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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 3 to Document 111(Add.22)-E** | |
|  | | **29 October 2023** | |
|  | | **Original: Chinese** | |
|  | | | |
| China (People's Republic of) | | | |
| Proposals for the work of the Conference | | | |
|  | | | |
| Agenda item 7(C) | | | |

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(C) Topic C - Protection of geostationary satellite networks in the mobile-satellite service operating in the 7/8 GHz and 20/30 GHz bands from emissions of non-geostationary satellite systems operating in the same frequency bands and identical directions

Introduction

Topic C was established to study the effectiveness of the regulatory protection of GSO MSS from interference caused by non-GSO systems and networks, and to identify potential inconsistencies in the provisions of Radio Regulations, covering the following frequency bands:

7 250-7 750 MHz (space-to-Earth);

7 900-8 025 MHz (Earth-to-space);

20.2-21.2 GHz (space-to-Earth);

30-31 GHz (Earth-to-space).

Three methods are established in the CPM Report to address this topic. Method C1 is no change to the Radio Regulations. Method C2 adds a new provision in RR Article **22** to extend the application of the protection concept in RR No. **22.2** and modifies RR No. **5.461**. This method contains two Options, the difference being the modification to RR No. **5.461**. Method C3 would modify RR No. **5.461** and add a new footnote to RR Article **5** to extend the application of the protection concept in RR No. **22.2**.

APT Member States support Method C3 in the CPM Report.

Proposals

China supports the APT common view, namely Method C3 in the CPM Report. Meanwhile, Option 2 of Method C2 could also be accepted.

With regard to Option 2 of Method C2, China proposes the following revisions to the Radio Regulations. The modifications to Method C3 can be found in the APT common proposal.

ARTICLE 5

Frequency allocations

Section IV – Table of Frequency Allocations  
(See No. 2.1)

MOD CHN/111A22A3/1#1998

7 250-8 500 MHz

|  |  |  |
| --- | --- | --- |
| Allocation to services | | |
| Region 1 | Region 2 | Region 3 |
| 7 250-7 300 FIXED  FIXED-SATELLITE (space-to-Earth)  MOBILE  MOD 5.461 | | |
| 7 300-7 375 FIXED  FIXED-SATELLITE (space-to-Earth)  MOBILE except aeronautical mobile  MOD 5.461 | | |
| ... | | |
| 7 900-8 025 FIXED  FIXED-SATELLITE (Earth-to-space)  MOBILE  MOD 5.461 | | |

MOD CHN/111A22A3/2#2000

5.461 *Additional allocation:*the frequency bands 7 250-7 375 MHz (space-to-Earth) and 7 900-8 025 MHz (Earth-to-space) are also allocated to the mobile-satellite service on a primary basis, subject to agreement obtained under No. **9.21**. However, No. **9.21** is not applicable to the geostationary-satellite networks in the mobile-satellite service with respect to non-geostationary-satellite systems for which complete coordination or notification information, as appropriate, is received by the Bureau from *[16 December 2023 or the date of entry into force of the Final Acts of WRC‑23]*.     (WRC‑23)

**Reasons:** The addition of the protection concept in RR No. **22.2** would result in its inconsistency with footnote RR No. **5.461**, therefore RR No. **5.461** is modified as indicated above.

ARTICLE 22

Space services1

Section II − Control of interference to geostationary-satellite systems

ADD CHN/111A22A3/3#2001

22.2*bis* In the frequency bands 7 250-7 750 MHz (space-to-Earth), 7 900-8 025 MHz (Earth-to-space), 20.2‑21.2 GHz (space-to-Earth) and 30-31 GHz (Earth-to-space), non-geostationary-satellite systems forwhich complete coordination or notification information, as appropriate, is received by the Bureau from *[16 December 2023 or the date of entry into force of the Final Acts of WRC‑23]* shall not cause unacceptable interference to and shall not claim protection from geostationary-satellite networks in the mobile-satellite service which are operating in accordance with these Regulations. No. **5.43A** does not apply in this case.     (WRC‑23)

**Reasons:** To add a new provision to reflect the protection of GSO MSS satellite networks.

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

MOD CHN/111A22A3/4#2002

**TABLE A**

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

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **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** |
| … | … | **…** | **…** | **…** | **…** | **…** | **…** | **…** | **…** | **…** | … | **…** |
| **A.25** | **CHARACTERISTICS OF NON-GSO SYSTEMS IN THE FREQUENCY BANDS 7 250-7 750 MHz (SPACE-TO-EARTH), 7 900-8 025 MHz (EARTH-TO-SPACE), 20.2-21.2 GHz (SPACE-TO-EARTH) AND 30-31 GHz (EARTH-TO-SPACE) FOR ADVANCE PUBLICATION OF A NON-GEOSTATIONARY-SATELLITE NETWORK OR SYSTEM NOT SUBJECT TO COORDINATION UNDER SECTION II OF ARTICLE 9 AND/OR NOTIFICATION OF THOSE SATELLITE NETWORKS OR SYSTEMS** |  | | | | | | | | | **A.25** |  |
| A.25.a | *Option 1:*  Maximum aggregate e.i.r.p. of associated non-GSO earth stations of a single non-GSO constellation/configuration towards any point within the geostationary arc |  | - | X |  | + |  |  |  |  | A.25.a |  |
| A.25.b | *Option 1:*  Maximum aggregate pfd caused by all non-GSO space stations in a filing/configuration at any point of the Earth’s surface within the visibility area of the GSO  *Option 2:* Maximum pfd caused by a non-GSO space station of a single non-GSO constellation at any point of the Earth’s surface within the visibility area of the GSO |  | - | X |  | + |  |  |  |  | A.25.b |  |
| A.25.c | For the exclusion zone about the geostationary-satellite orbit, the type of zone (based on topocentric angle or satellite-based angle for establishing the exclusion zone) | **-** | - | X |  | + |  |  |  |  | A.25.c |  |
| A.25.d | For the exclusion zone about the geostationary-satellite orbit, if the zone is based on a topocentric angle or a satellite-based angle, the width of the zone, in degrees | **-** | - | X |  | + |  |  |  |  | A.25.d |  |

NOTE: A.25 is applicable only to the frequency bands 7 250-7 750 MHz (space-to-Earth), 7 900-8 025 MHz (Earth-to-space), 20.2-21.2 GHz (space-to-Earth) and 30-31 GHz (Earth-to-space) and only for the advance publication of a non-geostationary-satellite network or system not subject to coordination under Section II of Article **9** and/or notification of those satellite networks or systems. The proposed parameters are intended to support the bilateral efforts of administrations to resolve difficulties. They are not used for any examination by the Bureau. It will allow GSO MSS operators to conduct reliable assessment of the interference to their networks using information directly from the BR IFIC publication without having to contact the notifying administration of the non-geostationary satellite network or system.

*View: A different view was expressed, opposing the addition of this new AP****4*** *data item.*

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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)