

July 25, 2017

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

Dear Sir/Madam,

**Re: Canada Gazette, Part 1, June 24 2017, Consultation on a License Renewal Process for Advanced Wireless Services and other Spectrum, SLPB-002-17**

1. The Canadian Wireless Telecommunications Association (CWTA) is the recognized authority on wireless issues, developments and trends in Canada. It represents wireless service providers as well as companies that develop and produce products and services for the industry, including handset and equipment manufacturers, content and application creators and business-to-business service providers. The CWTA is filing these comments on behalf of its members.
2. CWTA Members have developed a world class wireless infrastructure to serve Canadians across the second largest landmass in the world. These mobile wireless networks, developed by both national carriers and regional service providers, are providing the most advanced wireless services, enabling Canadians to be full participants in the digital economy, to access government services at all levels, and to interact socially with their family and friends. These networks have been built, upgraded and maintained through the investment of capital, entrepreneurial energy and risk by companies in all regions of Canada.
3. Advanced LTE and 4G networks have become a reality since the original auction of AWS-1 spectrum in 2008. The coverage, strength of signal and speed of these networks allow Canadians to enjoy the benefits of the most sophisticated mobile handsets available anywhere in the world. Canada's facilities-based wireless service providers' ongoing network infrastructure investment will also enable the deployment of 5G technology and the Internet of Things economy in the coming years. These investments will help keep Canadians and Canadian businesses in the forefront of global markets and communications. As ISED develops the renewal framework it should keep in mind the amalgam of financial resources, human capital, risk and time that wireless companies devote to developing world class digital services for Canadians.
4. ISED should refer to each CWTA Member's comments for its responses to the Department's specific questions, but we herein address a few areas of consensus.

**C: ISED invites comments on the likely timeframe for availability of equipment capable of providing access to licensed spectrum on an opportunistic basis.**

5. CWTA notes that a change in the established rules regarding the treatment of, and access to, licensed spectrum would necessitate an extensive and thorough consultation with the industry, given the assumptions upon which licensees relied in acquiring such spectrum and building network infrastructure. Between 1987 and 2016, firms in the sector have spent roughly \$58 Billion; \$44.8 Billion in capital expenditures to construct networks and infrastructure to service Canadians, along with a further \$13.8 Billion to acquire spectrum at auction (since 2001)<sup>1</sup>. Moving towards an “opportunistic” model for accessing spectrum would represent a significant change to facilities-based service providers’ business models, investment plans, and network deployments. ISED should hold a comprehensive consultation with specific proposed details before any such change to the licensing framework is considered.

**D: ISED invites comments on the proposal to renew AWS-1 and G Block licences that have complied with their conditions of licence for a new term of 20 years, and I Block licences that have complied with their conditions of licence for a new term of 10 years.**

6. CWTA agrees with the Department’s proposal to extend the terms of the AWS-1 and G Block licenses that have complied with their conditions of license for a new term of 20 years. Since the original AWS-1 auction in 2008, the industry as a whole has spent \$23.1 Billion in developing enhanced wireless networks<sup>2</sup>. The extension of the license terms will provide holders of such licenses greater certainty, predictability and, ultimately, incentive to further invest to the benefit of users and consumers of the services deployed in this band.

**H: ISED invites comments on the proposed conditions of licence for the AWS-1, G Block and I Block licences issued through the renewal process as set out in Annex A.**

**Annex A. 9. Research and Development**

7. CWTA is opposed to the ongoing requirement imposed by the Department that the licensees invest, as a minimum, 2% of adjusted gross revenues resulting from the use of a license, in research and development (R&D) activities related to telecommunications. In 1983, when this condition of license was first established to stimulate R&D in the infant cellular industry, it may have made sense. However, as ISED acknowledged in 2009, the contemporary wireless industry is thriving and is a strong performer in terms of R&D spending, with more than a billion dollars invested since the first licenses were issued. CWTA Members continue to take the need to innovate and provide state-of-the-art service offerings to their customers very seriously. Telecommunications is one of Canada’s most research-intensive industries and companies are constantly looking for ways to differentiate themselves and to provide innovative, reliable network technologies to consumers. Investments to date in 4G LTE networks have resulted in Canadians enjoying an average LTE connection speed that is twice as fast as that of the US (Can: 30.58 Mbps vs US: 14.99 Mbps)<sup>3</sup>. The last five years have seen substantial levels of network investment by Canadian facilities-based carriers (averaging \$2.6 Billion annually), including in advanced technologies such as Voice over LTE and LTE Advanced.
8. The CWTA asserts that the R&D condition is effectively an artifact from a previous era. To CWTA’s knowledge, no other industry in Canada, and no other segment of the telecommunications industry faces a similar obligation. Additionally, CWTA has not been able to find any other jurisdiction internationally that applies a comparable obligation on Wireless Service Providers as a condition of license. CWTA proposes, therefore, that

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<sup>1</sup> Figures compiled from CWTA sources and ISED documents.

<sup>2</sup> Figures compiled from internal CWTA sources

<sup>3</sup> Data provided by *Open Signal [The State of LTE – June 2017]*

the 2% R&D requirement be removed from the conditions of license in order to provide licensees with the needed flexibility to invest as dictated by market conditions and in response to the exponentially increasing demand from consumers for new wireless and digital services.

### **Annex A. 13. Annual Reporting**

9. The Annual Reporting requirement on licensees is onerous and constitutes an administrative burden on wireless companies. Wireless service providers strive to provide the regulator with timely access to documents and reports that are stipulated as conditions of their license. The burden of these reports however has been growing each year as expansion of services continues and as new reporting requirements are imposed on regulatory and engineering personnel via other proceedings. CWTA submits that the administrative burden would be reduced if the reports were required less frequently. We submit this would be reasonable given that the annual R&D spending requirement should be removed, and that deployment requirements are applied over a longer period of time than just one year. There should be no negative impact to ISED and its operations in reducing the frequency of such reporting, and in fact it would reduce the Department's administrative work as well.
10. CWTA submits the Department should consider the following alternative models for reporting requirements:
  - ISED could lengthen the intervals between the provision of certain reports; or
  - Reporting could become an "as-requested" model where companies are obligated to provide only those documents which are specifically requested by ISED each year, i.e., deployment levels are not likely required annually and could be requested only every three years.
11. In both cases, the administrative burden would be lessened while still achieving the objective of accountability by the licensee.
12. Thank you for this opportunity to comment on the License Renewal Process for Advanced Wireless Services and other Spectrum.

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