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**PLENARY MEETING**

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**Note by the Secretary-General**

INTERNATIONAL AMATEUR RADIO UNION (IARU)

**IARU POSITIONS ON WRC-19 AGENDA ITEMS OF PARTICULAR INTEREST  
TO THE AMATEUR AND AMATEUR-SATELLITE SERVICES**

I have the honour to bring to the attention of the Conference, at the request of the International Amateur Radio Union (IARU), the annexed information paper.

Houlin ZHAO  
Secretary-General

The International Amateur Radio Union has participated in ITU conferences since 1927 and has been a sector member of ITU since 1932, playing an active role in the work of the Radiocommunication and Development Sectors on behalf of more than three million licensees in the amateur and amateur-satellite services. Overall IARU objectives for WRC-19 are:

- Global harmonization of the amateur 50-54 MHz allocation
- Maintenance of existing spectrum access for amateurs
- Strengthening protection for radiocommunication services against interference from other generators of RF energy, in particular those used for Wireless Power Transmission.

The following agenda items are of particular interest to IARU.

*Agenda item 1.1, 50-54 MHz*

The only WRC-19 agenda item on which the IARU seeks an allocation to the amateur service is agenda item (AI) 1.1, regarding the frequency band 50-54 MHz in Region 1. The band is now allocated on a primary basis to the amateur service in Regions 2 and 3 and to some countries in Africa by country footnote. As noted in the CPM Report, sub-regional and national allocations have been implemented in a number of Region 1 countries for many years within the 50-52 MHz frequency band without any reported difficulties occurring. **The IARU therefore supports modification of the Table of Frequency Allocations to allocate the 50-54 MHz frequency band to the amateur service on a primary basis in Region 1 to provide a harmonized allocation across all three Regions.**

*Agenda item 1.7, spectrum for non-GSO satellites*

The IARU supports satisfying the spectrum requirements for non-GSO satellites with short duration missions within the existing non-amateur allocations for the space operation service or the frequency ranges identified in *invites ITU-R 3* of Resolution **659 (WRC-15)**, unless the satellites are amateur satellites as defined in RR Nos. **1.56** and **1.57**.

*Agenda items 1.12, intelligent transport systems (ITS) and 1.16, wireless access systems*

The frequency band 5 650 MHz to 5 850 MHz (5 650 MHz to 5 925 MHz in Region 2) is allocated to the amateur service on a secondary basis. The frequency band 5 830 MHz to 5 850 MHz is allocated to the amateur satellite service (space-to-Earth) on a secondary basis, and in the frequency band 5 650 MHz to 5 670 MHz, the amateur-satellite service (Earth-to-space) may operate subject to not causing harmful interference to other services operating in accordance with the Table.

The frequency band 5 760 MHz to 5 765 MHz is used for amateur weak-signal communication activity including terrestrial and Earth-Moon-Earth communications and propagation beacons.

There is growing interest among radio amateurs in experimentation, investigation of propagation phenomena, point-to-point communication and space communication in this band.

**IARU requests that existing and future amateur use in this band be protected with special attention to the bands 5 760 MHz to 5 765 MHz and 5 830 MHz to 5 850 MHz.**

*Agenda item 1.13, IMT*

**IARU supports no change (NOC) to the 47-47.2 GHz frequency band.** This narrow primary allocation to the amateur and amateur-satellite services is the only spectrum in which amateur experimentation with millimetre wavelengths can be conducted without practical constraints imposed by sharing with other services. Any identification for IMT in the frequency range 24.25-27.5 GHz should be accompanied by protection for the primary amateur and amateur-satellite

allocation at 24-24.05 GHz, similar to what must be provided for the passive services below 24 GHz.

*Agenda item 1.15, 275-450 GHz*

Resolution **767 (WRC-15)** recognizes that the amateur service is developing and demonstrating applications above 275 GHz. As studies proceed to identify candidate frequency bands for other services in the frequency range 275-450 GHz the IARU supports maintaining access for non-commercial experimentation by stations in the amateur service to as much of the frequency range as possible, consistent with the protection of the passive and other active services.

*Agenda item 4, review of resolutions and recommendations of previous conferences*

IARU supports the revision of Resolution **641 (Rev.HFBC-87)** proposed by the High Frequency Coordination Conference in ITU-R Study Group 6. Resolution **641 (Rev.HFBC-87)** prohibits the broadcasting service from operating in the band 7 000 kHz to 7 100 kHz. WRC-03 reallocated 7 100 kHz to 7 200 kHz from the broadcasting service to the amateur service as part of a realignment of allocations between 7 100 kHz and 7 450 kHz. The conditions that led to the adoption of Resolution **641 (Rev.HFBC-87)** still exist and now apply to the 7 000 kHz to 7 200 kHz band.

*Agenda item 9, issue 9.1.6, wireless power transmission for electric vehicles (WPT-EV)*

When new technology is developed that generates RF energy it is essential that adequate protection of radiocommunication services be included in the system design. WPT-EV involves very large amounts of RF power and involves components connected in a system with associated power supplies and control equipment. In accordance with RR Nos. **15.12** and **15.13** the spurious emissions from all these system parts must be carefully controlled to avoid degrading the radio spectrum and causing interference to radiocommunication services.

IARU notes that studies have taken place into the choice of operating frequencies for WPT-EV systems and that these provide adequate protection to the amateur service around the fundamental frequencies of operation. However, the question of spurious emissions from WPT-EV systems requires considerable further study, as studies so far show a considerable potential impact on radiocommunications services operating in the MF and HF spectrum. IARU believes that these studies into the spurious domain should be completed as soon as possible so that proper protection can be afforded to incumbent radiocommunications services.

*Agenda item 10, items for inclusion in future WRC agendas*

No future agenda items for new or harmonized spectrum allocations for the amateur services are being sought at WRC-19. This position does not preclude seeking specific allocations in the unallocated spectrum above 275 GHz if allocations to other services are considered.

IARU is carefully monitoring proposals for future agenda items that may impact existing amateur and amateur-satellite allocations.

IARU notes that CEPT has a proposed agenda item for WRC23 “to review the amateur service secondary allocation in the 1 240-1 300 MHz frequency band to determine if additional measures are required to ensure the protection of the radionavigation-satellite (space-to-Earth) service operating in the same band”. In IARU’s view this is better studied via the existing work item already under way within CEPT, where discussions would be more focused. This could achieve a faster resolution and allow the amateur service to modify its band plans if needed to ensure that cases of harmful interference are avoided.

If ITU's attention to the issue is determined to be desirable, the IARU respectfully suggests that the ITU-R Study Groups represent a more appropriate forum than a WRC. The Radio Regulations already establish that the amateur service is secondary in the band; nothing more is required to establish RNSS regulatory priority. The appropriate place to set out mitigation techniques would be in an ITU-R Recommendation, which can be developed more quickly in the Working Parties and adopted well before WRC-23.

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