



16 February 2018

**By Electronic Mail**

Director, Spectrum Regulatory Best Practices  
Innovation, Science and  
Economic Development Canada  
235 Queen Street  
Ottawa, Ontario  
K1A 0H5

Email: [ic.spectrumauctions-encheresdusprecture.ic@canada.ca](mailto:ic.spectrumauctions-encheresdusprecture.ic@canada.ca)

To whom it may concern:

Subject: *Canada Gazette* Notice No. SLPB-006-17 - *Consultation on the  
Spectrum Outlook 2018-2022*

---

1. Pursuant to the procedures established by Innovation, Science and Economic Development Canada ("ISED") in *Canada Gazette* Notice No. SLPB-006-17 - *Consultation on the Spectrum Outlook 2018-2022*, which was published on 21 October 2017 ("the consultation document"), as modified by *Canada Gazette* Notice SLPB-010-17 – *Extension to the comment period: Consultation on the Spectrum Outlook 2018-2022*, which was published on 30 December 2017, the Canadian Cable Systems Alliance and the Independent Telecommunications Providers Association (collectively "the Associations") hereby submit their comments on the consultation document.

2. Collectively the Associations represent more than 110 small telecommunications and broadcasting service providers from across rural and remote Canada. These service providers offer high quality voice, Internet access and broadcasting services to their customers.

---

## Introduction

*The medium is the message*  
(Marshall McLuhan)

3. The Canadian professor, philosopher and icon Marshall McLuhan is best known for coining the phrase “the medium is the message” in relation to telecommunications, media and how they affect society. The Associations would like to borrow McLuhan’s famous phrase and put a different spin on it for the purpose of these comments – to highlight the plight of small service providers in relation to wireless spectrum in Canada. And so, if “the medium is the message” and the medium is valuable licensed wireless spectrum in Canada, then the message that has been consistently communicated to small service providers since the advent of ISED’s spectrum auction process is:

“You can’t have any.”

4. Whether it be the complicated auction process, the associated Tier system used by ISED, the Federal Government’s drive to raise as much money as possible through the auctions and, finally, the essentially impossible task of prying unused spectrum from the hands of licensees, small service providers are effectively excluded from participating in the wireless market.

5. Some small service providers do have limited licenced spectrum via statutory licences (i.e. 800 MHz) and previous, pre-auction ISED processes. However, the Associations believe that the current predicament where small service providers are excluded is an unintended consequence of the decisions made by ISED and the Federal government with regard to the auction mechanism. This consultation process represents an opportunity for ISED to re-evaluate the current state of access to wireless spectrum for small service providers in light of its stated goals for its use in Canada as identified in the consultation document.

## Background

6. In section 2 of the consultation document titled “Context”, ISED states that:

[It] is focussed on three pillars that matter to Canadian families and businesses:

- Quality: supporting networks to allow for the latest technologies to be deployed
- Coverage: enabling services available to Canadians where they live and work
- Prices: encouraging services that are affordably priced.

7. In section 4 of the consultation document titled “A principled approach to releasing spectrum”, ISED states that it is guided by policy objectives which “[seek] to maximize the economic and social benefits that Canadians derive from the use of the radio frequency spectrum resource”<sup>1</sup>. ISED also states twice that it seeks to maximize the use of the spectrum.<sup>2</sup>

8. ISED’s first question, and the sole focus of the Associations’ comments in this proceeding, asks:

What future changes, if any, should ISED examine with regard to the existing licensing regime to better plan for innovative new technologies and applications and allow for benefits that new technology can offer, such as improved spectrum efficiency?

9. The CRTC’s latest Communications Monitoring Report 2017 demonstrates that wireless subscriber market share is remarkably concentrated across three companies which together control 89% of the market:

- Bell Group – 28%

---

<sup>1</sup> Paragraph 14.

<sup>2</sup> Paragraphs 16 and 20.

- Rogers – 33%
- TELUS – 27%
- Other – 11%<sup>3</sup>

10. The Associations question whether market share statistics such as these result in the best possible outcomes for Canadians with regard to quality, coverage and price.

### **Small Service Providers – Untapped Potential**

11. The members of the Associations are well positioned to assist ISED in the achievement of its goals as set out above. Their corporate offices and networks are located in rural areas and their entry into local wireless markets as carrier service providers would enhance competition with the expected impacts on price and customer service levels to rural Canadians. The members of the Associations could also assist ISED with maximizing the use of scarce wireless spectrum. The three large wireless carriers simply do not prioritize rural areas where population densities are a fraction of what they are in urban settings. However, it is precisely these rural areas that are the main focus of these small service providers. These service providers see the business potential in filling the competitive vacuum left by the largest service providers and would welcome the opportunity to add facilities-based wireless services to their service portfolios.

12. Therefore, in response to the consultation document's first question, the Associations strongly urge ISED to investigate ways in which the licensing regime can be revised to facilitate participation by their over 110 member companies.

13. A consistent roadblock to small service provider participation in wireless auctions since their first use is the system of geographic tiers used by ISED. Even the smallest tier – Tier 4 – area is far too large for a small service provider. This is because most Tier 4 licence areas contain at least one large population centre. The interventions by the Independent Telecommunications Providers Association in the

---

<sup>3</sup> Figure 5.5.5 *TSPs' wireless subscriber market share*. The data reflects 2016.

600 MHz, 3500 MHz and the AWS-3 consultations have consistently raised this roadblock but in the end ISED has failed to take any action to address these concerns, thereby foreclosing on any opportunities for small service providers to participate.

14. The Associations note that ISED has extensive experience and expertise with the hexagonal approach to evaluating broadband coverage in Canada and awarding subsidy dollars to carriers to build-out broadband networks. It is unclear to the Associations as to why the hexagonal approach could not also be used to establish smaller license areas that meet the needs of small carriers. The Associations are well aware that coordination issues arise and not suggesting that spectrum be awarded/granted on a hexagon-by-hexagon basis but, simply, that hexagons could serve as the base unit and grouped together to create smaller licence areas than the smallest Tier size currently used by ISED.

15. In addition to revising its approach to Tier sizes, ISED should consider the following mechanisms that would to some extent facilitate the participation of small service providers in wireless market.

#### “Use it or lose it” Condition of Licence

16. In order to achieve ISED’s stated goal of maximizing the use of wireless spectrum in Canada, the Associations believe that ISED should implement a stricter “Use it or lose it” enforcement mechanism for all spectrum. Spectrum hoarding is a problem in Canada that is generated by the current licence conditions that stipulate that only a certain percentage of the population in a given area must be served to satisfy the licence condition (e.g. 50% of the population).

17. A useful analogy that demonstrates the issues with the current licenced areas coverage conditions is that of buying a vehicle for spare parts or specific parts. For example, if someone owns a vehicle that requires a new engine, one possible solution is to purchase another vehicle for the express purpose of removing the engine and installing it in the owner’s current vehicle. In this example, the

remainder of the vehicle that was purchased for its engine, even though it may be in perfect working order, would go unused and be wasted.

18. This is exactly what occurs today in licensed areas. The Associations believe that the large wireless carriers acquire licensed areas for “the engine” of a particular area – the densely populated, low cost urban areas - and have no intention of using the bumpers or fenders – the remainder of the licensed areas - so that these areas lie largely unused and the spectrum associated with those areas is wasted.

19. ISED should implement a condition of licence, for new and renewing licences, that spectrum that is unused for a given time goes back to government as public property for re-disposition. Such a rule should encourage proactive sub-licensing/subordination to smaller players service providers as a way of retaining unused spectrum by the licensee. Conversely, ISED should reclaim the spectrum that is unused by licensees and make it available to other, most likely smaller carriers, in the outlying areas on a rental basis as proposed later in these comments.

#### International Coordination

20. ISED should strive to ensure that its plans to release spectrum occur in parallel with the plans of Canada’s major trading partners, most notably the U.S. The motivation behind the Associations’ position on this issue relates to handset availability for small service providers. These service providers have very little if any leverage with the manufactures of the most popular smart phones (i.e. Apple and Samsung).

21. If Canadian spectrum releases do not coincide with the releases of our major trading partners, Canadian service providers may be put in the position of requesting handsets that are not on the priority list of these manufacturers, with the result that there is little or no interest on the part of the manufacturers. If spectrum releases are co-ordinated and manufacturers are ramping up global production in response, it is

far easier to incorporate a Canadian variant into such a large manufacturing run than produce a smaller Canada specific handset.

### Spectrum Rental Model

22. As noted above, the Associations recommend that ISED investigate a Spectrum Rental regime whereby unused spectrum, whether reclaimed by ISED from the larger carriers or set-aside in the auction process be made available to interested service providers on a set fee per month per subscriber model – a “pay as you grow model”. The license areas in this model would be proposed by the applicant (i.e. based on a business model that makes sense to the service provider) and be subject to reasonable geographic minimums to ensure the efficient operation of the spectrum. There are several potential benefits to the government of this kind of model.

23. First, it would result in a continuous and potentially growing revenue stream for the government as service providers grow their customer bases. Second, it would enable ISED to truly fulfill its goal of maximizing the use of spectrum, especially in rural areas where this is currently not the case. There is pent-up demand on the part of small service providers to add wireless services to their service portfolios and to start benefitting from that source of revenue. Third, it would allow small service providers to enter the market by providing a financially manageable on-ramp into the wireless market.

### **Conclusion**

24. Without significant future changes to the existing wireless spectrum licensing regime small service providers will continue to be excluded from participating in this market, to the detriment of their customers and the Canadian economy. The Associations believe that “competition” between the entrenched oligopoly of Bell, Rogers and TELUS, including their flanker brands, will not drive innovation and

new applications to the same extent as a market that is truly open to small service providers and the innovations that they can bring to the market. Without signals from ISED that needed changes to the regime will be put in place, small service providers will continue to only watch from the side lines, knowing that their economic potential cannot be fully realized.

Yours truly,

A handwritten signature in dark ink that reads "Jonathan Holmes". The signature is written in a cursive style, with the first name and last name clearly legible.

Jonathan L. Holmes  
Executive Director  
ITPA

A handwritten signature in dark ink that reads "C.J. Edwards". The signature is written in a cursive style, with the first name and last name clearly legible.

Christopher J. Edwards  
VP Corporate & Regulatory Affairs  
CCSA

\*\*\* End of Document \*\*\*