

July 10, 2018

Innovation, Science and Economic Development Canada  
c/o Senior Director, Spectrum Licensing and Auction Operations  
235 Queen Street, 6th Floor  
Ottawa, Ontario K1A 0H5

by email to [ic.spectrumauctions-encheresduspectre.ic@canada.ca](mailto:ic.spectrumauctions-encheresduspectre.ic@canada.ca)

Re: Canada Gazette, Notice No. SLPB-004-18, June 2018: Consultation on Revisions to the 3500 MHz Band to Accommodate Flexible Use and Preliminary Consultation on Changes to the 3800 MHz Band

Dear Recipient,

### **Introduction**

Enbridge is a global energy infrastructure leader that operates gas pipeline and processing facilities in British Columbia and Alberta (Westcoast Energy Inc). The safe, effective and efficient operation of our pipeline facilities in northern BC relies on radio communications, including the use of spectrum in the 3500 MHz band under a subordinate license from ABC Communications.

Beginning in 2005, significant investments were made to upgrade existing radio communications and to extend communications into new areas. These investments included WiMAX systems in the 3500 MHz band for last mile from remote pipeline facilities to the transport microwave network. We have a symbiotic relationship with ABC Communications as they focus on providing internet service in the communities whereas our needs are outside of the communities. This is a very effective and efficient use of spectrum in ABC's license areas. Enbridge, ABC and our customers, have a vested interest in the outcome of this consultation and therefore wish to avoid disruption and unnecessary costs.

We are deeply concerned about the proposed reduction in spectrum holdings of existing licensees in the 3500 MHz band. Our understanding and position is summarized below.

### **Understanding**

We agree with paragraph 5: Spectrum is a critical resource for wireless carriers and wish to add that spectrum is also a critical resource for critical infrastructure operations.

We agree with paragraph 6: 5G has the potential to transform services across all sectors of the economy. We note that fixed wireless access is emerging as an early use case for 5G with high band spectrum advocated for urban service and low/mid band spectrum for rural.

We agree with paragraph 7: Spectrum releases should align with the international market developments. We note that the emergence of private LTE, including in the 3500 MHz band, is a long awaited development with significant benefits for many industry verticals. We see this trend carrying through to 5G.

We agree with paragraph 8: Large parts of Canada are sparsely settled and have smaller community sizes. We appreciate and support the effort and policies of the Department to promote reliable and affordable access in rural areas. We see multiple use cases as an effective contribution to this policy.

## Specific Comments

*Re Q5 – ISED is seeking comments on the expected impacts of the following options with regards to the continuation of existing services, competition in the Canadian marketplace and availability of new 5G services for Canadians.*

Existing rural service providers who are making use of their licensed spectrum should not have their spectrum reduced. This will cause service degradation and economic harm to rural communities. This is not seen as fair treatment for service providers that have made significant investments in the 3500 MHz band to serve rural areas. Therefore Option 1 (paragraph 46) cannot be supported. We support Option 2 (paragraph 48), which fully maintains the spectrum holdings of small rural service providers. In fact, we urge the Department to make more spectrum available for rural network operators providing fixed wireless services in rural communities. Allowing large mobile network operators to hold and under utilize large blocks of strategic spectrum in rural areas should be resisted.

*Re Q6 – ISED is seeking comments on alternative options for licensees to return spectrum to the Department to make available for a future licensing process. Respondents are asked to provide a rationale for any alternative proposals, including how they would meet ISED's policy objectives as stated in section 3.*

We see spectrum sharing where incumbent users have assured access as a potential means to improve spectrum utilization while preserving fairness. For example, using terminology from the Citizens Band Radio Service (CBRS) in the US with 3 tiers of access: where there is no incumbent usage, non incumbent users may obtain access with a Priority Access License (PAL) and General Authorized Access (GAA) would be available for all other users. This supports the policy goal of spectrum utilization and should facilitate innovation and economic benefits through harmonization with the US market. Although not without complexity, this type of spectrum sharing may be destined to more wide-spread adoption.

We appreciate the opportunity to contribute to this important consultation.

Sincerely,

D Kilindris

**Dino Kilindris**  
**IT Infrastructure Specialist**  
Technology and Information Services

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**ENBRIDGE**  
| OFF: 778-370-1359 |  
| CELL: 604-868-4592 |  
[enbridge.com](http://enbridge.com)  
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