

October 26, 2020
Revision: 1
Planetworks Reference: ISED 3.8 Consultation



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Subject: Canada Gazette, Part I, "Consultation on the Technical and Policy Framework for the 3650-4200 MHz Band and Changes to the Frequency Allocation of the 3500-3650 MHz Band," Notice Reference Number SLPB-002-20, published 2020-08 with correction 2020-09-21.

1. Planetworks Consulting Corporation appreciates the opportunity to submit this response to the subject consultation. Planetworks is an independent Canadian engineering consulting firm which has provided wireless engineering specification and design services to our client base for over 20 years. Specifically, we have been focused on delivering plans and designs to achieve the mission critical communication requirements of our government, public safety, utility, transportation and private sector customers.

2. Planetworks agrees with and supports the ISED objective from paragraph 4: ***Canadian consumers, businesses, and public institutions should have access to the latest wireless telecommunications services, at competitive prices.*** We also agree and support the following principles which have been para-phrased from the Consultation paragraphs 5 and 6:

- Additional spectrum should be allocated for flexible use.
- Wireless has been and will continue to be, vital for the safe and efficient operation of critical infrastructure.
- Flexible use should be directed to enable "the expansion of new wireless applications in agriculture, manufacturing, healthcare, public safety and transportation." For emphasis, spectrum allocations should align with 5G standards and 3GPP ecosystems. Planetworks recommends that this statement be further expanded to include the need for new allocations to be in harmonization with the allocations within the US market.

Accordingly, Planetworks provides the following comments in response to the Consultation questions Q3, A5 and Q13.

3. Consultation Q3: ISED is seeking comments on how the difference in technical rules between the U.S. and EU could impact Canada's ability to leverage the economies of scale from the global 3800 MHz ecosystem. In particular: (a) would the difference in technical rules result in two distinct region-specific equipment ecosystems; and (b) which equipment ecosystem would be more suitable in the Canadian environment and specifically, whether Canada should generally align its technical rules with the U.S. or the EU in the 3800 MHz band.

Response: Planetworks requests that mid-band allocations align with the United States to avoid the risk of a Canada-specific allocation with no mass market backing and consequently no availability or limited availability of economical and innovative wireless products.

It is also important to recognize that the vast majority of technology in the Canadian market was designed and built for the larger US market. US market goods, and in particular consumer goods, have a high likelihood of finding their way into the Canadian market. Consequently, mismatches in spectrum allocation between the US and Canada can result in interference issues. While European markets are also large, manufacturers are unlikely to import and support products into North America as they can only be utilized in the comparatively small Canadian Market.

Planetworks therefore recommends that ISED fully aligns both the 3500 and 3800 MHz bands with US allocations to enable:

- Full access to all the network and subscriber technology and solutions supported within these bands;
- Private and IOT LTE/5G deployments consistent with the US;
- Compatible allocations within the US -Canada coordination zone to ensure efficient and effective use of the bandwidth; and
- Reduced interference caused by operation of 'grey-market' consumer goods brought into Canada.

4. Consultation Q5: ISED is seeking comments on developing a flexible use licensing model for fixed and mobile services in the 3650-4000 MHz band.

Response: Planetworks supports the flexible use licensing model for the 3500 and 3800 MHz bands, provided the allocations are aligned with the US, for the reasons cited in our response to Question 3. In particular, the licensing model needs to accommodate and encourage spectrum use by campuses, transportation, utilities and communities for private applications. We note that this is one of the lessons from the recent US auction of CBRS Priority Access Licenses.

5. **Consultation Q13: ISED is seeking comments on: (a) establishing unpaired blocks of 10 MHz for the 3650-3700 MHz band; and (b) establishing unpaired blocks of 10 MHz for the 3700-3980 MHz band.**

Response: For the reasons cited in our response to Question 3 Planetworks does not support deviations from the band plans adopted by the FCC in the US. That said, there should be flexibility to accommodate licensing the bandwidth of 3GPP compliant equipment.

Respectfully submitted,

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