



September 29, 2017

Senior Director, Spectrum Licensing and Auction Operations

Innovation, Science and Economic Development Canada
ic.spectrumauctions-encheresduspectre.ic@canada.ca

Re: **Gazette Notice SLPB-005-17** — Consultation on a Technical, Policy and Licensing Framework for spectrum in the 600 MHz Band

Dear Sir/Madam,

About the British Columbia Broadband Association

- 1 The BC Broadband Association (“BCBA”) is a group of telecommunications service providers, equipment suppliers and infrastructure constructors in Western Canada. We represent small internet service providers who operate in remote and rural parts of British Columbia and Alberta.
- 2 Smaller locally and regionally based service providers have been building broadband networks in rural and remote communities for over 20 years, and provide high-speed connectivity to many households not served by national wireline or wireless carriers. Enabling these providers to access more spectrums will bring dramatic enhancements to service levels in rural communities.
- 3 These service providers have built sustainable business models in many of these communities, contributing to economic development and rural Canada and offering consumers competitive choices.

Limited Opportunities for Rural Communities

- 4 While the measures adopted by ISED in the 2008 spectrum auction have brought new competition to the Canadian mobile market, these new competitors have undertaken minimal deployments outside of urban areas. Most of the spectrum held by these companies is unused in rural communities.
- 5 In response to enhanced competition, incumbent mobile carriers have improved their service offerings in these same urban markets. While these carriers offer some mobile services in rural communities, these services do not match the speed and capacity available in urban areas. Incumbent carriers are not faced with spectrum scarcity in rural communities.
- 6 Under the proposed licensing framework, using Tier 2 service areas, the 600 MHz spectrum will be deployed in urban areas, and sit idle in rural communities.



- 7 The proposed use of Tier-2 service areas does a disservice to rural Canadians who do not have access to 50 Mbps services or mobile services.
- 8 By enabling small regional carriers to access this spectrum, ISED will see full deployment of this spectrum into both rural and urban markets. The spectrum will bring enhanced service levels and consumer choice to all Canadians.
- 9 The Canadian government is investing \$500 million to bridge the digital divide over the next 5 years through the Connect to Innovate program. By structuring spectrum auctions to enable the participation of smaller companies, the Canadian government will make tremendous strides towards achieving that goal in the immediate future.

BCBA's Proposed Licensing Framework

- 10 The BCBA supports ISED's proposed use of set-asides for non-national non-incumbent carriers who currently offer services in the licence areas. The BCBA agrees that such a set-aside is more likely to result in the provision of robust advanced wireless services, allowing for more effective and sustained competition in the post-auction marketplace.
- 11 The BCBA believes that spectrum aggregation limits should complement the spectrum cap in order to ensure competition from smaller, newer competitors.
- 12 The use of Tier-2 service areas precludes the participation of companies focused on providing service to areas outside of the largest cities in each province.
- 13 The BCBA proposes that ISED segment two of the seven blocks into Tier-4 service areas, and set aside those licences for smaller regional providers with annual revenues under \$50 million.
- 14 These blocks should be auctioned using a simplified auction format that would permit smaller companies to participate. The BCBA suggests that the SMRA auction format would be appropriate for these blocks.
- 15 The proposed 20-year licence term further discourages the participation of smaller regional providers by substantially increasing the cost of obtaining spectrum. ISED should not use licence terms longer than 10 years; the BCBA believes that 5-year terms would encourage more competitors to participate in the auction.
- 16 Participating in complex auction proceedings is a challenge for small businesses. The proposed CCA auction format discourages the participation of small competitors, and the use of package bidding puts small regional carriers, who are only interested in a few licences, at a disadvantage.
- 17 The BCBA is pleased to respond to ISED's specific questions below.



Pro-Competitive Measures

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.

- 18 The BCBA agrees that set-asides are important to ensuring competition in the telecommunications market.
- 19 The BCBA believes that spectrum aggregation limits should complement the spectrum cap in order to ensure competition from smaller, newer competitors. A spectrum aggregation limit of 20 MHz (two blocks) would be appropriate for this auction.

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.

- 20 In order to support competition, ISED should set aside 40 MHz of spectrum, and have open bidding on the remaining 30 MHz.
- 21 Two of these set-aside blocks should be auctioned as Tier 4 service areas in order to encourage deployment outside of major urban areas.
- 22 Spectrum outside of major cities should be entirely set aside for non-incumbent carriers. Incumbent carriers do not face spectrum scarcity in rural areas.

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.

- 23 The BCBA supports ISED's proposed eligibility criteria for bidding on set-aside spectrum.
- 24 The BCBA strongly supports the proposed criteria that set-aside-eligible bidders be actively serving the licence area. This will encourage the timely deployment of spectrum in each licence.
- 25 The BCBA notes that many small wireless internet service providers may wish to participate in the auction if their participation is enabled by changing the auction framework. These companies may not currently be registered with the CRTC as facilities-based providers. In our experience, the process of registration as a facilities-based provider with the CRTC can take well over one year. ISED should extend eligibility to those with pending applications for registration as facilities-based providers.

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.

- 26 In order to limit the speculative purchase of spectrum, ISED should prohibit the transfer of set-aside spectrum to set-aside-ineligible entities for the entire duration of the licence term. This measure will discourage the speculative purchase of spectrum.



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

- 27 The use of paired 5+5 blocks for the set-aside and the non-set-aside blocks is appropriate.
- 28 ISED should set aside four separate paired 5+5 MHz blocks, rather than three. This will encourage more competitors to participate in the auction.

Licence Areas

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.

- 29 The BCBA strongly objects to ISED's proposal to use Tier 2 service areas for this spectrum.
- 30 While the 600 MHz band does indeed present a potential for interference over long distances, the use of Tier 2 service areas is not justified by this concern. The FCC auctioned this spectrum using Partial Economic Areas, which are broadly smaller than Tier 4 service areas.
- 31 The use of Tier 2 service areas encourages auction winners to deploy spectrum in the most populous urban areas, at the expense of deployment in rural areas.
- 32 Large service providers who purchase Tier 2 spectrum licences invest in urban deployments in order to achieve an adequate return on their spectrum investment. These providers do not have a strong incentive to invest into rural deployments.
- 33 Rural and regional service providers are unable to purchase spectrum licences that include large cities, and so these carriers are unable to leverage this spectrum in rural areas.
- 34 In order to fully leverage the spectrum in rural and urban areas alike, ISED should auction at least two blocks using Tier 4 service areas.
- 35 These Tier 4 licences should be set aside for smaller regional providers with annual revenues under \$50 million.

Auction Format and Rules

Q3—ISED is seeking comments on:

- a. the proposal to use generic licences and;
- b. the proposal to categorize all blocks won by set-aside-eligible bidders as set-aside blocks.

- 36 The BCBA agrees with ISED that the 600 MHz licences are fungible and can be treated as generic.

- 37 Small companies are at a disadvantage to large companies in an auction in a package-bid auction. It is inappropriate to use a package-bid format in an auction that includes bidders of widely varying sizes. Any auction using the package-bid format should not be set up so that small companies are bidding in the same auction as large companies.
- 38 In general, small companies will be bidding on fewer licence blocks, and the auction format need not be complicated in order to serve these bidders.
- 39 The BCBA agrees with the proposal to categorize all blocks won by set-aside-eligible bidders as set-aside blocks.

Q4—ISED is seeking comments on:

- a. the use anonymous bidding during the auction; and
- 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.

- 40 No comment.

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.

- 41 Participating in auction proceedings is a challenge for smaller companies. In order to encourage investment and competition in Canada's rural areas, ISED should implement the simplest bidding process possible for set-aside spectrum.
- 42 The BCBA proposes that Tier-4 set-aside blocks be auctioned using the SMRA format, rather than the CCA auction format.

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
- 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.

- 43 The BCBA supports the proposal to award contiguous blocks for winners of more than one block.



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

44 No Comment.

Bidder participation—Affiliated and associated entities

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

45 The BCBA supports ISED’s proposed rules regarding affiliated and associated entities.

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.

46 The BCBA supports ISED’s proposed rules regarding communication and prohibiting collusion.

Conditions of licence for spectrum in the 600 MHz band

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.

47 The BCBA opposes the proposal to issue spectrum licences with a 20-year term.

48 The BCBA notes that, in practice, mobile spectrum licences are typically not revoked at the expiration of the licence term.

49 Nonetheless, the BCBA believes that moving from 10-year to 20-year licence terms will not result in increased investment.

50 Indeed, the BCBA believes that the use of shorter licence terms, such as 5 years, would result in more investment, as the initial licence would cost less, and many more entities would be in a position to win licences and deploy new systems.

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

51 The BCBA supports the proposed wording, with the exception of the second paragraph.

52 ISED should prohibit the transfer of set-aside spectrum to set-aside-ineligible entities for the entire duration of the licence term. This would discourage speculative bidding, and result in more competition in Canada.

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

53 The proposed deployment requirements do not address Canada’s rural population.

- 54 If two blocks are set aside for rural regional carriers using Tier 4 service areas, then the proposed deployment requirements would promote investment into rural infrastructure. These licence holders would be subject to the same deployment requirements as the holders of Tier 2 licence areas, requiring Tier 4 licence holders to deploy in rural communities in order to satisfy the licence conditions.

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.

- 55 The BCBA agrees with the proposed conditions of licence.
- 56 The BCBA takes this opportunity to note that the burden of reporting imposed by ISED and the CRTC has increased markedly over the past decade. The BCBA encourages ISED to introduce reduced reporting requirements for companies with less than \$10 million in annual revenue.
- 57 The licences should include a requirement for spectrum-holders to respond to requests for spectrum sub-licensing by other providers in a timely manner, and document these requests. This requirement could be structured in a way that is similar to the existing mandatory tower sharing requirement. Licence-holders receiving such a request should provide reasonable justification for a refusal to sub-licence spectrum that is un-used.

Auction Process

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

- 58 The BCBA re-iterates our position that Tier 2 licence areas will result in a further widening of the digital divide, as smaller regional providers will be unable to bid for licences that include major urban centres. Rural Canadians will not see any benefit from this spectrum unless smaller rural service areas are used.

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.

- 59 The BCBA suggests that the requirement for pre-auction deposits be reduced by 50% for entities with less than \$10 million in annual revenues. These pre-auction deposits impose significant financing requirements on small companies, discouraging the participation of small companies in the auction process. This is a barrier to serving rural and regional markets.



Licence Renewal Process

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

- 60 The BCBA supports ISED's proposed renewal process.
- 61 All spectrum licences won at auction should be associated with a high expectation of renewal at rates that reflect the economic value of the spectrum. This is crucial to supporting infrastructure investment in Canada.
- 62 ISED should only consider a fundamental reallocation of spectrum licences won at auction if there is overwhelming evidence that Canadians will benefit from this reallocation. The impact of reallocation on existing licence-holders, and on the customers served by those licence-holders, should be an important factor in the decision to reallocate spectrum.

The BCBA thanks ISED for the opportunity to comment on this consultation.

Kind regards,

A handwritten signature in blue ink, appearing to read 'Rey Sonico', with a stylized flourish at the end.

Rey Sonico

Secretary - BC Broadband Association