

Before
INNOVATION, SCIENCE AND ECONOMIC DEVELOPMENT CANADA
Ottawa, ON K1A 0H5

In the Matter of)	
)	
Consultation on the Technical and Policy Framework)	Canada Gazette, Part I
for Radio Local Area Network Devices Operating)	Jan. 28, 2017
in the Band 5150-5250 MHz)	Notice No. SMSE-002-17

**REPLY COMMENTS OF THE
TELECOMMUNICATIONS INDUSTRY ASSOCIATION**

The Telecommunications Industry Association (“TIA”)¹ hereby files these reply comments in response to the above-captioned Consultation² from Innovation, Science and Economic Development Canada (“ISED”). Overall, commenters strongly supported ISED’s proposal to allow higher-power and outdoor operation of radio local area network (“RLAN”) devices in the 5150-5250 MHz band to harmonize Canada’s rules in this band with the rules adopted in the United States three years ago. A few commenters raised concerns, but as described below, none provided substantive support for those concerns.

I. Commenters Strongly Support Moving Forward Now.

The large majority of commenters support moving forward now as ISED has proposed. For example, Cisco provides extensive data regarding demand for RLAN devices in the band along with the associated economic benefits,³ while noting that today Canadian consumers are

¹ TIA is the leading trade association for the information and communications technology (“ICT”) industry, representing companies that manufacture or supply the products and services used in global communications across all technology platforms. TIA represents its members on the full range of policy issues affecting the ICT industry and forges consensus on industry standards.

² [*Consultation on the Technical and Policy Framework for Radio Local Area Network Devices Operating in the Band 5150-5250 MHz*](#), Jan. 28, 2017 (“Consultation”).

³ [Cisco Comments](#) at 5-9.

limited to only five 80 MHz channels with no 160 MHz channels available for use outdoors.⁴

Ericsson states that further delays would disadvantage Canadian consumers and companies compared to those in the U.S., and that adopting the U.S. rules would allow Canadian consumers and industry to leverage and participate in the equipment ecosystem initially created for the U.S. market.⁵

Intel concurs that this would improve economies of scale compared to different rules that would require different product SKUs, noting that standardized IEEE 802.11ac products are already certified and available in the U.S. under the FCC's rules.⁶ Microsoft observes that even if WRC-19 does approve HPOD use as contemplated, the demand for outdoor Wi-Fi channels will likely be saturated in many Canadian urban centers long before devices based on that outcome will be available.⁷ And Nokia adds that with the FCC recently authorizing Long Term Evolution ("LTE") devices for use in unlicensed spectrum, the proliferation of 3GPP LTE technology in unlicensed 5 GHz bands should be expected and would benefit from the changes proposed.⁸

II. Incumbent Operators Provide No Basis for Delay.

Globalstar asserts that the regulations adopted for this band by the U.S. Federal Communications Commission ("FCC") cannot be applied on a worldwide basis and guarantee protection of its network.⁹ While TIA believes in the importance of protecting incumbent operations, since the FCC rule change in 2014 there have been no interference complaints by

⁴ *Id.* at 11 (text and graphic).

⁵ [Ericsson Comments](#) at 7.

⁶ [Intel Comments](#) at 2.

⁷ [Microsoft Comments](#) at 7.

⁸ [Nokia Comments](#) at 2.

⁹ [Globalstar Canada Comments](#) at 1.

Globalstar relative to HPOD (unlicensed) operations. Indeed, Globalstar has the ability to monitor noise levels at its satellites and was encouraged by the FCC to report “any significant changes in the noise levels and provide specific details as to how it is affecting its operations.”¹⁰ The lack of any reported concerns indicates that the FCC’s 2014 rules are successfully avoiding harmful interference.

The FCC rules are therefore also in compliance with Article 4.4 of the global Radio Regulations. The Radio Regulations seek to protect an *outcome* of no harmful interference, but permit local variations in the *means* of achieving that outcome. Thus, while global application of the U.S. rules in this band may or may not be appropriate in particular countries, unanimous worldwide harmonization of the protection rules is not a requirement. Globalstar’s argument citing unanimous worldwide harmonization as a reason to wait until after WRC-19 is therefore based on a condition that is neither possible nor necessary to achieve.

III. Concerns Regarding Unmanned Aircraft Systems are Unsupported.

NAVCanada and Transport Canada note that the International Civil Aviation Organization (“ICAO”) plans to make use of the band for radionavigation related to unmanned aircraft systems (“UAS”), and assert that allowing HPODs could eventually cause harmful interference.¹¹ However, no detail or analysis was provided to explain why the FCC limits on either in-band or out-of-band emission (“OOBE”) levels would be inadequate. Notably, the FCC did not loosen or change the OOBE requirements when it increased the permitted EIRP in this band.

¹⁰ US Federal Communications Commission (FCC) ET Docket No. 13-49, First Report and Order, “In the Matter of Revision of Part 15 of the Commission’s Rules to Permit Unlicensed National Information Infrastructure (U-NII) Devices in the 5GHz Band,” released April 1, 2014, at ¶ 46.

¹¹ [NAV CANADA Comments](#) at 1-2; [Transport Canada Comments](#) at 1.

Meanwhile, no alternative technical requirements were proposed, and no detail on the deployment scale or geographic scope of UAS was provided. Such vague and ambiguous claims should not be a basis for delaying action, particularly since ISED did not address these concerns in the Consultation to permit HPOD proponents to address them. Meanwhile, while ICAO may currently be developing standards for potential future UAS operations in various bands, one of which “happens to be in the 5150-5250 MHz band,”¹² no specific need for the 5150-5250 MHz band has been established. In contrast, a majority of commenters favored expanded HPOD use in the 5150-5250 MHz band and made a substantial showing of ecosystem interest, product availability, and projected need.

IV. RADARSAT Concerns are Hypothetical and Unsupported.

The Canadian Space Agency (“CSA”) expresses concerns regarding OOBEE affecting a future satellite system (RADARSAT-3) in the adjacent 5250-5350 MHz band. At present, CSA’s RADARSAT operations utilize only the 5350-5470 MHz band, but CSA states that future higher-resolution needs will eventually require use of the wider 5250-5570 MHz band – although no specific plan dates or funding for such expanded use are noted.

Regardless, CSA’s objections do not provide any analysis regarding the inadequacy of the FCC’s safeguards, nor does CSA provide alternative requirements supported by analysis. As with the UAS objections, such vague and ambiguous claims do not serve a constructive purpose. Again, the conditional increase in EIRP adopted by the FCC in 2014 maintained the OOBEE requirement at prior levels. There is simply no justification for elevated concerns regarding OOBEE.

¹² NAV CANADA Comments at 1.

V. Conclusion

TIA continues to believe that ISED should enable indoor and outdoor HPOD devices in advance of WRC-19. We appreciate ISED's work on this important issue.

Respectfully submitted,

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ASSOCIATION

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