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Connecting our communities*

Ottawa, February 14th 2018

Senior Director
Spectrum Licensing and Auction Operations
Innovation Science and Economic Development
235 Queen Street
Ottawa, K1A 0H5

SUBJECT: Canada Gazette, Part 1, SMSE-018-17 Consultation on a Technical, Policy Framework for White Space Devices-- CanWISP Submission

Madam, Sir,

Please find below the comments from CanWISP, the Canadian Association of Wireless ISPs.

For any questions or inquiries, please contact me.

Truly yours,

Dan Barnes
Chairman of the Board
CanWISP
dan@canwisp.ca

Introduction:

1. CanWISP is an organization representing Canadian Wireless Internet Service Providers. Our members operate networks providing Internet access to households in rural areas throughout Canada – areas that the large telecom operators are not servicing. Our members' business model allows them to serve areas of low density profitably and at low cost, unlike the large telecom service providers, whose business model is usually designed to optimize return to shareholders, and is not suited to provide service in these areas, even if they are close to large population centers.
2. Our members' networks range in size from several hundred to some 25,000 subscribers, and supply high speed internet service as well as VoIP-based voice services, and video services. Some even provide mobile roaming services over LTE. Overall, our 53 members provide service to around 160,000 subscribers in hard to reach rural areas. We estimate that the total number of subscribers serviced by similar wireless operators (more than 100 others) that are not members, to be around 150,000, for a total WISP subscribership of some 310,000 and representing revenues of over \$100M per year. More than 98% of the connections are wireless.

Preamble:

3. CanWISP members have been on the outlook for new frequency bands to cater to the increase demand in throughput from our customers as well as serving potential customers that are presently difficult to reach because they are in forested areas or are far from the transmitters.
4. CanWISP has been placing a lot of hope in the White Space frequency band to achieve these goals. This frequency band started as being very interesting because a lot of spectrum was available and the low frequency allows for great reach in mountainous terrain where vegetation is thick.
5. However, much of the frequency band disappeared over time to the benefit of large providers who don't have an immediate obligation to use the band.
6. At the same time, CanWISP is sensitive to the equipment ecosystem in the White Space band and recognizes that availability will match with frequency bands in large markets like U.S. and UK.

Answer to Questions

Q1. ISED is seeking comments on its proposal to harmonize with the U.S. framework regarding the operation of fixed white space devices in the channels 3 and 4 (60-72 MHz).
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7. Q1. CanWISP is in agreement to harmonize the Policy with the U.S. framework regarding the operation of fixed white space devices in channel 3 and 4.

Q2. ISED is seeking comments on its proposal to harmonize with the U.S. framework regarding the operation of personal/portable white space devices in channels 14 to 20 (470-512 MHz).

8. Q2. CanWISP is in agreement to harmonize the Policy with the U.S. framework regarding the operation of personal/portable white space devices in channels 14 to 20.

Q3. ISED is seeking comments regarding its proposal to limit the use of white space devices to spectrum below 608 MHz at this time.

9. Q3. CanWISP is NOT in agreement with the proposal to limit the use of white space devices to spectrum below 608 MHz.
10. CanWISP is of the opinion that the band assigned to Commercial mobile operation (614MHz to 698MHz) can be used in remote areas to the benefit of the general population much earlier than what the mobile operators would.
11. In fact, referring to the Licencing Framework proposed in the August 2017 document SLPB-005-17, section 11.3 Deployment Requirements, the licence conditions are stating that Tier 4 areas are to be covered within 20 years.
12. Furthermore, the areas that would benefit the most from the use of a far reaching frequency band are those where the % of required coverage is the least.
13. Knowing that cellular operators are not interested in low density areas, we can state that they will not deploy these areas until they have the obligation to do it.
14. Not harmonizing with the FCC, who have allowed the use of WSDs in most of the spectrum above 608MHz, could negatively effect technology innovation and availability of equipment in Canada.
15. Dynamic spectrum access via a geolocation database will manage spectrum access and is designed to prevent interference in the event mobile license holders are transmitting in a given area by not assigning that spectrum for use to WSD's. This proven approach has been in use in the U.S. for some time now.

16. Therefore, CanWISP is of the opinion that service providers deploying WSDs should be granted access to spectrum above 608MHz on the basis that interference can be avoided when license holder begin to deploy equipment in the same spectrum.

17. CanWISP is also of the opinion that the licenced users would need to provide White Space users a 6 month notice before deploying in the spectrum to allow them to find alternate solutions and migrate their equipment.

Q4. ISED is seeking comments on its proposal to continue to preclude the use of channel 37 (608-614 MHz) by white space devices.

18. CanWISP is in agreement to continue to preclude the use of channel 37 by white space devices.