

## UNITED STATES OF AMERICA

### DRAFT PROPOSALS FOR THE WORK OF THE CONFERENCE

**Agenda Item 9:** *to consider and approve the Report of the Director of the Radiocommunication Bureau, in accordance with Article 7 of the Convention:*

9.2 *on any difficulties or inconsistencies encountered in the application of the Radio Regulations;*

#### **Issue: CLARIFICATION IN THE RADIO REGULATIONS OF THE USE OF THE SPACE RESEARCH SERVICE (DEEP SPACE)**

**Background Information:** During the preparations for WRC-12 Agenda item 1.25 and WRC-15 Agenda item 1.9.1, there were discussions of the protection of near-Earth operation of deep space missions that produced a misunderstanding of whether those near-Earth operations of deep space missions should be protected in the same manner as for transmissions/receptions in the deep space region.

In examining the wording of RR Nos. **5.460** and **5.465**, which apply to the 7 145-7 235 MHz and 8 400-8 500 MHz space research allocations, it was concluded that there may be an interpretation of these footnotes which are physically impossible to comply with and lead to constraints on the use of frequencies that are not compatible with the design of a spacecraft meant for deep space operations. To resolve the issue, it was proposed that the definition of the space research service in Article **1** should be modified to indicate that a deep space station may use an SRS deep space allocation when it has to operate in the region of space between the Earth and deep space (i.e. near Earth region) during launch and early orbit phases, Earth flybys, or when returning to Earth. Consequential modifications to RR footnotes **5.460** and **5.465** were also suggested. These views were transmitted to the Special Committee for consideration and to the Director, BR for possible inclusion in his Report to the WRC under Agenda Item 9.2.

The Special Committee (SC) noted that there were other footnotes than just **5.460** and **5.465** in Article **5** that were designated for deep space and there should be further study of those footnotes. The SC concluded that Article **1** was not in its mandate and referred this issue to CPM-15 under Agenda Item 9.2.

The United States has examined all the deep space allocations in Article **5** (both footnote and Table allocations) and concluded that none of those provisions need to be modified if a provision is added in Article **4** to describe the use of deep space SRS allocations when spacecraft operate near the Earth. Consequently, that is what is proposed herein.

It is noted that the United States has a companion proposal under Agenda Item 1.11 to modify footnote **5.460** that is consistent with this proposal and provides further clarity. Depending on the results under that agenda item, No. **5.460** may need some consequential edits consistent with this proposal.

#### **Proposals:**

**MOD**

## ARTICLE 4

### **Assignment and use of frequencies**

**ADD**

**4.xx** Space research service allocations with a “deep space” designation are restricted for use by space networks that principally operate in or to the deep space region. Such space networks are also authorized to use these allocations during launch and near-Earth operational phases.

**Reasons:** To clarify that space research service allocations designated for deep space use may also be used to support near-Earth operational phases such as during launch, early orbit, Earth flyby and sample return.