



Title: ISED's response to clarify the RSS-195 requirement related to wireless communication service equipment operating in 2305-2320 MHz / 2345-2360 MHz frequency range

May 13, 2022

Dear Mr. Ivo Maljevic,

Innovation Science and Economic Development Canada (ISED) is hereby replying to the TSG-RAN liaison statement sent on March 24, 2022 entitled "**LS to ISED-Canada to clarify the RSS-195 requirement related to wireless communication service equipment operating in 2305-2320 MHz / 2345-2360 MHz frequency range**".

By way of background, ISED's Radio Standards Specification [RSS-195, Issue 2](#), "*Wireless Communication Service (WCS) Equipment Operating in the Bands 2305-2320 MHz and 2345-2360 MHz*", published on April 24, 2014, sets out the certification requirements for radio transmitters and receivers of WCS systems operating in the bands 2305-2320 MHz and 2345-2360 MHz. WCS equipment must meet the requirements set forth in this Canadian regulatory standard to be manufactured, imported, distributed, leased, offered for sale or sold in Canada.

TSG-RAN requested clarification on the measurement method associated with the transmitter unwanted emission in the first 1 MHz immediately adjacent to the channel edges of WCS equipment. Section 5.6 of RSS-195 prescribes the measurement method requirements of the transmitter unwanted emissions and these requirements are transcribed below:

*The transmitter unwanted emissions shall be measured with a resolution bandwidth of 1 MHz. A smaller resolution bandwidth is permitted provided that the measured power is integrated over the full required measurement bandwidth of 1 MHz. **However, in the 1 MHz bands immediately adjacent to the edges of the frequency range(s) in which the equipment is allowed to operate, a resolution bandwidth of as close as possible to, without being less than 1% of the occupied bandwidth, shall be employed provided that the measured power is integrated over the full required measurement bandwidth of 1 MHz.***

The measurement method in the first 1 MHz immediately adjacent to the channel edges of the equipment (described in the third sentence "**bolded**") requires the power to be integrated over the full 1 MHz bandwidth using a resolution bandwidth as close as possible to 1% of the occupied bandwidth, but not less than 1% of the occupied bandwidth, which results in an unwanted emission limit of -13 dBm/MHz from 0 to 1 MHz from the channel edges. As such, ISED confirms that TSG-RAN correctly interpreted ISED's regulatory requirements.

ISED notes that the 3GPP liaison statement suggested that the Canadian regulatory requirements in RSS-195 differed from the US FCC regulatory requirements in 47 CFR 27.53 for the first 1 MHz immediately adjacent to the WCS channel edges. ISED consulted with its FCC counterparts where they confirmed that the requirements prescribed in 47 CFR 27.53 (a)(5) are indeed harmonized with section 5.6 of RSS-195 with respect to the measurement procedures in the first 1 MHz immediately from the WCS equipment band edges.



ISED notes that different limits and measurement method requirements for the transmitter unwanted emissions in the first 1 MHz immediately adjacent to the channel edges may differ between RSSs. These differences can be explained based on co-existence requirements between different adjacent services. In RSS-195, more stringent requirements were deemed necessary to reduce the risk of harmful interference between WCS equipment and adjacent services.

ISED thanks the 3GPP for its ongoing work and we trust this letter provides the clarification requested by TSG-RAN.

Sincerely,

Josette Gallant
Senior Director, Terrestrial Engineering and Standards
Innovation, Science and Economic Development Canada

CC: Ira Keltz, Deputy Chief, FCC