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| A close up of a sign  Description automatically generated | **World Radiocommunication Conference (WRC-23) Dubai, 20 November - 15 December 2023** | |  |
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| PLENARY MEETING | | **Addendum 5 to Document 62(Add.22)-E** | |
|  | | **3 October 2023** | |
|  | | **Original: English** | |
|  | | | |
| Asia-Pacific Telecommunity Common Proposals | | | |
| PROPOSALS FOR THE WORK OF THE CONFERENCE | | | |
|  | | | |
| Agenda item 7(D2) | | | |

7 to consider possible changes, in response to Resolution 86 (Rev. Marrakesh, 2002) of the Plenipotentiary Conference, on 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 the rational, efficient and economical use of radio frequencies and any associated orbits, including the geostationary-satellite orbit;

7(D2) Topic D2 - New RR Appendix **4** parameters for Recommendation ITU-R S.1503 updates

Introduction

The APT has considered WRC-23 agenda item 7, Topic D2, and developed an APT Common Proposal to support the single method in the CPM Report to address this topic.

Proposal

APPENDIX 4 (REV.WRC‑19)

Consolidated list and tables of characteristics for use in the  
application of the procedures of Chapter III

ANNEX 2

Characteristics of satellite networks, earth stations  
or radio astronomy stations[[1]](#footnote-1)2    (Rev.WRC‑12)

Footnotes to Tables A, B, C and D

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**TABLE A**

GENERAL CHARACTERISTICS OF THE SATELLITE NETWORK OR SYSTEM,  
EARTH STATION OR RADIO ASTRONOMY STATION     (Rev.WRC‑23)

*Note: These proposed changes are included for information purposes only as* *ITU-R discussions on revisions to Recommendation ITU-R S.1503-3 will continue at the June/July 2023 meeting of ITU-R Working Party 4A. There have been no agreements on which elements will be submitted to SG 4 as part of updates to Recommendation ITU-R S.1503-3. These discussions could lead to additions or deletion to the Appendix* ***4*** *data items included in example regulatory text below.* *Upon approval of revision to Recommendation ITU-R S.1503-3 additional explanations may be added to these items to clarify their applicability (uplink or downlink etc.), if needed.*

| **Items in Appendix** | ***A \_ GENERAL CHARACTERISTICS OF THE SATELLITE NETWORK OR SYSTEM, EARTH STATION OR RADIO ASTRONOMY STATION*** | **Advance publication of a geostationary- satellite network** | **Advance publication of a non-geostationary-satellite network or system subject to coordination under Section II  of Article 9** | **Advance publication of a non-geostationary-satellite network or system not subject to coordination under Section II  of Article 9** | **Notification or coordination of a geostationary-satellite network (including space operation functions under Article 2A of Appendices 30 or 30A)** | **Notification or coordination of a non-geostationary-satellite network or system** | **Notification or coordination of an earth station (including notification under  Appendices 30A or 30B)** | **Notice for a satellite network in the broadcasting-satellite service under  Appendix 30 (Articles 4 and 5)** | **Notice for a satellite network  (feeder-link) under Appendix 30A  (Articles 4 and 5)** | **Notice for a satellite network in the fixed- satellite service under Appendix 30B  (Articles 6 and 8)** | **Items in Appendix** | **Radio astronomy** |
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| … | … | … | … | … | … | … | … | … | … | … | … | … |
| **A.14** | **FOR STATIONS OPERATING IN A FREQUENCY BAND SUBJECT TO Nos. 22.5C, 22.5D, 22.5F OR 22.5L: SPECTRUM MASKS** |  | | | | | | | | | **A.14** |  |
| … | … | … | … | … | … | … | … | … | … | … | … | … |
| A.14.b.6 | the mask pattern defined in terms of the power in the reference bandwidth as a function of latitude and the off-axis angle between the non-geostationary earth station boresight line and the line from the non-geostationary earth station to a point on the GSO arc or as a function of latitude, the non-geostationary earth station pointing angles (azimuth, elevation) and the difference in longitude between the non-geostationary earth station and a point on the geostationary arc |  |  |  |  | **X** |  |  |  |  | A.14.b.6 |  |
| A.14.b.7 | the reference bandwidth used for the mask pattern of A.14.b.6 |  |  |  |  | **X** |  |  |  |  | A.14.b.7 |  |
| A.14.c | **For each pfd mask used by the non-geostationary space station:**  *Note* – The space station pfd mask is defined by the maximum power flux-density generated by any space station in the interfering non-geostationary-satellite system as seen from any point on the surface of the Earth |  |  |  |  |  |  |  |  |  | A.14.c |  |
| … | … | … | … | … | … | … | … | … | … | … | … | … |
| A.14.c.4 | the type of mask, among one of the following types: (Earth-based exclusion zone angle, difference in longitude, latitude) or (satellite azimuth, satellite elevation, latitude) |  |  |  |  | **X** |  |  |  |  | A.14.c.4 |  |
| A.14.c.5 | the mask pattern of the power flux-density defined in three dimensions |  |  |  |  | **X** |  |  |  |  | A.14.c.5 |  |
| A.14.c.6 | the reference bandwidth used for the mask pattern of A.14.c.5 |  |  |  |  | **X** |  |  |  |  | A.14.c.6 |  |
| A.14.d | **For each set of non-geostationary-satellite system operating parameters**  to be provided, if A.4.b.6*bis* indicates the use of an extended set of operating parameters  *Note* – There could be different sets of parameters at different frequency bands, but only one set of operating parameters for any frequency band used by the non-geostationary-satellite system |  |  |  |  |  |  |  |  |  | A.14.d |  |
| … | … | … | … | … | … | … | … | … | … | … | … | … |
| A.14.d.x1 | the minimum angle in degrees at the surface of the Earth between the lines to any two active non-GSO satellites. |  |  |  |  | **O** |  |  |  |  | A.14.d.x1 |  |
| A.14.d.x2 | the minimum angle in degrees at the non-GSO satellite between the lines to any two active non-GSO earth stations. Assumed to be zero if not provided |  |  |  |  | **O** |  |  |  |  | A.14.d.x2 |  |
| A.14.d.x3 | the maximum number of non-geostationary earth stations tracked co-frequency by a non-geostationary satellite. If a value is not provided, it is assumed that the maximum number of earth stations tracked co-frequency by a non-geostationary satellite is equal to the number of earth stations created for the epfd↑ run |  |  |  |  | **O** |  |  |  |  | A.14.d.x3 |  |
| A.14.d.x4 | the likelihood of a non-geostationary satellite having an alpha angle in degrees that is less than or equal to a set of given values defined for a range of latitudes, where the alpha angle is the minimum topocentric angle between the line to a non-GSO satellite and the line to any point on the visible geostationary arc. Note: Can only be specified if the minimum track duration in A.14.d.8 is set to zero |  |  |  |  | **O** |  |  |  |  | A.14.d.x4 |  |
| … | … | … | … | … | … | … | … | … | … | … | … | … |

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1. 2 The Radiocommunication Bureau shall develop and keep up-to-date forms of notice to meet fully the statutory provisions of this Appendix and related decisions of future conferences. Additional information on the items listed in this Annex together with an explanation of the symbols is to be found in the Preface to the BR IFIC (Space Services).    (WRC‑12) [↑](#footnote-ref-1)