

May 3, 2022

Ms. Josette Gallant
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Engineering, Planning and Standards Branch
Innovation, Science and Economic Development Canada
235 Queen Street, 6th Floor
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(Submitted by email)

Subject: ***SRSP-513, Issue 4, Technical Requirements for Advanced Wireless Services (AWS) in the Bands 1710 1780 MHz and 2110-2180 MHz;***
RSS-139, Issue 4, Advanced Wireless Services (AWS) Equipment Operating in the Bands 1710-1780 MHz and 2110-2200 MHz;
SRSP-519, Issue 2, Technical Requirements for the Ancillary Terrestrial Component (ATC) of Mobile-Satellite Service (MSS) Systems Operating in the Bands 2000-2020 MHz and 2180 2200 MHz; and
RSS-170, Issue 4, Mobile Earth Stations (MESs) and Ancillary Terrestrial Component (ATC) Equipment Operating in the Mobile Satellite Service (MSS) Bands

Dear Ms. Gallant,

Introduction

In February 2022, the Department requested that the RABC review proposed revisions to the four above noted standards. The Board assigned the review to its Advanced Wireless Services subcommittee. At the request of the Department, the RABC also posted the consultations for RSS-139 and RSS-170 on its website to facilitate comments from Canada's World Trade Organization (WTO) partners.

The AWS subcommittee held two calls to review the standards. Invitations to participate in the review were extended to ten guests identified by ISED. There was significant discussion and feedback provided during the calls, as well as post-meeting follow-up written feedback.

The AWS subcommittee supports the updated drafts to the four standards as developed through the RABC review process interactively with ISED, and as captured in email correspondence between ISED and AWS subcommittee members through March and April 2022.

There was one strong RABC recommendation related to RSS-139 that ISED advised would need to be considered as part a future revision of that standard once related coexistence considerations were reviewed. This recommendation is detailed below.

Future version of RSS-139

The RABC recommends that Table 3 in section 5.5 be modified for the Frequency band 1710-1780 MHz. A separate row for fixed subscriber equipment should be added with a maximum power limit of 39 dBm e.i.r.p/channel bandwidth (breaking it out from the subscriber equipment row). The subscriber equipment ecosystem is comprised of both mobile and fixed subscriber equipment, each with different e.i.r.p characteristics. In order for operators to take full advantage of the fixed equipment output power and associated antenna gain, consistent with the 3GPP standard, the maximum power should be 39 dBm e.i.r.p/channel bandwidth (rather than 30 dBm e.i.r.p/channel bandwidth).

Consistent with the above, the third row of Table 3 should identify an Equipment type of “Subscriber equipment other than fixed subscriber equipment”. [emphasis added]

The 1710 - 1780 MHz portion of the proposed future new Table 3 would be as follows:

Frequency band	Equipment type	Maximum power
1710 - 1780 MHz	Fixed and base station	30 dBm e.i.r.p/channel bandwidth
	Fixed subscriber equipment	39 dBm e.i.r.p/channel bandwidth
	Subscriber equipment other than fixed subscriber equipment:	30 dBm e.i.r.p/channel bandwidth

With respect to coexistence with the uplink (1710-1780 MHz) operating at the proposed 39 dBm e.i.r.p/channel bandwidth:

- a. All **in-band** services are FIXED/MOBILE that can coexist at this power level given the OOBE emission protection from the frequency block edge. The higher power would not impact point-to-point services in the AWS-1 and AWS-3 bands due to their limited deployment as well as the displacement policy outlined and reiterated in SRSP-513
- b. Coexistence with **adjacent band** services are also protected by the unwanted emissions limit in SRSP-513. The adjacent band services are almost entirely FIXED/MOBILE except for 1700-1710 MHz which is FIXED and METEOROLOGICAL-SATELLITE (space-to-Earth). Earth stations operating in 1700-1710 MHz are only currently located in Edmonton/Stony Plain Alberta and Gander, Newfoundland and Labrador, whereas the intended application of Fixed Wireless Access for CPE is in rural areas.

Conclusion

RABC did not receive any comments from stakeholders via the WTO portal on its website.

The Board has now completed its review. We appreciate having had the opportunity to review the updated standards.

Sincerely,



J. David Farnes
General Manager