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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 1 to Document 111-E** | |
|  | | **29 October 2023** | |
|  | | **Original: Chinese** | |
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| China (People's Republic of) | | | |
| PROPOSALS FOR THE WORK OF THE CONFERENCE | | | |
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| Agenda item 1.1 | | | |

1.1 to consider, based on the results of ITU‑R studies, possible measures to address, in the frequency band 4 800-4 990 MHz, protection of stations of the aeronautical and maritime mobile services located in international airspace and waters from other stations located within national territories, and to review the power flux-density criteria in No. **5.441B** in accordance with Resolution **223** **(Rev.WRC‑19)**;

Introduction

Resolution **223 (Rev.WRC-19)** invites ITU-R to study the technical and regulatory conditions for the protection of the aeronautical mobile service (AMS) and the maritime mobile service (MMS) stations located in international airspace and waters (i.e. outside national territories) and operated in the frequency band 4 800-4 990 MHz.

Studies on the coexistence and compatibility of International Mobile Telecommunications (IMT) with the fixed service (FS) and AMS systems were carried out during the WRC-15 cycle. However, studies of IMT in relation to AMS were not finalized before WRC-15. WRC‑15 established No. **5.441B** of the Radio Regulations (RR) to provide IMT identification in the frequency band 4 800-4 990 MHz, and introduced a pfd limit on IMT stations. This limit was subject to review at WRC‑19.

Studies on the coexistence and compatibility of IMT with AMS were carried out during the WRC‑19 cycle. However, no consensus was reached. WRC‑19 updated RR No. **5.441B** and Resolution **223**. Additional country names were included in RR No. **5.441B**, and *resolves* 5 was added to Resolution **223 (Rev.WRC-19)**, which exempted 11 of these countries from the pfd limit set in RR No. **5.441B**.

In this study cycle, based on the regulatory and technical studies, six methods have been drafted to satisfy this agenda item.

– **Method A**: NOC.

– **Method B**:NOC to the RR except for modification of Resolution **223 (Rev.WRC-19)** to apply the existing pfd limit to all countries listed in RR **No. 5.441B**.

– **Method C**: Modification of the existing pfd limit in RR No. **5.441B**.

– **Method D**: Modification of the existing pfd limit in RR No. **5.441B** and applying it to all countries listed in RR No. **5.441B**.

– **Method E:** Applying a pfd limit and expanding the list of countries where the limit does not apply through separate regulatory measures.

– **Method F**: Applying RR No. **9.21** and bilateral/multilateral coordination agreements with coastal States for the protection of AMS/MMS stations located in international airspace and waters.

Different views were expressed regarding each of these methods.

Proposal

China supports Method F in principle. The reasons and considerations are as follows:

– There is no specific notification and registration procedure for AMS and MMS stations located in international airspace and waters and operated in this frequency band in accordance with RR No. **11.14**.In such cases, the frequency assignments to AMS and MMS stations located in international airspace and waters cannot obtain international recognition pursuant to RR No. **8.1**, neither can they claim protection from other countries.

– RR No. **15.28**, the only provision having in direct reference to international protection, does not refer to any frequency bands and services related to the agenda item.

– Working Parties dealing with the agenda item have reached consensus in their discussions, i.e. no country has jurisdiction over the use of spectrum in international airspace and waters.

Considering the above, China is of the view that AMS and MMS located in international airspace and waters and operated in the frequency band 4 800-4 990 MHz should not claim protection from the IMT systems located within national territories.

China proposes further revisions to the proposed modifications to RR No. **5.441B** and Resolution **223 (Rev.WRC‑19)** based onMethod F in the CPM Report.

– In the CPM Report, Method F proposes to modify “IMT stations shall not claim protection from stations of other applications of the mobile service” in No. **5.441B** to “IMT stations shall not claim protection from stations of the aeronautical mobile service”. This is a change to the provisions relating to applications other than IMT, AMS and MMS and it is not within the scope of this agenda item. China does not propose such a change.

– RR No. **5.441B** states that “IMT stations shall not claim protection from stations of other applications of the mobile service”. According to No. **5.43A**, the above provision also means that IMT stations need to protect stations of other applications of the mobile service. Within the scope of this agenda item, China considers that AMS and MMS located in international airspace and waters and operated in the frequency band 4 800-4 990 MHz should not claim protection from IMT systems located in national territories. Therefore, it is proposed that No. **5.43A** does not apply.

– In the CPM Report, Method F proposes to modify *invites the ITU Radiocommunication Sector* 2 in Resolution **223 (Rev.WRC‑19)**, and specifies the measures enabling sharing, including those based on frequency planning. China is of the view that, if Method F is adopted, the sharing measures for relevant services should be studied, therefore it is proposed not to specify any sharing measures in Resolution **223 (Rev.WRC‑19)**.

China proposes the following specific modifications.

ARTICLE 5

Frequency allocations

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

MOD CHN/111A1/1#1325

4 800-5 250 MHz

|  |  |  |
| --- | --- | --- |
| Allocation to services | | |
| Region 1 | Region 2 | Region 3 |
| 4 800-4 990 FIXED  MOBILE 5.440A 5.441A MOD 5.441B 5.442  Radio astronomy  5.149 5.339 5.443 | | |

MOD CHN/111A1/2

5.441B In Angola, Armenia, Azerbaijan, Benin, Botswana, Brazil, Burkina Faso, Burundi, Cambodia, Cameroon, China, Côte d’Ivoire, Djibouti, Eswatini, Russian Federation, Gambia, Guinea, Iran (Islamic Republic of), Kazakhstan, Kenya, Lao P.D.R., Lesotho, Liberia, Malawi, Mauritius, Mongolia, Mozambique, Nigeria, Uganda, Uzbekistan, the Dem. Rep. of the Congo, Kyrgyzstan, the Dem. People's Rep. of Korea, Sudan, South Africa, Tanzania, Togo, Viet Nam, Zambia and Zimbabwe, the frequency band 4 800-4 990 MHz, or portions thereof, is identified for use by administrations wishing to implement International Mobile Telecommunications (IMT). This identification does not preclude the use of this frequency band by any application of the services to which it is allocated and does not establish priority in the Radio Regulations. The use of IMT stations is subject to agreement obtained under No. **9.21** with concerned administrations, and IMT stations shall not claim protection from stations of other applications of the mobile service. No. **5.43A** does not apply. Resolution **223 (Rev.WRC‑23)** applies.      (WRC‑23)

**Reasons:**  
No additional measures, such as the pfd limit, is needed for the protection of AMS and MMS located in international airspace and waters and operated in the frequency band 4 800-4 990MHz. RR No. **9.21** continues to apply, which is a protection mechanism for AMS and MMS located in national territories.  
The provision “IMT stations shall not claim protection from stations of other applications of the mobile service” in RR No. **5.441B** also means that IMT stations need to protect stations of other applications of the mobile service in accordance with RR No. **5.43A**. However, the study of this agenda item considers that AMS and MMS located in international airspace and waters and operated in the frequency band 4800-4990 MHz should not claim protection from IMT systems located in national territories. Therefore, it is proposed that RR No. **5.43A** does not apply.

MOD CHN/111A1/3

RESOLUTION 223 (REV.WRC‑23)

Additional frequency bands identified for International   
Mobile Telecommunications

The World Radiocommunication Conference (Dubai, 2023),

...

recognizing

*a)* that for some administrations the only way of implementing IMT would be spectrum refarming, requiring significant financial investment;

*b)* that the rights to international recognition and protection of any frequency assignments are derived from the recording of those frequency assignments in the Master International Frequency Register and conditioned by the provisions of the Radio Regulations,

resolves

1 to invite administrations planning to implement IMT to make available, based on user demand and other national considerations, additional frequency bands or portions of the frequency bands above 1 GHz identified in Nos. **5.341B**, **5.384A**, **5.429B**, **5.429D**, **5.429F**, **5.441A** and **5.441B** for the terrestrial component of IMT; due consideration should be given to the benefits of harmonized utilization of the spectrum for the terrestrial component of IMT, taking into account the services to which the frequency band is currently allocated;

2 to acknowledge that the differences in the texts of Nos. **5.341B**, **5.384A** and **5.388** do not confer differences in regulatory status;

3 that in the frequency bands 4 800-4 825 MHz and 4 835-4 950 MHz, in order to identify potentially affected administrations when applying the procedure for seeking agreement under No. **9.21** by IMT stations in relation to aircraft stations, a coordination distance from an IMT station to the border of another country equal to 300 km (for land path)/450 km (for sea path) applies;

4 that in the frequency band 4 800-4 990 MHz, in order to identify potentially affected administrations when applying the procedure for seeking agreement under No. **9.21** by IMT stations in relation to fixed-service stations or other ground-based stations of the mobile service, a coordination distance from an IMT station to the border of another country equal to 70 km applies,

invites the ITU Radiocommunication Sector

1 to conduct compatibility studies in order to provide technical measures to ensure coexistence between the MSS in the frequency band 1 518-1 525 MHz and IMT in the frequency band 1 492-1 518 MHz, including guidance on the implementation of frequency arrangements for IMT deployment in the frequency band 1 427-1 518 MHz, taking into account the results of these studies;

2 to study the technical and regulatory measures for facilitating sharing between terrestrial IMT stations of coastal States and stations of the AMS and the maritime mobile service (MMS) located outside the national territories of any country and operated in the frequency band 4 800-4 990 MHz, and on the basis of these studies, to develop ITU-R Recommendations and/or Reports, as appropriate, to assist the administrations wishing to implement such measures;

3 to continue providing guidance to ensure that IMT can meet the telecommunication needs of developing countries and rural areas;

4 to include the results of the studies mentioned in *invites the ITU Radiocommunication Sector* above in one or more ITU‑R Recommendations and Reports, as appropriate.

**Reasons:**  
In the event that the pfd limit in RR No. **5.441B** is deleted, there is no need to maintain the exemption country list. Thus *resolves* 5 is proposed to be deleted.  
It is proposed that ITU-R carries out studies on the technical and regulatory measures for facilitating sharing between terrestrial IMT stations and AMS/MMS stations located in international airspace or waters, in order to assist the administrations with the sharing issues. *Invites the ITU Radiocommunication Sector* 2 is therefore modified to reflect such a proposal.

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