



**AWS Subcommittee
Adopted Meeting Notes
February 20, 2020
13:00 to 14:30**

RABC Review of RSS-192 and SRSP-520

Participants

Geoff Catliff (Chair)	TELUS	Jean-Yves Bernard	Rogers
Josette Gallant	ISED	Mark Draper	Rogers
Alain Abou-Zeid	ISED	Michel Eric	Inukshuk
Hughes Nappert	ISED	Don Falle	Inukshuk
Mahmudur Rahman	ISED	Rob Berezowski	Sasktel/CWTA
Matthew Dorrance	ISED	Jad Berberi	Huawei/CWTA
Christine Hsu	ISED	Gabriel Lascut	Ericsson/CECA
Loan Tran	ISED	Jody Mitiche	Ericsson/CECA
Fabiano Chaves	Nokia/CECA	Daryl Smith	Ericsson/CECA
Emmanuel Neilz	Nokia/CECA	Elisabeth Neasmith	Telesat/CSSIF
Frank Korinek	Motorola/CECA	Esam Ghanem	Xplornet/CWTA
Adam Tenenbaum	TELUS	William Gooding	Eastlink/CWTA
Sam Luu	TELUS	Veena Rawat	GSMA
Ivo Maljevic	TELUS	Kirk Nesbitt	CAB
Rahim Nathoo	TELUS		
Alexis Ouellet Patenaude	CBC/Radio Canada		
Julie Bergeron	CBC/Radio Canada	David Farnes (Secretary)	RABC

Discussion

- Dave Farnes summarized the various pieces of information that had been shared since the first call, including:
 - Notes from the February 3rd call
 - Feedback to the Department from Dave Morley, Freedom/Shaw
 - New draft RSS-192, Issue 4, version 4
 - New draft SRSP-520, Issue 1, version 4

- Geoff Catliff welcomed everyone.
- Geoff noted that meeting notes from the February 10th call were circulated by Dave Farnes. He asked for comments/corrections. No corrections were raised. The meeting notes were then adopted.

RSS-192

- Alain Abou-Zeid explained that the Department has revised the definition of max e.i.r.p and the definition will be circulated by email.
- Section 8.6. Josette responded to the emailed comments from Dave Morley; do others members agree to only have TRP limits? Jad, how do we measure a radio without an integrated antenna? Josette, worried about creating a unique definition for Canada. Jad, current definition has a problem; can't measure TRP without integrated antenna. ECC definition assumes integration. Adam, we are trying to put an operational issue into a certification standard rather than the SRSP. This requires assumptions. Josette, the Department would like to see written proposals (with supporting rationale). Jean-Yves, keep e.i.r.p for non-AAS and keep TRP for AAS. Daryl, this issue has come up in other jurisdictions. Jody, don't keep changing the definitions, fix table 8.6. Josette, ISED will again review the comment from Dave Morley. Fabiano, he has discussed with David. Concerned about assumptions made by ECC and not sure David understands correctly what ECC has done. Fabiano doesn't think it is a good idea to make assumptions about antenna gain.
- Section 8.7.3. Table 5. Esam doesn't believe all the requirements can be met at 3450 MHz. Alain, look at section 8.7.1 for 3450 MHz. Additional questions from Esam. Can these limits apply to 3700 MHz? ECC requirements apply per antenna, not per MHz? **Esam to supply written comments/questions. Josette (and others from ISED during the course of the call) stressed the importance to include supporting rationale and references with the comments.**
- Adam indicated that members previously asked ISED to operationalize some of the limits. Does the Department consider this approach to be a workable alternative? Josette, Canada needs to protect radiolocation services and these services are not fixed locations. Department requires more rationale in the explanation as to why the limits can't be met. Adam explained that he is concerned about the forward compatibility of the band and new frequency bands are identified 5G/flexible use. Esam agrees, filters will be required in the radios to meet the limits; those filters cannot be easily removed if the standard is subsequently relaxed. Veena, issue is about flexibility to expand the band without changing the radios to have the filters removed. Current proposed limits will result in Canada only equipment if the band is expanded internationally.
- Daryl, pleased to see alignment with ECC limits, but unfortunately the Canadian frequencies don't align with those in ECC. This will result in Canada only equipment. Josette asked for written comment. Daryl explained that written comment was provided by Jody. Filtering will require guard band to be expanded or -52db to be relaxed.

Mahmud asked for an explanation as to how this works in the ECC. Daryl responded. **Josette recommended an off-line discussion to better understand filtering.**

- Elisabeth asked the Department to explain how the limits for above 3690 MHz were arrived at. Why move away from FCC? Josette explained that this was based on feedback from industry and that lower limits from FCC were based on lower CBRS power limits. Elisabeth expressed concern over such a big change in the limit. Jody noted that this has been discussed at length already, so why are we revisiting? *[NTD: The meeting moved on to the SRSP. Elisabeth repeated her questions in an email to Josette; and Josette replied.]*

SRSP-520

- Mahmud Rahman reviewed the new updates.
- Paragraph 12. Jean-Yves asked the Department to clarify the 3rd sentence, noting it is not clear what is intended by “except for the band plan specified in section 5.” Mahmud agreed that the text should be clarified and that the section being referenced is not correct since new sections have been added to the draft.
- Paragraph 12 & 13. Esam asked for explanation of the rule if a radio changes. Christine responded that, in cases where a radio is changed, the operator must then comply with SRSP-520. Veena expressed confusion. This is a FDD band plan, so why the exception? Christine responded that the exemption pertains to the blocks the incumbent operators are using.
- Paragraph 18. Esam asked whether a guard band is required in the RSS? Christine explained that non-TDD must meet out-of-band emission limit which could be achieved with a guard band. ISED to clarify text. Adam suggested the text in paragraph 40 be used.
- Paragraph 23 & 24. Mahmud asked whether the square brackets can be removed? No objections raised so they will be removed. Jean-Yves noted that the RSS still refers to point-to-multipoint; Mahmud indicated that ISED would align the wording between the RSS and SRSP.
- Paragraph 23 & 24. Daryl asked whether this applies to channel or occupied bandwidth? He recommended the text be clarified to say, “average over entire channel bandwidth”. Marc Draper indicated that he previously raised this point. Mahmud agreed that ISED should review the text.
- Section 7. Esam proposed harmonizing blocks for an operator, otherwise the coordination issues will be very complex. Christine responded that this point will be covered in the licensing framework decision (consultation is 2019), and that would have been the time to raise concerns. Esam asked whether this could be addressed elsewhere?
- Paragraph 34. Esam, where in the country will an operator not have a neighbouring licensee within 70 kms? This should be deleted. Don agreed. Marc prefers to leave the paragraph. Esam explained, the wording is per licensee not per station. If per station, Esam agrees text could be kept. Mahmud indicated that it is a good point about using

per station. Don, still not sure 70 is correct number. Michel Eric suggested 40 km, not 70. Further, station information must be properly inputted into ISED database and may need more parameters than currently collected by ISED in the database. Mahmud stressed that ISED requires more justification as to why the 70 km limit should be reduced.

- Paragraph 39. Adam agrees with changes as they address his concern.
- Paragraph 48. Esam, is there a requirement to coordinate? Christine, yes. Michel, Inukshuk is using LTE systems up to 3650 MHz; have not encountered issues with WBS systems. So why add this requirement? Mahmud, because of increased power limits in the new standard. Esam agrees with Michel, why is unlicensed getting veto over licensed? Adam, this is probably a policy issue. However, the licensing framework consultation did not provide an opportunity to provide technical comments on coordination. The wording in the SRSP is giving equal priority to WBS. How/where do we address this? Christine/Matthew, ISED could add out of band emissions mask. What other options would members propose? Don agrees with Adam's concern regarding the current wording giving equal priority to WBS. Christine indicated that the Department requires a short-term remedy. Adam replied that the short-term remedy has long term implications in light of the upcoming 3500 MHz auction. **ISED will take this back for consideration.**
- Veena asked whether the number of WBS operators is known? Mahmud explained that the Department believes there are many – in the hundreds. Rob stated his agreement with Adam's concern and offered that, while there are 100s of stations in the database, 100s are also missing from the database.
- Paragraph 51. Julie, how will unlicensed earth station operators be notified? Christine, no decision on unlicensed earth stations, but they are not protected. Julie, CBC does not want to be in a position where it is reacting to interference, would rather take proactive measures once notified. Mahmud, how do you see notification working? Not all the unlicensed locations are known. Julie, CBC provided a list to ISED which could be added to the SMS database. Christine, what would the timeframe be for notification? Julie, not sure. Matthew, **please provide input regarding the parameters for a notification process.** Don, the onus should be on unlicensed CBC. Julie, trying to avoid being reactive. Don, that puts more onus on licenced. Elisabeth, the data has been provided already – why can't it be added to SMS? Christine, need to consult with ISED operations. Veena, is there anything to learn from the way WBS currently notifies CBC? Does the notification proposal apply to the entire band, or can it be narrowed?
- Paragraph 52. Esam, likes the new paragraph; please explain "certain technical requirements". Mahmud, since we don't have agreement with US, wording is required that hints at future requirement. Esam, so this is still an unknown? Mahmud, yes.
- Paragraph 53. Michel, at 2500 MHz we don't use the -114.5 db. Usually there is a negotiation between Canada/US. Christine, this is an incentive to get the operators to coordinate. ESAM, very disruptive for FWC operators using only 3500 MHz. Mahmud, ISED needs suggestions. Esam, this is a policy question. Christine, this is to trigger coordination. Veena, problem is the general access users of the band in the US are not

considered licensees for coordination. Mahmud, the Department continues to explore whether it can share the draft agreement with the US.

Closing comments/questions

- At 3:30 (which was past the planned end-time for the call), ISED indicated that it must drop from the call.
- Matthew reiterated that comments provided should include supporting rationale.
Comments to be provided by February 26th so that ISED can circulate revised drafts before the next call.
- The next call is scheduled for March 2.

The meeting adjourned at 15:30.

J. David Farnes
General Manager