

Work prioritization discussion

RABC Fixed Wireless Committee

November 3rd, 2016

Proposed agenda

- Meeting goal
- Description of potential work group activities
- Discussion
- Way Forward

Meeting goal

- Many topics potentially requiring setting up a FWC working group have been proposed by members since the May 5th meeting
 - There was agreement during September 29th RABC quarterly meeting to initiate working group activity on two of those topics:
 - Review of 6 GHz channel plan, bandwidths and antenna characteristics, as well as 11 GHz channel plan and bandwidths
 - Licensing framework for 71-76/81-86 GHz fixed services
- In its report during September 29th RABC quarterly meeting, ISED also indicated upcoming “revisions and development of technical rules stemming from backhaul decisions”
 - There may interest from RABC to provide advice on these upcoming documents
- There is limited resource not allowing to pursue all potential activities in parallel
- Therefore, there is a need to prioritise what is of upmost importance to members
- The proposal is to review the different activities and develop a ranking, so RABC can proceed with setting up working groups to start addressing the topics

Describing of the different activities put forward

- The following activities have been proposed for investigation within FWC (presented in order of frequency increase for discussion only)
 - Antenna requirements in 1.8 GHz
 - Review of 6 GHz channel plan, bandwidths and antenna characteristics
 - Review of SRSP-310.5 for 10.55-10.68 GHz band
 - Review of 11 GHz channel plan and bandwidths
 - Review of SRSP-317.8 for 17.8-18.3 GHz and 19.3-19.7 GHz
 - New SRSP-331.8 for 31.8-33.4 GHz band
 - Licensing framework for 71-76/81-86 GHz fixed services

Antenna requirements in 1.8 GHz

- The review of SRSP-310.5 has been brought forward by ISED during September 29th quarterly meeting, as a follow-up from SMSE-018-12 backhaul consultation decisions (SMSE-022-14) published in December 2014
 - This is in response to comments in section 8 proposing to revise antenna requirements for smart grid deployment in 1800-1830 MHz and ISED decision that “the Department will also permit the use of smaller antennas, as defined in future SRSP updates.”
- RABC could consider providing advice to ISED in preparation for the proposed revision of the 1.8 GHz band as indicated above

Review of 6 GHz channel plan, bandwidths and antenna characteristics

- **SMSE-018-12 backhaul consultation decisions (SMSE-022-14) reported that:**
 - Operators were experiencing congestion in the upper 6 GHz (sections 4.2.1, 5.1.1, 5.3.1, 5.3.2 and 5.3.3)
 - “the Department will also permit the use of smaller antennas, as defined in future SRSP updates.”
- **ISED reported during September 29th quarterly meeting its openness to receive RABC feedback on relative interest and priority on SRSP-306.4 channel plan and bandwidths (6425-6930 MHz)**
- **In the same meeting, RABC membership approved the creation for a working group within FWC to investigate potential use of larger RF channel and/or combining RF channels in SRSP-306.4 to cope with the transport capacity increase and explore newer antennas which could facilitate coordination and improve spectrum efficient use in this band**
 - Objective is to recommend to ISED to consider RABC inputs when revising the SRSP

NOTES: FCC recently allowed larger RF channel sizes of 60 MHz and 80 MHz in its channel plans for the Lower 6 GHz (5925-6425 MHz), as well as the use of smaller antennas without materially increasing the interference risk to other licensees (FCC Report and Order 12-87)

Review of SRSP-310.5 for 10.55-10.68 GHz band

- The review of SRSP-310.5 has been brought forward by ISED during September 29th quarterly meeting, as a follow-up from SMSE-018-12 backhaul consultation decisions (SMSE-022-14)
 - Section 9.1 specified that “The Department will remove the maximum capacity restriction from the 10 GHz band. As such, any point-to-point radio system in the fixed service using digital modulation will be permitted to operate within the frequency band, regardless of capacity, provided that it conforms to the technical requirements of the SRSP”
- RABC could consider providing advice to ISED in preparation for the proposed revision of the 10 GHz band as indicated above

NOTE: FYI, this decision was based on a proposal by RABC to allow MC (Medium Capacity), as only LC (Low Capacity) was previously allowed; it has been supported by all consultation’s respondents

Review of 11 GHz channel plan and bandwidths

- ISED “Commercial Mobile Spectrum Outlook” published in March 2013 indicated congestion in this frequency range
- SMSE-018-12 backhaul consultation decisions (SMSE-022-14) reported that operators were experiencing congestion in the 11 GHz (sections 4.2.1, 5.2.1 and 5.3.2)
- ISED reported during September 29th quarterly meeting its openness to receive RABC feedback on relative interest and priority on SRSP-310.7 channel plan and bandwidths (10.7-11.7 GHz)
- In the same meeting, RABC membership approved the creation for a working group within FWC to investigate potential use of larger RF channel and/or combining RF channels in SRSP-310.7 to cope with the transport capacity increase
 - Objective is to recommend to ISED to consider RABC inputs when revising the SRSP

NOTE: FCC recently allowed larger RF channel sizes of 60 MHz and 80 MHz in its channel plans for the 11 GHz and, ETSI band plans allow for larger bandwidths including 56 MHz and 112 MHz in the 10-50 GHz frequency range

Review of SRSP-317.8 for 17.8-18.3 GHz and 19.3-19.7 GHz

- The review of SRSP-317.8 has been brought forward by ISED during September 29th quarterly meeting, as a follow-up from SMSE-018-12 backhaul consultation decisions (SMSE-022-14)
 - The action, as specified in section 5.1.2 of SMSE-022-14, is to “establish specific technical rules for the 18.14-18.3 GHz and 19.3-19.36 GHz portions of the band”
- RABC could consider providing advice to ISED in preparation for the proposed revision of the 18 GHz band as indicated above

NOTE: FYI, RABC suggested in its SMSE-018-12 to “further explore whether these bands are suitable for applications using TDD technology”

New SRSP-331.8 for 31.8-33.4 GHz band

- In its “Commercial Mobile Spectrum Outlook”, ISED indicated that the 32 GHz band was “well suited for high-density fixed service (HDFS) applications, including both point-to-point and point-to-multipoint configurations.”
- The development of a new SRSP-331.8 has been brought forward by ISED during September 29th quarterly meeting, as a follow-up from SMSE-018-12 backhaul consultation decisions (SMSE-022-14)
 - ISED decision was that “The Department will designate the frequency band 31.8-33.4 GHz for fixed two-way point-to-point radio systems”
- RABC could consider providing advice to ISED in preparation to the proposed new SRSP for the 32 GHz

NOTES: RABC recommended to ISED in its SMSE-018-12 response “that the Department initiate consultations on the use of the 31.8-33.4 GHz bands for backhaul applications as soon as possible”. It also noted in its response that ETSI was allowing channel bandwidth up to 112 MHz in this band.

Licensing framework for 71-76/81-86 GHz fixed services

- During RABC working group review of ISED proposed draft SRSP-371.0, the issue of licensing fee was brought up
- As this was outside the scope of the working group, it was suggested to consider setting up a working group on the topic of licensing framework specifically for the frequency range 71-7/81-86 GHz
- In September 29th RABC quarterly meeting, membership approved the creation for a working group within FWC to explore the best appropriate licensing framework for the E-band (71-76/81-86 GHz), where the outcome could be a proposal of possible approach(es) that would be provided to ISED for consideration explicitly for this frequency range