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| **40 MEETING OF PERMANENT****CONSULTATIVE COMMITTEE II:****RADIOCOMMUNICATIONS****October 31 to November 04, 2022****Port of Spain, Trinidad and Tobago** | **OEA/Ser.L/XVII.4.2.39** **CCP.II-RADIO /doc. /22****6 October 2022****Original: English** |
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|  | **DRAFT PROPOSALS FOR THE WORK OF THE CONFERENCE** **AGENDA ITEM 7 TOPIC D1** |
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|  | **(Item on the Agenda: 3.1)****(Document submitted by the United States of America)** |

**Impact on the sector:**

This document supports the CITEL PCCII WRC Working Group’s preparations for WRC-23.

**Executive Summary:**

This document contains a preliminary proposal from the United States for WRC-23 agenda item 7 Topic D1 regarding Modifications to Appendix 1 to Annex 4 of RR Appendix 30B.

**UNITED STATES OF AMERICA**

**DRAFT PROPOSALS FOR THE WORK OF THE CONFERENCE**

**AGENDA ITEM 7**: *to consider possible changes, and other options, in response to Resolution 86 (Rev. Marrakesh, 2002) of the Plenipotentiary Conference, an advance publication, coordination, notification and recording procedures for frequency assignments pertaining to satellite networks, in accordance with Resolution* ***86 (Rev.WRC-07)****, in order to facilitate rational, efficient and economical use of radio frequencies and any associated orbits, including the geostationary satellite orbit;*

Resolution **86 (Rev.WRC‑07)** – *Implementation of Resolution 86 (Rev. Marrakesh, 2002) of the Plenipotentiary Conference*

**Topic D1** - *Modifications to Appendix 1 to Annex 4 of RR Appendix* ***30B***

**BACKGROUND INFORMATION**:

Appendix 1 to Annex 4 of Appendix **30B** of the Radio Regulations deals with the method to determine the overall single-entry and aggregate carrier-to-interference (*C/I*) value averaged over the necessary bandwidth of the modulated carrier.

The World Radiocommunication Conference (WRC) 2019 adopted modifications to sections 1.1 and 1.2 of Annex 4 of RR Appendix**30B** by amending the minimum orbital separation between GSO satellite networks to be exceeded in order to be considered as unaffected and not be identified by the Bureau when performing its examination under § 6.5 of RR Appendix **30B**. The minimum orbital separations were changed from 10° and 9° to 7° and 6°, in §§ 1.1 and 1.2 of Annex 4 of RR Appendix**30B**, respectively. However, these modifications were not reflected in section 2 of Appendix 1 to Annex 4 of RR Appendix **30B** where 10 and 9 degrees are still referred to for the calculation of the aggregate *C/I* ratio at any given downlink test point.

WRC-23 agenda item 7, Topic D1, considers this discrepancy and proposes to align Appendix 1 to Annex 4 of RR Appendix **30B** with the values of orbital separation in §§ 1.1 and 1.2 of Annex 4 of RR Appendix **30B**. With these modifications, the method proposed in Appendix 1 to Annex 4 of RR Appendix **30B** will align the values of orbital separation with those in sections 1.1 and 1.2 of the Annex adopted by WRC-19.

Proposal:

MOD USA/7D(1)/1

APPENDIX 30B (REV.WRC‑23)

**Provisions and associated Plan for the fixed-satellite service
in the frequency bands 4 500-4 800 MHz, 6 725-7 025 MHz,
10.70-10.95 GHz, 11.20-11.45 GHz and 12.75-13.25 GHz**

ANNEX 4     (REV.WRC‑23)

**Criteria for determining whether an allotment or
an assignment is considered to be affected**[[1]](#footnote-2)15*bis*

APPENDIX 1 TO ANNEX 4     (Rev.WRC‑23)

**Method for determination of the overall single-entry and aggregate
carrier-to-interference value averaged over the necessary
bandwidth of the modulated carrier**

**2 Aggregate *C*/*I***

The aggregate (*C*/*I*)*agg* at a given downlink test point is given by:

           dB

 *j* = 1, 2, 3 . . . *n*,

where:

 (*C*/*I*)*tj*: overall carrier-to-interference ratio due to interference from the *j*-th allotment or assignment calculated using the method for overall single-entry (*C*/*I*)*t* as provided in § 1 of Appendix **1** to this Annex; and

 *n*: total number of interfering allotments or assignments for which the orbital separation with the desired satellite is less than or equal to 7° in the case of the 6/4 GHz band and less than or equal to 6° in the case of the 13/10‑11 GHz band.

**Reasons:** To align Appendix 1 to Annex 4 of RR Appendix **30B** with the orbital spacing values contained in §§ 1.1 and 1.2 of Annex 4 to Appendix **30B** (Rev. WRC-19) and incorporate the Rule of Procedure on Section 2 of Appendix 1 to Annex 4 in the RR.

1. 15*bis* For frequency assignments recorded in the List and brought into use before 23 November 2019, the criteria of § 2.2 of this Annex are not applicable.     (WRC-19) [↑](#footnote-ref-2)