

January 4, 2019

Director, Spectrum Regulatory Best Practices
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Via Email – ic.spectrumoperations-operationsdsuspectre.ic@canada.ca

Re: Canada Gazette, Part 1, November 15, 2018 – Notice No. DGSO-001-18 - Consultation on License Fees for Fixed Point-to-Point Radio Systems

The Canadian Wireless Telecommunications Association (CWTA) is pleased to respond to the above referenced Notice.

Q1: ISED invites comments on the proposed consumption-based fee model for the radio license fees under consideration.

1. Canada's facilities-based mobile wireless service providers have invested billions of dollars into creating some of the fastest and widest-reaching mobile wireless networks in the world. Yet, given the ever increasing consumer demand for mobile data as highlighted in the Department's consultation document, Canada's wireless service providers will have to continue to invest massive amounts in expanding and upgrading their networks, including wireless backhaul, to meet this demand and offer new and innovative wireless services.
2. According to a recent report commissioned by CWTA, Accenture estimates that the initial roll-out of 5G networks will require approximately \$26 billion in capital investment, the vast majority of which will have to be made by Canada's facilities-based mobile wireless service providers.¹ To realize such high levels of capital investment it is imperative that the Government of Canada look for ways to reduce policy and regulatory disincentives to network investment, such as spectrum license fees that are much higher than in many other developed countries. These higher costs have to be absorbed by wireless carriers, and ultimately their customers, and act as a drag on the amount of capital available for network investment and innovation.
3. ISED's proposal to move from a capacity-based fee model to a consumption-based fee model for the radio license fees under consideration is a positive step in reducing

¹ Fuel for Innovation: Canada's Path in the Race to 5G, Accenture, June 2018.

regulatory costs. However, there are a few elements of the proposed model that require further consideration.

Cost Recovery

4. While it is not clear from the consultation document how the proposed base rates were determined, the consultation document cites as its first guiding principle the promotion of spectrum efficiency. While the promotion of efficient spectrum use is a valid concern, fears over potential inefficient use of spectrum in the absence of significant annual fees risk being exaggerated. Wireless operators are motivated to obtain and maximize benefit from all assets at their disposal, including licensed spectrum, in order to meet mobile data growth and earn a return on their investment; regardless of the cost of those assets. Alternatively, excessive fees could be counterproductive as it increases the risk of inefficiency if spectrum is left unused or under-utilized due to high fees.
5. Rather than overweighting the objective of spectrum efficiency when setting rates, the Department should have as its primary guide the policy objective set for it under the *Spectrum Policy Framework*², which is “to maximize the economic and social benefit that Canadians derive from the use of the radio frequency spectrum resource”. This objective is much broader than promoting efficient use of spectrum or generating profits for the government’s general account.
6. The greater economic and social benefit to Canadians arises from the wide-deployment of best in class wireless networks which serve as the back-bone for Canada’s mobile digital economy and increase the quality of life for Canadians. Nordicity reported that in 2016 the wireless industry generated a contribution of \$25.2 billion in GDP to the Canadian economy and generated 138,000 full-time equivalent jobs as a result of its activities. In the above-mentioned Accenture report, Accenture projects that the successful rollout of 5G in Canada will result in a \$40 billion annual incremental increase to GDP by 2026. Accenture also estimates that deploying 5G in Canada will result in 250,000 new full-time jobs by 2026.
7. To maximize these economic and social benefits, the Department should not only be looking to encourage the efficient use of spectrum, but also consider how the economic and social benefits of having world class wireless infrastructure will be increased if spectrum fees are set lower. With lower spectrum fees operators are able to increase other spending on network infrastructure, leading to greater coverage, better service, and new types of innovative businesses and services. While the proposed move from a capacity-based model to a consumption-based model is a step in the right direction towards lowering fees, CWTA recommends that, when setting fees, the Department’s emphasis should be on recovering its costs associated with the management and regulation of radio frequencies and not the generation of profit for the government.

² <https://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/sf08776.html>

Discounted Fees for Low Density Areas

8. Consideration should be given to reducing base rates for geographical areas where there is less density of services and demand for spectrum. In its *Spectrum Outlook 2018 to 2022*³, the Department stated that in pursuing its objective to maximize the economic and social benefits that Canadians derive from spectrum use, including ensuring that Canadians in rural and remote regions benefit from access to wireless services, its approach would include making spectrum available a lower cost. CWTA supports reduced point-to-point license fees in areas where there is less congestion and lower demand for radio frequencies, provided that this does result in adding premiums to rates for more congested areas.

Fee Model Must Not Discourage Innovation

9. In addition to spectral efficiency, the Department suggests that the proposed new fee model would also provide an innovation incentive. However, the proposed total fees of fixed point-to-multipoint (PTMP) systems as the sum of the point-to-point (PTP) fees for each of the individual links within the system could stifle innovative ways of using PTMP systems.
10. For example, a small cell 5G cluster may use a new type of RAN architecture that utilizes a variety of subsystems, such as a centralized baseband unit and multiple standalone remote radio heads, that use wireless connections over short single hop distances (also known as front-haul). These systems are designed to massively increase the capacity and efficiency of the RAN system without materially increasing the consumption of spectrum. However, such systems would be considered PTMP systems and under the proposed license fee model each PTP link would be summed to determine the total fee, even if all links were using the same frequency. Such a fee would do nothing to encourage efficient use of spectrum and would likely discourage the adoption of innovative systems of this kind.
11. CWTA recommends that the Department consider these short distance PTMP links as a single PTP link for fee setting purposes. If this is not acceptable to the Department, an alternative method of capping license fees for such systems should be implemented so as not to discourage innovation.

³ <https://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/sf11403.html#s5.1>

Q2: ISED invites proposals for a fee escalator that takes into account fee predictability for the radio license fees under consideration.

12. Our understanding is the topic of fee escalators will be considered as part of a separate consultation that is not restricted to fees for fixed point-to-point radio systems. As such we will reserve comment for that consultation.

Q3: ISED invites comments on the proposals for minimum fees, short-duration license fees and prorated fees.

13. CWTA has no comment on Q3.

- End of Submission-