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| **41 MEETING OF PERMANENT**  **CONSULTATIVE COMMITTEE II:**  **RADIOCOMMUNICATIONS**  **May 22 to 26, 2023**  **Mexico City, Mexico** | | **OEA/Ser.L/XVII.4.2.41**  **CCP.II-RADIO /doc. /23**  **01 May 2023**  **Original: English** | |
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|  | **PROPOSALS FOR THE WORK OF THE CONFERENCE**  **AGENDA ITEM 9.1 Topic B** | |  |
|  | **(Item on the Agenda: 3.1 (SGT-5))** | |  |
|  | **(Document submitted by the administration of the United States of America)** | |  |

**Impact on the sector:**

This document supports the work of CITEL’s PCC.II Working Group for WRC under 3.1 of the agenda.

**Executive Summary:**

This contribution is a preliminary proposal in relation to WRC-23 agenda item 9.1 Topic B. The United States proposes that a No Change to the Radio Regulations should be made under Agenda item 9.1 Topic B and suppression of Resolution 774 (**WRC-19)**. Administrations are encouraged to take into account ITU-R Reports/Recommendations under development on how the amateur allocation can coexist with primary services in the 1240 – 1300 MHz band

**UNITED STATES OF AMERICA**

**PROPOSALS FOR THE WORK OF THE CONFERENCE**

**Agenda Item 9.1 b)**: *Review of the amateur service and the amateur-satellite service allocations in the frequency band 1 240 1 300 MHz to determine if additional measures are required to ensure protection of the radionavigation-satellite (space-to-Earth) service operating in the same band in accordance with Resolution****774 (WRC-19)***

**Background**:

Resolution **774 (WRC-19)** *resolves to invite the ITU Radiocommunication Sector:*

*“1 to perform a detailed review of the different systems and applications used in the amateur service and amateur-satellite service allocations in the frequency band 1 240-1 300 MHz;*

*2 taking into account the results of the above review, to study possible technical and operational measures to ensure the protection of RNSS (space-to-Earth) receivers from the amateur and amateur-satellite services in the frequency band 1 240-1 300 MHz, without considering the removal of these amateur and amateur-satellite service allocations.”*

The amateur service has a global secondary allocation in the 1 240-1 300 MHz frequency band. The amateur-satellite service has a secondary allocation in 1 260-1 270 MHz

(Earth-to-space) (see No. **5.282**). Services with primary allocations in these frequency ranges include the radionavigation-satellite service (RNSS) (space-to-Earth) and (space-to-space), the radiolocation service, the earth exploration-satellite service (active), and the space research service (active).

Based on years of operational experience, many applications of the secondary amateur and amateur satellite services have successfully co-existed with all the primary services in the range 1 240-1 300 MHz. However, some cases of harmful interference caused by transmissions from stations in the amateur service operating on a secondary basis into RNSS (space‑to-Earth) receivers operating on a primary basis have been observed, documented and reported in two countries.

Subsequent ITU-R studies provided an estimate of potential interference distance and confirmed that the impact of interference generally depends on the bandwidth and power of the interfering signal. Furthermore, these studies predicted that RNSS receiver protection criteria could be exceeded by co-frequency emissions from typical amateur stations.

In some cases where certain applications (in particular wide bandwidth, high duty cycle applications) could increase the potential for interference, specific spectrum management techniques and national licensing conditions have minimized any risk of harmful interference. The ITU-R is developing a Recommendation ITU‑R M.[AS.GUIDANCE] providing guidelines in order to avoid such cases of harmful interference to the RNSS receivers in the future. This Recommendation could include, *inter alia*, encouragement of the use of specific sub-bands with sufficient frequency offsets from the spectrum main lobes of RNSS signals to enhance the protection of RNSS receivers in the bands under consideration. These guidelines are intended to assist administrations and the amateur and amateur-satellite services to ensure the protection of the RNSS (space-to-Earth) in the frequency band 1 240-1 300 MHz.

Given the secondary allocation status of the service, there is no present need for any additional regulatory, operational or technical conditions incorporated into the Radio Regulations. The ITU-R can address and facilitate the compatibility between the secondary amateur and amateur-satellite services and co-frequency primary incumbent services through ITU Reports or Recommendations providing additional information for administrations on operational and technical matters that could be considered on a national basis.

**Proposals**:

**NOC** USA/9.1-B/1

ARTICLES

**Reason**: The United States is of the view that no changes to the Radio Regulations should be made under this Agenda item 9.1 topic. Administrations are encouraged to take into account ITU-R Reports/Recommendations under development on how the amateur allocation can coexist with primary services in the 1240 – 1300 MHz band.

**SUP** USA/9.1-B/2

RESOLUTION 774 (WRC-19)

**Studies on technical and operational measures to be applied in the frequency band 1 240-1 300 MHz to ensure the protection of the radionavigation-satellite service (space-to-Earth)**

**Reason:** Consequential action