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

COMMENTS OF THE
TELECOMMUNICATIONS INDUSTRY ASSOCIATION

The Telecommunications Industry Association ("TIA")[1] hereby files these comments in response to the above-captioned Consultation[2] from Innovation, Science and Economic Development Canada ("ISED"). TIA supports 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. TIA also urges ISED to consider adopting harmonized rules for indoor deployments as well. These rule changes should be adopted promptly, in advance of the World Radio Conference 2019 ("WRC-19").

As ISED notes in the Consultation, the explosion of Wi-Fi-enabled devices is putting pressure on the current capacity of RLAN bands, with projections of continued growth due to more devices and broadband off-loading.[3] While ISED specifically notes the expected 13-fold

[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] Consultation ¶ 20.

increase in public and home Wi-Fi hotspots in Canada through 2020,[4] other available data more importantly shows how Wi-Fi is being *used*. For example, Cisco projects that by 2020, almost 65 percent of Canada's Internet traffic will originate or terminate on a Wi-Fi network, while mobile networks will be carrying less than 10 percent.[5]

Moreover, consumers using dual-capacity devices — those that communicate using Wi-Fi *and* mobile data services — will continue to offload their data to Wi-Fi. In fact, 75 percent of data that could be transmitted on a mobile network will instead begin or end on Wi-Fi.[6] With unlicensed services playing a more significant role in how consumers and businesses communicate, TIA therefore urges the ISED to move forward now to allow high power and outdoor RLAN devices ("HPODs") as the United States did in 2014,[7] rather than waiting until 2020 after the completion of WRC-19.[8] In addition, and as discussed further below, TIA urges ISED to consider adopting harmonized rules for indoor deployments as well.

Meanwhile, TIA believes that protecting existing satellite interests in the band is also important. In our initial comments to the U.S. Federal Communications Commission ("FCC") in

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[4] *Id.*

[5] *See* Cisco, Visual Networking Index ("VNI") Forecasts Tool, *available at* http://www.cisco.com/c/m/en_us/solutions/service-provider/vni-forecast-highlights.html (select data for Canada, 2020 Forecast Highlights, section on Wired Wi-Fi and Mobile Growth, visited March 6, 2017).

[6] *See* Cisco, Visual Networking Index ("VNI) Mobile Forecast Highlights, 2016-2021, *available at* http://www.cisco.com/c/dam/assets/sol/sp/vni/forecast_highlights_mobile/index.html#~Country (select data for Canada, Device Growth/Traffic Profiles, section on Offload Traffic, visited March 27, 2017).

[7] Consultation ¶ 18 (citing U.S. Federal Communications Commission, First Report and Order, *Revision of Part 15 of the Commission's Rules to Permit Unlicensed National Information Infrastructure (U-NII) Devices in the 5 GHz Band*, FCC 14-30, ET Docket No. 13-49, March 31, 2014) ("FCC Report and Order").

[8] Consultation ¶ 28 ("Alternatively, the Department could defer the review of Canadian HPOD rules until 2020").

2013, we supported increasing power limits and permitting outdoor operations, agreeing with the FCC's assessment that this "would likely permit the introduction of a wide range of new broadband products capable of operating at higher data rates than is now possible."[9] After robust debate and eventually productive discussions involving Globalstar, the parties narrowed their differences[10] and TIA endorsed the "emerging consensus."[11] In its decision, the FCC adopted a compromise that allowed higher-power operations with restrictions limiting outdoor access point antenna gain at 30 degrees.[12]

TIA believes that ISED would therefore be well-served by adopting the same compromise rules for Canada. Moreover, if significant concern remains regarding potential interference to satellite operations, ISED could adopt a lightly licensed or registration system similar to that defined by the FCC, requiring operators of a significant number of outdoor access points to register with ISED and to acknowledge a requirement to mitigate in the unlikely event that outdoor HPOD operation causes interference.[13]

Finally, ISED should consider altering its rules for indoor operations as well. Given the continuing escalation in demand for unlicensed technologies, and with indoor applications continuing to be the pre-dominant use cases, TIA recommends the rules be changed to allow

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[9] Comments of the Telecommunications Industry Association, filed May 28, 2013 in FCC ET Docket No. 13-49, at 12 n. 29 (citing FCC Notice of Proposed Rulemaking, *Revision of Part 15 of the Commission's Rules to Permit Unlicensed National Information Infrastructure (U-NII) Devices in the 5 GHz Band* , FCC 13-22, Feb. 20, 2013, 28 FCC Rcd 1769, 1782 ¶ 39).

[10] FCC Report and Order ¶ 31 (describing efforts by NCTA and Globalstar to reach a mutually-agreeable resolution to issues in the 5150-5250 MHz band).

[11] Ex Parte Letter from Telecommunications Industry Association to FCC Secretary Marlene H. Dortch, filed March 21, 2014 in FCC ET Docket No. 13-49, at 2.

[12] FCC Report and Order ¶¶ 34-46 (describing the Commission's decision and safeguards adopted).

[13] FCC Report and Order ¶ 38.

master devices to operate at 1W conducted power + 6dBi antenna gain and client devices to operate at 250 mW conducted power + 6dBi antenna gain, aligned with FCC rules. This will enable users to fully utilize unlicensed radio spectrum at home and in their businesses by helping with penetration of indoor walls and indoor coverage of large commercial spaces.

TIA appreciates ISED's work on this important issue.

Respectfully submitted,

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