Summary Meeting Report
ITU-R Radio Assembly (ITU-R RA): 13th – 17th November 2023 (Dubai)

Relating to the 23cm Band RNSS Coexistence Aspects and WRC-23 AI 9.1b

The Radio Assembly meets in the week before the World Radio Conference (WRC) and amongst other things, deals with matters left unresolved from the ITU-R Study groups that may be important elements for the discussions at the WRC. The incomplete ITU-R Recommendation ITU.R M.[AS_GUIDANCE] from WP5A on 23cm band Amateur/RNSS coexistence falls into this category.
At the RA the IARU was represented in person by Barry Lewis (G4SJH – WRC-23 AI9.1b Lead).
The meeting supported a US proposal for Jon Siverling (WB3ERA) from ARRL to chair the relevant sub working group as identified below.

Background

As detailed in the report from WRC-23 CPM-1, ITU-R WP5A was the lead group responsible for developing the CPM report on agenda item 9.1 topic b and worked in with WP4C on the studies identified under invites 2 of Resolution 774 (WRC19). Unfortunately due to hard positions from some administrations neither the last WP5A meeting nor the subsequest Study Group 5 meeting were able to finalise the ITU-R Recommendation M.[AS_GUIDANCE] in time to be available for consideration in the WRC-23 discussions. (See the previous WP5A Report).

Three contributions were provided to the RA by CITEL, Australia/Japan and Europe (Multi Country).

RA input contributions

Doc RA23/PLEN/13-E – Member States of the Inter-American Telecommunication Commission: (CITEL)
Doc RA23/PLEN/18-E – Australia and Japan
Doc RA23/PLEN/37-E – Germany (Federal Republic of), Austria, Belgium, Bulgaria (Republic of), Cyprus (Republic of), Croatia (Republic of), Denmark, Spain, Estonia (Republic of), Finland, France, Greece, Hungary, Ireland, Italy, Latvia (Republic of), Lithuania (Republic of), Luxembourg, Malta, Montenegro, Norway, Netherlands (Kingdom of the), Poland (Republic of), Portugal, Slovak Republic, Czech Republic, Romania, Slovenia (Republic of), Sweden, Switzerland (Confederation of)
All three proposed variations of the draft Recommendation including technical annexes based on the final draft from the ITU-R WP5A discussions. No contribution was made by ITU-R Study Group 5.

**IARU objectives for RA**

The IARU was able to participate in the discussions within the RA with the objective to finalise the Recommendation ahead of the WRC. The IARU supports the development of the Recommendation as a necessary component to the WRC discussions so as to avoid other regulatory action that some parties are considering and proposed in contributions to the WRC. For example technical conditions could be proposed in a WRC Resolution in the Radio Regulations.

**RA Meeting Activity**

The contributions above were allocated directly into RA Working Group 4. There was no discussion of the specific contributions during the opening plenary however some administrations (China and the Russian Federation specifically) raised procedural and technical objections to the contributions and proposed that they should not be even discussed. These objections continued into the WG4 opening session where the Russian Federation highlighted their view that the contributions contravened the ITU-Resolution on the RA procedures in that the proposals did not come from the relevant Study Group. China continued to oppose discussion and instead stated that it should take place during the WRC.

Nevertheless, the documents were addressed in a sub-working group WG4C chaired by Jon Siverling. In the meantime the RA chair had convened an off-line meeting with the relevant parties to discuss the procedural aspects including the possibility for legal advice from the ITU-R bureau.

In summary and procedural aspects aside, the Russian Federation were chiefly concerned with the proposal in Document 37 for no technical measures between 1240 and 1256 MHz. China supplemented the Russian Federation objections and were most concerned about the amateur satellite operations between 1260 and 1270 MHz claiming the measures had never been agreed previously despite the three years of discussion in ITU-R WP5A. The Chinese technical experts were not in the meeting.

Despite all the objections, those willing to find a solution persisted and the sub-group quickly agreed to develop a composite proposal from documents 13 and 18. The preamble parts (recognisings, considerings and recommends etc.) were taken from document 18 and the technical annex was taken from document 13.

Additionally the Russian Federation brought in additional technical aspects (previously seen in WP5A) including conditions associated with amateur operation near airports. China’s objections to technical measures around 1260 MHz continued. In both cases these proposals were not acceptable for several administrations nor the IARU.
After lengthy and detailed negotiations a final version of the Recommendation was eventually agreed at the very last minute. Extra time had to be allowed for discussion by the WG4 chair and later the RA chair to find a compromise.

**The output document**

**Revision 2 to Document RA23/PLEN/74-E**: This is the final Recommendation adopted by the meeting. Some editorial work by the ITU-R Bureau will be carried out before publication as ITU-R M.2164.

**IARU Observations:**
With respect to the Recommendation, there was no discussion about the weak signal working part of the band covering 1296 – 1300 MHz. The previously agreed conditions of use remained unchanged as detailed in earlier versions of the draft Recommendation.

The heaviest discussion focussed on the proposed “broadband” part around 1256 MHz and the amateur satellite part from 1260-1262 MHz. Around 1256 MHz there is an overlap with all three RNSS systems so finding the compromise was challenging. In the end the amateur service retains 2.3 MHz of viable spectrum for broadband activities at reasonable power levels in the range 1 255.76 MHz to 1 258 MHz. China proposed many variations of parameters relating to amateur satellite operation but finally technical conditions were agreed for viable amateur satellite operation in the range 1260-1262 MHz.

In the parts of the band outside these “preferred frequency blocks” the proposed very low power levels in effect suppress any meaningful amateur activity. These levels are deemed necessary to protect the RNSS from the potential for harmful interference.

Importantly though, that the Recommendation is clearly identified as “Guidance” and there is the flexibility for administrations to do anything or nothing as they feel appropriate.

**Finally there will be further discussion on proposals in the WRC** that may attempt to make the recommended measures more mandatory in the Radio Regulations. That is a discussion for the WRC. The IARU is opposed to that as are several regional regulatory organisations.

Barry Lewis G4SJH