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Innovation, Science and Economic Development Canada (ISED)
c/o Aline Chevrier, Spectrum Licensing and Auction Operations
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Re. ISED Consultation on Releasing Millimetre Wave Spectrum to Support 5G SLPB-001-17 - June 2017
Huawei Technologies Canada Co., Ltd

Dear Aline

Huawei Technologies Canada Co., Ltd. is pleased to submit these comments in response to the Innovation, Science and Economic Development Canada (ISED) **Consultation on Releasing Millimetre Wave Spectrum to Support 5G (5G SLPB-001-17 - June 2017)**. Huawei Canada appreciates the opportunity to share with ISED our vision and experience related to the suitability of the proposed millimeter wave (“mmWave”) spectrum for 5G services.

Huawei believes this consultation is a critical next step in facilitating innovation and investment in Canada for future wireless technologies and services through the identification of spectrum for 5G systems with wide contiguous bandwidth.

Spectrum is one of a nation’s most precious technology resources and is a basic component in the provision of wireless communications services. The consumer demand for wireless broadband services is skyrocketing and will continue to increase for decades to come. As consumer and industry traffic grows, the demands on wireless networks and the need for access to spectrum continues to increase.

The availability of spectrum has become crucial to promoting consumer choice and competition and in fostering innovation in the mobile communications marketplace. Spectrum is fundamental not only for the consumer’s radio access link to the network but it is also crucial to the service providers’ ability to deploy next generation networks utilizing a mix of spectrum bands that serve diverse services and deployment capabilities including both access and backhaul.

Indeed, as the ISED Consultation recognizes, while low-band spectrum has certain propagation advantages for network deployment over long distances and reaching deep into buildings and urban canyons, the mmWave high-band spectrum allows for transmission of large volumes of information locally. Given that mobile connectivity has already dramatically changed the way Canadians live and work, fulfilling future demand for even higher data rates and the requirements of new applications will

not only necessitate technological innovation in mobile systems, but also will necessitate the availability and access to additional low- and high-band spectrum for consumers, industry and mobile service providers.

From Huawei's perspective, the evolution toward 5G mobile technologies and services is dependent on three factors. Firstly, Huawei believes that accelerating technological innovation will create new applications and deliver new experiences, thereby enhancing the commercial value of 5G to Canadian users. Secondly, Huawei believes that the new technical standards, application scenarios and business models leveraging 5G technologies should be developed through open cooperation and cross-industry collaboration.¹ This requires active involvement of all stakeholders in the global information and communications technology ("ICT") industry, as well as governments, academia, and vertical industries. And thirdly, Huawei recognizes that government has a unique responsibility in managing spectrum resources.

Forward-looking policies on spectrum allocations are essential to the development of the 5G systems and, Huawei submits, are the reason why this ISED consultation is of particular importance for the future of mobile communications services in Canada.

These comments primarily focus on the mmWave spectrum bands above 24 GHz proposed to be authorized for the provision of all facets of mobile services. Huawei believes the criteria employed in the Consultation to identify suitable spectrum bands are all highly relevant and that the bands identified in the Consultation satisfy the service criteria and, therefore are economically and technically suitable for mobile services.

While the Consultation and the comments provided here are specific to the 28, 37-40, and 64-71 GHz bands, additional bands are under discussion in Canada and globally for 5G applications and Huawei looks forward to further consultation with ISED on these other bands.

Huawei submits these comments in response to the questions in the Consultation and would be pleased to work further with the Department, industry and all stakeholders on this very important initiative.

Sincerely ...

Robert Backhouse
VP Marketing and Solution Sales
Huawei Technologies Canada Co., Ltd.
