



# International Amateur Radio Union

## Summary Meeting Report

ITU-R WP5A #30: 13th – 22nd September 2023 (Hybrid Meeting)

ITU-R SG5: 25th – 26th September 2023 (Hybrid Meeting)

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

At WP5A the IARU was represented in person by Barry Lewis (G4SJH – WRC-23 AI9.1b Lead) and by Ole Garpestaad (LA2RR – IARU International).

Participation in SG5 took place online.

## WP5A Background

As detailed in the report from WRC-23 CPM-1, ITU-R WP5A is the lead group responsible for developing the CPM report on agenda item 9.1 topic b and is working in collaboration with WP4C on the studies identified under *invites 2* of Resolution 774 (WRC19).

This is the last WP5A meeting ahead of the WRC-23 and all final deliverables need to be submitted to Study Group 5 for adoption in order to be available for consideration in the WRC discussions.

The contributions relating to this WRC-23 agenda item 9.1 topic b work were dealt with in working group WG5A-1 which met for thirteen sessions over nine meeting days. Additional meeting time was agreed devoted solely to this AI 9.1b topic before the main WP5A meeting started on Monday 18th September

WG5A-1 also deals with other aspects related to the amateur and amateur satellite services reported elsewhere.

IARU provided one contribution to this meeting. Other contributions were provided by Japan, Canada, China, France/Korea, Germany and Russian Federation. A liaison document from WP4C and a contribution from CITEL (the Americas WRC preparatory organisation) were considered. These were all presented in WG5A-1 and used as the basis for ongoing discussion and development of the WG5A-1 deliverables. The deliverables under development relating to AI9.1b are:

1. draft technical report **ITU-R M.[AMATEUR.CHARACTERISTICS]**
2. draft ITU-R Recommendation **ITU-R M.[AS\_GUIDANCE]**

## WP5A working documents from the previous meeting

The following working documents carried over from the previous meeting #29 formed the basis for the work to progress:

**Document 5A/769-E, Annex 5** - The draft technical report ITU-R M.[AMATEUR.CHARACTERISTICS].

**Document 5A/769-E, Annex 6** - The draft recommendation ITU-R M.[AS\_GUIDANCE].

### **WP5A #30 input contributions**

**Doc 5A/782** – ITU-R WP4C - Liaison

**Doc 5A/789** – Canada– Support to continue working with the draft ITU-R Recommendation ITU-R M.[AS\_GUIDANCE] based on the output from 5A meeting #29.

**Doc 5A/795** – Russian Federation – technical proposals for the draft recommendation ITU-R M.[AS\_GUIDANCE] Annex.

**Doc 5A/800** – IATC/CITEL - Proposals for the draft recommendation ITU-R M.[AS\_GUIDANCE] *recognizings*.

**Doc 5A/801** – Japan - Technical proposals for the draft recommendation ITU-R M.[AS\_GUIDANCE] Annex.

**Doc 5A/804** – IARU - Technical proposals for the draft recommendation ITU-R M.[AS\_GUIDANCE] Annex.

**Doc 5A/810** – France/Korea - Technical proposals for the draft recommendation ITU-R M.[AS\_GUIDANCE] Annex including limiting the range covered to 1 256 MHz to 1 300 MHz.

**Doc 5A/818** – China - Technical proposals for the draft recommendation ITU-R M.[AS\_GUIDANCE] Annex.

**Doc 5A/826** – Germany - Proposals for the draft recommendation ITU-R M.[AS\_GUIDANCE] to develop two annexes.

In addition one contribution **Doc 5A/809** from France was provided relating to the draft ITU-R Report M.[AMATEUR\_CHARACTERISTICS]

### **IARU objectives for WP5A**

The IARU objectives were to finalise the technical proposals for the draft Recommendation laid out in the IARU contribution (Doc 804). The IARU opposes operational constraints that in some cases would completely suppress any amateur service operation in the band. Identifying spectrum in the parts of the band around 1255 MHz for broadband (DATV) activities was a key objective.

The IARU also supported completion of the draft Report on amateur and amateur satellite characteristics and its onward transmission to Study Group 5 for adoption.

### **WP5A Meeting Activity**

a) Report ITU-R M.[AMATEUR\_CHARACTERISTICS]

With the acceptance of IARU contributed study material as a revision of Report M.2315 developed in WP4C, the report was completed and elevated to 'Draft New Report' status for SG5 consideration. This work is complete.

b) Draft Recommendation **ITU-R M.[AMATEUR\_GUIDANCE]**

Discussions in this item were intense and the differences in views were impossible to resolve. The technical measures proposed for the top part of the band (above 1296 MHz) remained stable and there appears to be no contention here (only GALILEO is affected).

Several proposals for technical constraints on the amateur service in certain parts of the band would result in no possibility to operate any amateur application. In particular the proposals from the Russian Federation (aiming at protecting airborne RNSS GLONASS receivers) included several e.i.r.p. proposals in the milli-Watt region across large swathes of the band.

The main disagreement centred on proposals to identify a block of spectrum for broadband amateur applications in the range 1254 MHz to 1260 MHz. (IARU proposed 1254-1258 MHz). This range overlaps with the edges of all the RNSS systems in the band. The Russian Federation proposed such stringent e.i.r.p. constraints that no amateur applications would be able to operate.

Russian Federation argue that these levels are based on the studies published in ITU-R M.2513 and are required to properly protect the RNSS system. They reiterated the view liaised from WP4C that no proposed measures in the draft Recommendation fully protect the RNSS and therefore objected to any acceptance of the measures in the draft recommendation. This was one aspect that prevented consensus on the draft recommendation, therefore stalling the completion of the work.

From a regulatory perspective arguments continued about use of the word “guidance” in the recommendation annex. The CITELE representative (the Americas) objected to proposals from one country (France) to remove this word. (France has been driving the CEPT sub-region towards mandating the technical measures as an outcome of the WRC-23). Consensus on this matter could not be reached either.

After a great deal of discussion and hours of offline activity, attempts to find consensus on a way forward could not be found and no further progress could be made. The draft Recommendation was presented to the WP5A plenary with 3 alternatives for the technical measures annex:

**Alternative 1:** This was worked on in detail in the meeting with some compromises made to identify a specific frequency block for wideband amateur activities. The section 1296 to 1300 MHz remained unchanged. However concerns from the Russian Federation required specific measures that referred to parts of the band where GLONASS might operate proposing very stringent eirp levels. France refused to support this “guidance” annex and took no part in the discussion.

**Alternative 2:** This was introduced by France and proposed “no technical measures” from 1240 to 1256 MHz. In effect the current status-quo would remain below 1256 MHz. The section 1296 to 1300 MHz remains the same as for alternative 1.

**Alternative 3:** This reflected the Russian Federation contribution 5A/795. The section 1296 to 1300 MHz remains the same as for alternative 1 but no other part of the band would support any amateur application.

Generally speaking the IARU can be content with either alternative 1 or 2 with a preference for alternative 2 from the technical perspective. However alternative 2 could not be fully agreed as the word “guidance” had been removed from the title of the technical annex.

In the plenary session there was no consensus to adopt the draft from WG5A-1 for approval in SG5 due to objections from the Russian Federation. Instead the WP5A chairman attached the draft to his Executive report to facilitate a discussion in SG5.

### **Summary of the WP5A meeting outputs relevant to AI 9.1b**

**5/166-E:** PDNR ITU-R M.[AMATEUR.CHARACTERISTICS]. The completed report passed to SG5 for adoption.

The status of the working document towards a Recommendation on guidance is unclear as no further work can be carried out in WP5A in this study cycle.

**Next WP-5A meeting:** None in this study cycle.

### **Study Group 5**

Study Group 5 took place during 25-26th September 2023. The meeting approved the DNR ITU-R M.[AMATEUR.CHARACTERISTICS] for publication.

The status of the draft Recommendation was discussed with similar objections being raised by certain parties in this meeting also. Again, despite concerted effort behind the scenes (by correspondence) still no consensus could be reached.

Therefore by the end of the WP5A and Study Group 5 meetings there is still no agreed recommendation ITU-R M.[AMATEUR\_GUIDANCE] for consideration during the WRC-23 discussions.

It is expected that further discussion could take place during the ITU-R Radio Assembly meeting held in the week before the start of WRC-23.

Barry Lewis G4SJH