparse.
- 143 Through previous federal and provincial initiatives, partnerships with private sector suppliers and telecommunication sector commercial expansion, 93% of B.C.'s population has access to broadband connectivity. The majority of rural and remote areas are serviced by small to medium ISP's but often lack competition.
- 144 Mobile wireless services are available in most largely populated areas from 3 main carriers, one of which uses a network sharing arrangement to provide these services to locations other than British Columbia's largest urban areas. The majority of telecommunications infrastructure investment in B.C. is being done by the incumbent carrier. For the most part, this investment is targeting areas with the highest return. Access to the 700Mhz band may help entice larger carriers to expand into higher density rural areas.
- 145 As mentioned in Industry Canada's 700Mhz consultation paper, low densities and challenging terrain make it difficult to built a business case for advanced broadband services in Rural and remote areas. Small ISP's in B.C. have an important role in the broadband market place, as evidenced in the Industry Canada Connecting Rural Canadians broadband program. Of the 12 proponents that were award funding in British Columbia, roughly nine of these were small to medium ISP's.
- 146 Providing a sustainable business environment for small ISPs is the key to maintain existing broadband services as well as expanding connectivity to the remaining 7% of B.C.'s unconnected population. Policy makers need to recognize that small ISP's don't have the resources, expertise or access to funding required to participate in governmental telecommunications processes in the same degree as larger carriers and therefore policy and frameworks need to incorporate their unique requirements. Fee structures that minimize operational costs and reduced procedural requirements are areas that would help in this regard.
- 147 A high cost structure for the 700 MHz band is possible through the auction process and as seen in the AWS auction, may be a further barrier to the spectrum being utilized in rural and remote areas. High cost to obtain spectrum will further erode the economic business case for provides to deploy services in the these areas
- 148 The characteristics of the 700 MHz band are very favourable for the geographic terrain in rural and remote British Columbia. This is especially important in B.C. were many people live in heavy forested areas or are dispersed along winding valleys. In many cases the characteristics of this band will improve the marginal business cases for small to medium IPS's by increasing reach and coverage, decreasing infrastructure requirements, which will translate into higher rates of return on capital.

8-2. Is there a need for further regulatory measures or changes to existing regulatory rules (e.g. RP-19) to facilitate service deployments in rural and remote areas that remain unserved and/or underserved?

149 Some of the existing alternatives to accessing spectrum may not be optimum for British Columbia. The option of entities forming a consortium that would bid on spectrum would need a well defined governance structure and business arrangement between participants. Small to medium ISP's in B.C. may not have the resources or finances to be able to achieve this.

150 Consortium participation in an auction process may be possible, however individual members would most likely still be accountable for the purchase of the spectrum. Since this option most likely envisions using existing geographic tiers for spectrum allocation, not all the purchased spectrum may be usable by the consortium members. This could lead to poor utilization of the spectrum. It may also lead to the cost of the usable spectrum being higher when compared to the cost of smaller geographic spectrum areas being recommend in this submission.

151 Frequency transfer is another possible option, however due to the value the carriers place on the 700 MHz band for its rural and remote characteristics and added capacity in urban areas, this is very unlikely to occur. There are not many examples in British Columbia of this type of commercial arrangement between service providers. It is also unlikely there will ever be a transfer of frequency between large carriers as the economic criteria for both parties in rural and remote areas are similar. Lastly, it is unlikely there will ever be a transfer of frequency between a large carrier and a small ISP as it's very difficult to facilitate a commercial arrangement such as this, between large and small entities.

152 Generally, policies such as RP-019 do not appear to provide a resolution to the issues in regards to small to medium ISP's and service expansion to rural and remote areas. Specifically, RP-019 appears to focus on cellular services and new entrant into the market. As mentioned previously, new cellular service providers are focusing their deployment into high density urban areas. It is unlikely a new entrant could build a business case in an area that the large carriers are unable to.

153 Policies such as RP-019 should be updated to address the requirements of advanced adband services, small to medium ISP's and rural and remote areas.

154 Please reference responses to questions: 5.12, 5.13, 7.1, and 7.3 for further information.

8-3. Should the Department decide that measures are necessary, comments are sought on specific measures that could be adopted within the 700 MHz spectrum auction process to ensure further deployment of advanced mobile services in rural and remote areas (e.g. roll-out conditions, tier structure, etc.). Rationale and supporting evidence that substantiate your responses should be provided.

155 Please reference responses to questions: 5.12, 5.13, 7.1, and 7.3.

9-1 The Department seeks comments on whether there is a need for government intervention to promote open access, by increasing access by users to handsets and/or applications.

156 The Province has no comment at this time.

9-2. If government intervention is needed, which of the following options should be implemented?

Option 1: Mandated open access requirements across all future commercial mobile bands

Option 2: Mandated open access requirements for the entire commercial mobile spectrum in the 700 MHz band.

Option 3: Mandated open access requirements for the "C Block" (746-757/776-787 MHz) as in the United States.

Please provide supporting arguments for your responses, and any additional comments related to provisions of open platforms for devices and applications.

157 The Province has no comment at this time.

10-1. The Department is considering three options to proceed with the 700 MHz and 2500 MHz bands auction processes:

Option 1: to conduct an auction for licences in the 700 MHz band first, followed by an auction for licences in the 2500 MHz band approximately one year later;

Option 2: to conduct an auction for licences in the 2500 MHz band first, followed by an auction for licences in the 700 MHz band approximately one year later;

Option 3: to conduct one combined auction for licences in both the 700 MHz and 2500 MHz bands, which would be six months later than the first auction in the case of separate auctions.

Industry Canada is seeking views on the merits or disadvantages of proceeding with each of the various options stated above. The Department seeks to understand the magnitude of interdependencies between the two bands from a business/operational perspective. Specifically, comments are sought as to the extent spectrum in these bands is interchangeable or complementary from both a technological and a strategic perspective. In addition, views on the business and financial capabilities of participating in a joint auction for both bands are sought.

Comments should include the rationale for selecting one option rather than another.

158 The Province has no comment at this time.

5-12. The Department seeks comments on whether the auction of 700 MHz commercial spectrum should be based on uniform tier sizes across all spectrum blocks, or a mixture of tier sizes.

92. To best address service demand across different geographic areas, competition and flexibility, the province recommends a mixture of tier sizes across all spectrum blocks that are auctioned.
93. Public safety spectrum should not be auctioned but assigned to an appropriate national or provincial body with a mandate to oversee the effective utilization of the spectrum on behalf of public safety. In regards to Public Safety please see our response to question 5-7 for further details.
94. Access to spectrum for small to medium ISP's providing service to rural and remote communities should be through a non-auction based spectrum allocation mechanism that incorporates a modest license fee that would promote a sustainable business case in areas of low population density. Such a mechanism could incorporate input from regional, provincial or local authorities and could be employed through a competitive process if required. New mobile wireless, incumbent or national service providers should not be eligible for this spectrum that has been allocated for rural and remote purposes.

**5-13. Based on your answer above, what tier size(s) should be adopted?
Provide supporting arguments for your responses to the above questions.**

95. Public safety spectrum should not be auctioned but assigned to an appropriate national or provincial body with a mandate to oversee the effective utilization of the spectrum on behalf of public safety. In regards to Public Safety please see our response to question 5-7 for further details.
96. The spectrum needs of small to medium ISP's in British Columbia may be best addressed through a further sub-division of tier 4 geographic areas. Many of the 100 + ISP's in British Columbia that provide broadband to rural and remote areas only service their local community and surround areas. The smaller geographical footprints for spectrum allocation should exclude urban areas
97. While the size of the tier 4 service areas are relative small compared to tier 2, they are still drastically larger than the service areas most small to medium ISP's in B.C. employ. Evidence of this fact can be found when looking at the results of Industry Canada's Connecting Rural Canadian's program.
98. This program defined General Service areas similar to a tier 3 structure. Out of the roughly 26 projects that were approved in B.C. only a few projects provided connectivity to entire service areas. These projects provided connectivity via Satellite systems. The lone service provider that applied to provide broadband connectivity to multiple service areas in

British Columbia via terrestrial infrastructure, developed financial difficulties and withdrew from the program. Only two large carriers in B.C. (Shaw Communications and NorthwesTel), were able to obtain funding through this program. All of their projects provided connectivity in small communities or locales. The remaining successful applications to Industry Canada's Connecting Rural Canadian's program provide connectivity to rural and remote areas from small to medium ISP's. To provide service to rural and remote communities and locales, defining smaller service areas is clearly a better strategy.

99. In the commercial auction space a mixture of tier 2, 3 and possibly 4 should be adopted. Larger carriers may find it advantageous to obtain spectrum in tier 2 and 3 for financial, planning and deployment purposes but with only these two tiers the number of entities obtaining spectrum in a given area may be limited.
100. Tier 3 & 4 may allow targeted competition in small urban areas or the augmentation of spectrum obtained in other tiers. This option may also allow smaller carriers to take a regional approach to service deployment. As mentioned above, tier 4 does not provide a small enough geographic footprint to be used by the majority of small to medium ISPs in BC and may lead to poor utilization of the spectrum.

Effective immediately, no new broadcasting certificates will be issued for LPTV stations in TV channels 52-59 (698-746 MHz).

The Department proposes that the displacement of the incumbent LPTV stations be subject to a notification period of one year for LPTV stations located in urban areas or in specific geographic areas, such as along highway corridors; and a period of two years for LPTV stations in all other areas. A displacement notification can be issued only after technical determination is made concluding that continued operation of the incumbent LPTV station would impede the deployment of new licensed systems in the 700 MHz band.

5-14. The Department seeks comments on the transition policy proposed above.

- 101 The Province supports the Department's proposal. We believe that the proposal would have little adverse impact in British Columbia.

5-15. The Department seeks comments regarding its proposal to permit low-power licensed devices, including wireless microphones, to operate in the band 698-764 MHz and 776-794 MHz only until March 31, 2012.

102. The Province has no comment at this time.

6-1. The Department seeks comments on its proposed changes to the *Canadian Table of Frequency Allocations* for the band 698-806 MHz.

103. The Province supports the Industry Canada proposed changes to the Table.

7-1. The Department seeks comments on the current state of competition and its anticipated evolution, including the impact on consumers in the Canadian wireless services market:

(a) in general;

104. Competition only exists where there is a sufficient market economic activity to justify the infrastructure deployment and offer a profit opportunity. Commercial network operators are primarily motivated by maximizing infrastructure utilization, revenue generation, and hence, profitability, on their networks. To do this they must address the needs of the majority of users (i.e. consumers and business users) in their network designs and operational policies. This is reinforced by the necessity to secure sufficient revenue to cover not just the life cycle cost of the network infrastructure, but also the amortized cost of the commercial spectrum the network is built upon

105. In British Columbia, areas of high competition most often overlap with areas of high customer density leading to frequency exhaustion for service providers in many urban centers. These markets are the most lucrative for service providers and thus attract the most competition.

106. New Canadian mobile wireless providers that have deployed service have not demonstrated an interest in anything other than the largest urban areas, as they focus on market share. There is no evidence that this focus will change in the near future.

107. Many rural and remote locations typically have a single service provider that typically only provides partial coverage of the area, or no service provider at all. This is due to the marginal business cases resulting from low customer density, and the high cost of deployment in B.C.'s challenging terrain. Of the larger carriers, only those that can leverage existing infrastructure are able to provide services to the larger rural communities. There will be little feasibility for larger carriers to provide services to small or very small rural and remote communities and locales. This problem will be exacerbated as the population shifts from remote and rural areas to more populated regions. This trend is shown in the last census taken by Statistics Canada.

108. Over 100 small to medium fixed wireless ISPs' currently exist sustainably in the rural and remote market places in British Columbia. They are successful and experienced in making marginal business cases work sustainably while delivering service to their communities. Often the locations that these ISP's serve are their neighbour's homes and businesses. These small to medium ISP's may be best situated to provide broadband services in rural and remote areas of British Columbia.

109. Access to 700 MHz spectrum at rates that reflect the local business case conditions would allow small to medium ISPs to: expand their existing networks, offer new services and applications to citizens, and help enhance local economic development.

(b) in terms of its contributions and interaction to the broader Canadian telecommunications service market;

110 The current state of competition clearly serves the needs of urban citizens and continues to evolve services to meet those needs. Unfortunately the current status quo does not encourage service providers of any size to serve the needs of rural and remote locations in B.C.

111 Please refer to the responses in questions 8-1, 8-2 and 8-3 for further information.

(c) in comparison with the wireless markets of other jurisdictions.

112 We believe that our response in (a) and (b) are representative of the situation in other jurisdictions as well, but will leave the determination to the respective authorities in those jurisdictions.

7-2. Provide views, and any supporting evidence, on the impacts of government measures adopted in the AWS auctions, including the impacts on consumers and on the state of competition. In particular, what has been the impact, if any, of such measures on industry concentration, barriers to entry or expansion of services, and the availability of new or improved service offerings and pricing plans?

113 There has been much speculation by industry observers that the past spectrum auction drove up costs inappropriately due to the structure of the process. The speculation specifically pointed to the use of restricted spectrum for some participants, which appears to have resulted in disingenuous speculative bidding based on game theory, rather than serious bidding based on business requirements and needs.

114 Clearly activity of this sort, that drives up costs unnecessarily, hurts the consumer, who in the end bears the burden of business costs (whether just or unjust) through the rates they pay. This could be one reason the cost of mobile wireless service in Canada is significantly higher than in other jurisdictions such the United States.

115 The Province strongly urges Industry Canada to review the past auction process and if necessary, take appropriate action in the 700 MHz allocation process to insure that such distortions do not impact this or other commercial auctions.

7-3. In light of the current conditions in the Canadian wireless service market(s), is there a need for specific measures in the 700 MHz and/or 2500 MHz auction to increase or sustain competition?

116 The pricing of spectrum needs to be linked with the geographic market place value to provide opportunity for small to medium ISPs to gain access to spectrum and build sustainable business models for rural and remote areas.

117 The Province strongly urges the creation of modestly priced licensed spectrum that covers modestly sized geographic areas (that exclude urban and metropolitan areas). This licensed spectrum frequency block should be large enough to support the anticipated current spectrum needs as well as a reasonable growth factor for the future.

118 This frequency block should not be available for allocation to current mobile providers (whether incumbent or "new"), anticipated multi-jurisdictional participants who are expected to enter the mobile markets in the near future, or speculative spectrum investors who have no inclination or timely plan to use the spectrum for services to citizens.

119 In addition this modestly priced licensed spectrum should have a "use it, or lose it" clause that is reasonable in nature, to preclude speculative hoarding of the spectrum resource. A reasonable term or timeline for demonstrable usage could be as short as 3 years.

120 It should be noted that these small to medium sized ISPs are currently typically providing fixed wireless and or fixed wire line terrestrial broadband services. This type of service currently provides higher capacity and lower cost (per byte) than mobile wireless services. For the most part they provide these more affordable services in the absence of mobile service competition realizing that their target audience in rural and remote locations are extremely cost sensitive due to their own personal budgetary constraints.

121 While future mobile technologies (LTE) offer the promise of higher capacity, the infrastructure costs, and timeframes to deployment, suggest that even competition in the urban areas may not eliminate the lower cost (per byte) price point of wire line or fixed wireless services in the foreseeable future.

122 As previously commented, there is often either no mobile wireless service or a single

7-4. The Government of Canada has undertaken a consultation on potential changes to the foreign investment restrictions that apply to the telecommunications sector. How would the adoption of any of these proposed changes impact your responses to the questions above?

Provide supporting evidence and rationale for all responses.

123 The Province has no comment at this time.

7-5. If the Department determines that there is a need for measures to promote competition, which of the above mechanisms would be most appropriate and why should this mechanism be considered over the other? Comments should also indicate if further restrictions should apply so that policy objectives are met, for example, over a given time period?

124 Please see above comments on geographical spectrum blocks in rural and remote locations.

125 The Province believes that it is a proven case that broad competition in these rural and remote markets will not happen in a reasonable foreseeable timeframe.



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February 16, 2011

Manager
Mobile Technology and Services
Industry Canada
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Sent via email: Spectrum.Engineering@ic.gc.ca

Subject: *Canada Gazette, Part 1, December 4, 2010, Gazette Notice No. SMSE-018-10 – Consultation on a Policy and Technical Framework for the 700 MHz Band and Aspects Related to Commercial Mobile Spectrum*

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Regional District of
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First Vice-President
Premier vice-président
Councillor Berry Vrbanovic
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Chief Executive Officer
Chef de la direction
Brock Carlton
Ottawa, Ontario

Past President
Président sortant
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Summerside,
Prince Edward Island

Dear Madam/Sir:

1. The Department has issued a consultation paper titled **Consultation on a Policy and Technical Framework for the 700 MHz Band and Aspects Related to Commercial Mobile Spectrum** ("the Consultation Paper"). In the Consultation Paper, the Department has invited comments on the use of the 700 MHz band by commercial mobile services.
2. The Federation of Canadian Municipalities (FCM) appreciates the opportunity to provide comments on the above-noted consultation.
3. FCM supports the call of the Emergency Medical Services Chiefs of Canada, the Canadian Association of Fire Chiefs and the Canadian Association of Chiefs of Police to secure dedicated 700 MHz spectrum for public safety broadband.
4. FCM has been the national voice of municipal government since 1901. With more than 2,000 members municipalities FCM represents the interests of municipal governments on policy and program matters that fall within federal jurisdiction. Members include Canada's largest cities, small urban and rural communities, and 18 provincial and territorial municipal associations. As a national organization, FCM is dedicated to improving the public safety of Canadians.
5. In December 2010, the presidents of the Emergency Medical Services Chiefs of Canada, the Canadian Association of Fire Chiefs and the Canadian Association of Chiefs of Police announced the creation of the Tri-Services Special Purpose Committee on 700 MHz Broadband for Mission Critical Public Safety Data ("the Special Purpose Committee"). The creation of the Committee was in direct response to the above-noted consultation.
6. FCM supports the Special Purpose Committee in its current efforts to secure dedicated 700 MHz spectrum for public safety broadband, including strongly opposing any potential Industry Canada commercial auction of that portion of the spectrum.

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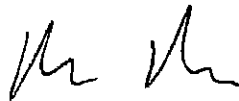


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7. FCM urges Industry Canada to reallocate 8 MHz of spectrum (currently assigned to public safety but with unspecified use) to broadband use and allocate an additional 12 MHz of adjacent spectrum to public safety for broadband use. This would result in 20 MHz being assigned for public safety broadband use and a total allocation to public safety of 36 MHz — 20 MHz for broadband and an existing 16 MHz for narrowband/wideband (i.e., voice and low speed data).
8. Allocating 700 MHz spectrum directly to public safety is the only way to ensure robust, modern, reliable public safety grade interoperable networks. First responders and public safety providers must have the right tools to protect and save lives. This includes interoperable communications networks that allow real-time information sharing through high speed video and data. This requires an appropriate, dedicated band of spectrum that can accommodate the everyday needs of police officers, firefighters, and emergency medical personnel, as well as provide excess capacity during times of emergency. The soon to be available 700 MHz block of spectrum provides this opportunity.
9. FCM appreciates this opportunity to share its views with the Department to ensure this one time opportunity for public safety is not lost.

Sincerely,



Michael Buda
Director
Policy and Research

c: The Honourable Tony Clement, Industry Canada
c: Tri-Services Special Purpose Committee on 700 MHz Broadband for Mission
Critical Public Safety Data

