



International Amateur Radio Union

Region 1

Comments on

Public consultation on the Draft RSPG Opinion on the ITU-R World Radiocommunication Conference

Introduction

The International Amateur Radio Union (IARU) is a Non-Governmental Organisation representing the interests of Radio Amateurs. The amateur radio service is one of the oldest radio services recognised and regulated by the International Telecommunication Union (ITU) and pre-dates the regulation of radio communications. Having a strong Amateur Radio service has been recognised by Governments not only for the development of technical knowledge but as providing a network of radio stations which is geographically diverse and is able to assist in times of disaster.

The economic importance of having a sufficient supply of trained engineers and scientists within the Union to meet future employment needs and technological development is critical. Amateur radio can provide an introduction to practical engineering, mathematics and physics to youth which directly contributes to a promotion in interest in careers in STEM.

To begin with we wish to address two agenda items which we believe are significant for the Union but so far are not included in detail in the draft opinion.

Para 4.13 Other Agenda Items - 1

WRC-19 Agenda Item 1.1 – 50-54 MHz allocation

IARU maintains that RSPG is remiss in disregarding the relevance of ITU WRC-19 Agenda Item 1.1 (AI-1.1) which requests the World Radiocommunication Conference in 2019 to consider a 50-54 MHz frequency allocation to the amateur service in the CIS, Africa, Europe and the Middle East (ITU Region 1) in a similar manner to the rest of the World in accordance with Resolution 658 of WRC-15.

Agenda Item 1.1 originates from a CEPT Proposal supported by EU/RSPG members at ITU WRC-15 which was developed by Project Team A of CEPT's Conference Preparatory Group,

The development of innovative technology by the amateur service has the potential to create significant societal and STEM benefits in line with EU policy,

However such a development is now being opposed (particularly by non-EU states) within CEPT with the following consequences:

- Undermines and blocks current and future Innovation that would have wider societal benefits thus incurring an opportunity cost
- Supports inefficient and in some cases minimal use of spectrum by governmental services in a frequency band that is not a core requirement in the NATO Joint Frequency Agreement
- Ignores the facts e.g. 30 years of interference-free amateur service usage on a national basis in the 50-52 MHz frequency band (and 50-54 MHz in parts of Africa)
- Has potential consequences for EU TV Broadcasting policy in respect of analogue switch off in the band 47-68 MHz, due to restrictions that may be imposed on the Union's Eastern member states
- Appears not to be in favour of EU Member States having the possibility of allocating up to 2 MHz of additional spectrum on a secondary basis to their amateur service in the band 52-54 MHz, which is key to supporting the latest developments and innovation. This wider range would enable a greater degree of tuning for finding (or locally coordinating) vacant channels and compatibility with other services.

In addition studies have not identified any significant commercial use of the 50-54 MHz band. Given that governmental use may often only be for occasional contingencies, or in localised areas we maintain there is ample opportunity to accommodate amateur service requirements.

Furthermore, numerous other opinions by the RSPG (principally in the field of IMT) have either ignored or have resulted in negative consequences for the amateur and amateur satellite service in higher frequency bands above 1 GHz, without any compensation in terms of replacement spectrum.

IARU therefore urges the RSPG and Commission to take a far more pro-active and supportive position with respect to the granting of a 50-54 MHz frequency allocation to the amateur service with at least a portion of that on a Primary basis. The latter would provide a harmonisation with the situation outside Africa, CIS, Europe and the Middle East, where the rest of the World has had a frequency allocation to the amateur service in the 50-54 MHz frequency band since the International Radio Conference in 1947. It would also provide the amateur service in Member States with a greater degree of certainty in the event of any further re-planning of the band which at ITU level remains as a primary broadcasting band.

Para 4.13 Other Agenda Items -2

Item 9.1.6 Wireless Power Transfer for Electric Vehicles (WPT-EV)

IARU has a particular concern with this item as the high powers and duty cycles involved (in the ~10-100kW range) can lead to high levels of spurious/harmonic emissions and have a widespread impact on amateur, standard time, navigation and broadcast services. It thus needs to be potentially treated as a radio application and be controlled by robust ITU-R (and CEPT) recommendations. We also would highlight that the technology is far from 100% efficient, and such inefficiencies may also have negative consequences for the Union's goals on lowering carbon emissions.

Para 4.3 and 4.9: Agenda Items 1.13 (IMT2020/5G) and 1.6 (Non-GSO FSS Q/V band)

Attention is drawn to the amateur and amateur-satellite service Primary allocations at 24-24.05 and 47-47.2 GHz and the necessity of protecting these bands from unnecessary interference from adjacent out-of-band emissions from these newer services.

Para 4.4: WRC-19 Agenda Item 1.7 (Nano-/Picosatellites)

IARU welcomes the development of Nano-/Picosats particularly for STEM missions. IARU has already contributed by launching a series of CubeSats and facilitating the frequency coordination of satellites operating on amateur service frequencies. IARU is anxious that any future developments respect existing frequencies.

Para 4.11: WRC-19 Agenda Item 1.16 and Issue 9.1.5 (RLAN 5 GHz)

IARU notes and welcomes the draft recommendation to “ensure compatibility with other services and applications in the 5725-5850 MHz range”.

It is unfortunate that CEPT have excluded consideration of some of these other services. There is considerable amateur service usage of frequencies from 5725-5850 MHz on a secondary basis in developing networks such as HamNet throughout the Union. Apart from the experimental dividend the availability of and ability to use such networks for civil protection in case of emergency is a feature of the contribution of the amateur service to society. Additional applications include narrowband weak-signal communications and propagation research (at ~5760 MHz), and amateur satellite downlinks (at ~5840 MHz).

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