



October 2, 2017

Senior Director  
Spectrum Licensing and Policy Branch – ISED  
235 Queen Street (6<sup>th</sup> Floor East Tower)  
Ottawa, ON K1A OH5

Dear Senior Director:

**Re: Canadian Gazette, Part I, August 2017, Consultation on a Technical, Policy and Licensing Framework for Spectrum in the 600 MHz Bands, SLPB-005-17**

Corridor Communications Inc. (CCI) appreciates the opportunity to submit comments regarding ISED's Consultation on a Technical, Policy and Licensing Framework for Spectrum in the 600 MHz Band.

Please see the attached views of CCI regarding the above title consultation.

Sincerely,

**Corridor Communications Inc.**  
Adam Lamont, CPA, CGA  
CEO/CFO

CORRIDOR COMMUNICATIONS INC. COMMENTS

INNOVATION, SCIENCE, AND ECONOMIC DEVELOPMENT CANADA  
CONSULTATION ON A TECHNICAL, POLICY AND LICENSING  
FRAMEWORK FOR SPECTRUM IN THE 600 MHz BAND CANADA  
GAZETTE, PART I, AUGUST 2017 (SLPB-005-17)



OCTOBER 2, 2017

Corridor Communications Inc., operating as CCI Wireless (“CCI”), appreciates the opportunity to provide comments on the issues raised under SLPB-005-17 – Consultation on a Technical, Policy, and Licensing Framework Spectrum Licences in the 600 MHz Band (“the Consultation”).

Under the Consultation, Innovation, Science and Economic Development Canada (“ISED”) seeks comments on its proposed terms and conditions, and auction framework, for licensing available spectrum in the above noted band.

CCI is currently the second largest wireless internet service provider (WISP) in Canada and is operated out of the organization’s head office in Calgary, Alberta. The business supports the universal service objective and believes the key component to meeting that objective is access to licensed spectrum in rural and remote regions of Canada and government policies that facilitate the efficient and expedited deployment of infrastructure in those regions.

CCI’s submission will seek to provide ISED with our perspective on how the residual auction process can facilitate greater broadband access to a larger percentage of the rural and remote populations of Canada.

CCI has responded below to the Commission’s sixteen questions on its proposed framework for the spectrum licences available under this Consultation.

**Q1A—ISED is seeking comments on its proposal to implement a set-aside as a pro-competitive measure in the auction process for the 600 MHz band.**

CCI believes that implementing a set aside as a pro-competitive measure in the auction process for the 600 MHz spectrum is necessary to facilitating competitive service offerings for Canadians. In addition, due to the propagation characteristics of this spectrum, the set-aside will aide in achieving the universal service objective in rural and remote areas of Canada.

**Q1B—ISED is seeking comments on its proposal to set aside 30 MHz of spectrum in the 600 MHz band for eligible entities and to have open bidding (no pro-competitive measures) on the remaining 40 MHz in the band.**

CCI supports ISED’s proposal to set aside 30 MHz of spectrum in the 600 MHz band for eligible entities and to have open bidding on the remaining 40 MHz. The proposal will facilitate significant aggregate auction proceeds for ISED while supporting greater competition in the market.

**Q1C—ISED is seeking comments on its proposal to limit the eligibility criteria to bid on set-aside spectrum to those registered with the CRTC as facilities-based-providers, that are not national incumbent service providers, and that are actively providing commercial telecommunication services to the general public in the licence area of interest, effective as of the date of application to participate in the 600 MHz auction.**

CCI agrees with ISED that limiting the eligibility criteria to bid on set-aside spectrum to those registered with the CRTC as facilities-based-providers, that are not national incumbent service providers, and that are actively providing telecommunication services to the general

public in the license area of interest, is imperative to maintaining competitive marketplace dynamics for Canadian consumers.

However, CCI does not agree with the proposed definition of a “national incumbent service provider” as described in SLPB-005-17 as “companies with 10% or more of the national wireless subscriber market share”. CCI believes that definition unjustly discriminates against the “big three” incumbent service providers, given there are additional telecommunications entities that are of similar size, and means, but are eligible to bid on the set-aside spectrum because they lack the necessary share of the wireless subscriber market to be considered a “national incumbent service provider”.

According to the Communications Monitoring Report 2016: Telecommunications sector overview, 97.3% of telecommunications revenue in 2015 were generated by companies that do greater than \$100 million in sales. During the same period, 93% of telecommunications revenues in Canada were generated by 10 organizations. The report appears to indicate that Canada’s telecommunications industry is currently dominated by a limited number of similar-sized organizations with access to extensive resources to compete against one another.

Favoring some of these large organizations over others will only affect the competitive dynamics within that group, not the aggregate Canadian market, as it will not facilitate new entrants to that “exclusive club”.

CCI proposes that ISED consider factors that are outlined in section 4 of the Framework for Spectrum Auctions in Canada (FSAC) and define “national incumbent service provider” as “companies with national telecommunications revenues of greater than \$100 million”.

Under FSAC, Principle 1 indicates that Industry Canada may decide that an entity that currently provides telecommunications services should be restricted from holding certain licences if: the entity possesses market power in the supply of one or more telecommunications services in a region covered by the license to be auctioned, a new entrant is likely to use the license to provide services in competition with the entity’s existing services, and the anti-competitive effects of the entity acquiring a license are not outweighed by the potential economies of scope arising from the integration of the spectrum in question into the entity’s existing network.

Principle 2 specifies that when multiple licenses for the use of spectrum in a given geographical area are auctioned, and when these can be used to provide closely substituted service, aggregation limits may be required on the amount of spectrum that any single bidder is allowed to acquire so as to ensure competitive markets. Spectrum aggregation limits may be imposed when a bidder that acquires an amount of spectrum beyond a certain level would not face effective competition from providers of closely substituted services, and the anti-competitive effects arising from the acquisition of an amount of spectrum beyond a certain level by a single bidder would not be offset by lower prices or higher valued services resulting from a single entity holding this amount of spectrum.

Revising the definition of “national incumbent service provider” would satisfy Principle 1 of FSAC as those entities with greater than \$100 million in revenue possess market power in relation to providing one or more telecommunications services in a region covered by the

license to be auctioned, will experience competition from the new entrant that will purchase the set aside spectrum, and will not realize potential economies of scope due to the integration of the set aside spectrum into their existing network.

The new description would also satisfy Principle 2 of FSAC as allowing entities with greater than \$100 million in revenue to bid on the set aside spectrum would insulate them from effective competition from providers of closely substitutable services and would not result in lower prices or higher valued services for Canadians.

It is important to remember that even with a new definition of a “national incumbent service provider” those organizations that have revenues in excess of \$100 million will still be able to bid against one another for the non-set-aside spectrum for use in the delivery of their existing services.

In 2016, Canada’s GDP was proximately \$1.53 trillion USD. According to a report by the International Telecommunications Union titled Impact of Broadband on the Economy (April 2012), the average impact of broadband on GDP growth in medium penetration countries (including Canada) is 0.014%. For high penetration countries, the average effect is 0.023%. While allowing those entities that generate greater than \$100 million in sales to bid on the set aside auction will undoubtedly generate higher auction proceeds, the transition from a medium penetration country to a high penetration country will generate approximately \$138 million in additional GDP per year (based on 2016 figures). By making large, established telecommunications companies ineligible to bid on set aside spectrum, ISED will be facilitating a more diverse group of spectrum holders that will drive increased broadband penetration across Canada.

**Q1D—ISED is seeking comments on its proposal to limit the transferability of the set-aside spectrum for the first five years of the licence term.**

CCI believes the transferability of any set aside spectrum should not be allowed prior to the expiry of the licence term. Allowing the license to be transferred prior to the expiry of the license term encourages the practice of purchasing spectrum for reselling at a later date, versus using it to provide service, hampering ISED’s goal of improving broadband connectivity in Canada.

**Q1E—ISED is seeking comments on its proposal to auction the set-aside spectrum as three separate paired blocks of 5+5 MHz.**

CCI disagrees with ISED’s proposal to auction the set-aside spectrum as three separate paired blocks of 5+5 MHz. The suggested channel size is too small to use to provide meaningful throughput for subscribers.

While CCI believes that, for the set aside spectrum, a paired block of 10+10 MHz would provide sufficient channel size to facilitate meaningful throughput for consumers, given the amount of set-aside spectrum that is being contemplated, a paired block of 15+15 MHz would be the most appropriate approach.

**Q2—ISED is seeking comments on its proposal to use Tier 2 service areas across the country, except in the three Territories (Yukon, Northwest Territories and Nunavut) where Tier 4 service areas would apply.**

CCI agrees with ISED's proposal to use Tier 2 service areas across the country, except in the three Territories, as trying to use smaller service areas (either Tier 3 or Tier 4) would likely cause coordination issues.

**Q3—ISED is seeking comments on:**

- a) the proposal to use generic licences; and**

CCI agrees with ISED's proposal to use generic licences.

- b) the proposal to categorize all blocks won by set-aside-eligible bidders as set-aside blocks.**

CCI also supports ISED's proposal to categorize all the blocks won by set aside eligible bidders as set aside blocks.

The restrictions ISED is putting on the set aside spectrum to encourage timely deployment to utilize that resource is an important condition. Those that are participating in the auction of the set aside spectrum should be subject to more restrictive terms as they were able to make their purchases with the assistance of the pro-competitive measures put in place by ISED.

**Q4—ISED is seeking comments on:**

- a) the use anonymous bidding during the auction; and**

CCI agrees with the use of anonymous bidding during the auction as it believes transparent bidder identification will encourage targeted anti-competitive bidding practices.

- b) the information that will be disclosed to bidders during the clock rounds, as described in annex A (which would also apply to the CCA with a modified activity rule set out in annex B) and annex C.**

CCI is comfortable with the information that will be disclosed to bidders during the clock rounds, as described in annex A. The material available will be sufficient to make informed decisions within the auction process.

**Q5—ISED is seeking comments on:**

- a) The advantages and disadvantages of the three auction formats being considered for the 600 MHz auction:**
- i. Combinatorial clock auction, using the WARP-based activity rule (annex A);**
  - ii. Combinatorial clock auction, using the GARP-based activity rule (annex B);**
  - iii. Enhanced combinatorial clock auction (annex C).**
- b) Where there is a preference for one of the options, respondents are asked to provide a rationale and explanation.**

CCI has no comments in response to Q5.

**Q6—ISED is seeking comments on:**

- a) **The proposal that winners of more than one block in a single service area be assigned contiguous blocks; and**

CCI agrees with ISED's proposal that the winners of more than one block in a single service area be assigned contiguous blocks. The proposal will facilitate greater throughput delivery from the auctioned spectrum as it is considerably more efficient to broadcast in adjoined spectrum blocks.

- b) **The proposed structure of the assignment stage, including the order of the assignment rounds and the combination of service areas into a single assignment round.**

CCI disagrees with the proposed structure of the order of the assignment rounds. The concern lies in the potential for gamesmanship that may arise from a bidder knowing whether they were assigned spectrum in the most populous service areas and how that may guide their actions in the assignment rounds of the less populous service areas. The gamesmanship and altered actions have the potential to distort the true value of the spectrum being auctioned.

However, CCI does agree with the proposed combination of service areas into a single assignment round when the service areas are contiguous and the number of licenses and the winners are the same in both service areas.

**Q7—ISED is seeking comments on the proposed methodology for incrementing prices during the clock rounds, as described in annex A.**

CCI agrees with ISED's proposed methodology for the incrementing prices during the clock rounds, as described in annex A.

**Q8—ISED is seeking comments on the proposed Affiliated and Associated Entities rules that would apply to bidders in the 600 MHz auction.**

CCI supports ISED's proposed Affiliated and Associated Entities rules for bidders in the 600 MHz auction. The rules are necessary to ensure a transparent auction process that respects the guidelines ISED has put in place to protect competition in the telecommunications industry.

**Q9—ISED is seeking comments on the proposed rules prohibiting collusion and other communication rules, which would apply to bidders in the upcoming 600 MHz auction.**

CCI believes that the proposed rules prohibiting collusion and other communications rules are appropriate and necessary for a fair and transparent auction process.

However, as a point of clarity, it would be helpful if ISED indicated the specific periods in which communication is prohibited (or deemed to be collusion). There is reference to the “auction process” but the window in which the “auction process” occurs is not defined.

As is customary in most industries, there are constant conversations between market participants regarding various initiatives that aim to attain mutually beneficial outcomes. Clearly defining the period in which communication is prohibited would allow bidders to conduct their operations (generally), and those conversations (specifically), with a greater degree of certainty.

**Q10—ISED is seeking comments on its proposal to issue spectrum licences in the 600 MHz band with a 20-year licence term and the proposed wording of the condition of licence above.**

CCI believes that licensing terms of 5 years would facilitate expedited deployment of telecommunications infrastructure and encourage organizations to only bid on those licenses they intend to use in the immediate future. It would also prevent the “hoarding” of licensed spectrum by those with greater access to capital.

In Alberta, mineral rights leases are issued for 5 year terms, with automatic renewals with proof of production. Given the capital-intensive nature of both the petroleum and the telecommunications industries, CCI feels the use of a 5 year license term is appropriate.

The concern regarding a lack of financial incentive to invest in telecommunications infrastructure when licensing terms are short is addressed through the license renewal process. As discussed in this consultation paper, spectrum licenses that are being utilized have a high likelihood of renewal. If licensing terms are reduced to 5 years, those that have deployed capital to use the spectrum during that period should find themselves able to protect that investment through a high likelihood of renewal, creating the financial incentive.

**Q11—ISED is seeking comments on the proposals on the condition of licence related to transferability and divisibility, and the proposed wording above.**

CCI disagrees with ISED’s proposal for the transferability and divisibility of the set aside spectrum from a set aside eligible entity to a set aside ineligible entity.

CCI believes that since ISED is setting aside spectrum in the 600 MHz auction to facilitate increased competition in the wireless market by supporting the purchase of that spectrum by smaller carriers, at potentially reduced prices, the value of the set aside spectrum should only be derived from using it for a network deployment.

If ISED allows set aside spectrum to be transferred, in whole or in part, before the expiry of the license, it is encouraging bidders to acquire the spectrum for resale. Hoarding spectrum for resale does nothing to improve broadband connectivity for Canadians.

CCI recommends that ISED prohibits the transfer of set aside spectrum, in whole or in part, within the initial term of the license, whatever ISED determines the term to be. If the owner of set aside spectrum executes a network deployment within the license term and is granted a renewal, they should then be free to transfer that spectrum during the renewal period, subject to ISED’s approval.



**Q12—ISED is seeking comments on the proposed deployment condition of licence as stated above.**

CCI finds the proposed conditions of deployment inadequate and misguided given the propagation characteristics for the 600 MHz frequency.

Take the Alberta service area (2-012). The 5 year deployment requirement is 25% of the service area's population of 4,070,844, for a minimum population coverage of 1,017,711.

According to the 2011 census, the population of the City of Calgary was 1,096,833. Due to the propagation characteristics of the 600 MHz frequency, the entire City of Calgary could be covered, meeting the 5 year deployment requirement, with a single site containing three 45 degree antennas.

CCI believes the proposed deployment condition of license should be based on a percentage of square kilometers of each service area because using a percentage of the population of a service area encourages priority deployments in urban areas with no incentive to facilitate coverage for rural Canadians.

CCI believes the 5 year deployment requirement should be a percentage of square kilometers of each Tier 3 area within a Tier 2 service area and the 10 year deployment requirement should be a percentage of square kilometers of each Tier 4 area within a Tier 2 service area.

The methodology proposed by CCI will encourage expeditious access to wireless broadband across both rural and urban areas of Canada and will facilitate sublicensing agreements with those entities focused on serving rural Canadians.

**Q13—ISED is seeking comments on proposed conditions of licence outlined in annex G that would apply to licences issued through the proposed auction process for spectrum in the 600 MHz band.**

CCI agrees with the proposed conditions of licence outlined in annex G of SLPB-005-17 that would apply to licences issued through the proposed auction process for spectrum in the 600 MHz band.

**Q14—ISED is seeking comments on the proposed opening bids as presented in table 1.**

CCI believes that, should ISED revise the definition of a “national incumbent service provider” (as per CCI's response to Q1C), the opening bid for set aside eligible spectrum across all Tier 2 service areas should be in line with the Tier 4 service areas of Northwest Territories, Nunavut and Yukon (\$0.133 MHz/pop).

As previously discussed, by facilitating the ability of smaller telecommunications companies to bid on set aside spectrum, ISED will be enabling a more diverse group of spectrum holders that will drive increased broadband penetration across Canada, producing lasting economic benefits for the country.

**Q15—ISED is seeking comments on the proposed eligibility points for spectrum licences in the 600 MHz as outlined in table 2, and pre-auction deposits as outlined above.**

CCI believes the proposed eligibility points for set aside spectrum licenses in the 600 MHz band should be revised to reflect the revised opening bids suggested in its response to Q14.

**Q16—ISED is seeking comments on the proposed renewal process for spectrum licences in the 600 MHz band.**

CCI supports the proposed renewal process for spectrum licenses in the 600 MHz band.

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