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| **World Radiocommunication Conference (WRC-19) Sharm el-Sheikh, Egypt, 28 October – 22 November 2019** |  |
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| COMMITTEE 6 | **Document 209-E** |
|  | **6 November 2019** |
|  | **Original: Chinese** |
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| China (People’s Republic of) | |
| Proposals for the work of the conference | |
|  | |
| Agenda item 9.2 | |

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[[1]](#footnote-1)\*; and

Introduction

In the review of the Chinese version of the Radio Regulations, it has come to the attention of this Administration that there exist misalignments or discrepancies between certain texts in the Radio Regulations in Chinese and those in other official languages of the Union. Consequently, this contribution proposes certain editorial changes to the texts of the Chinese version of the Radio Regulations (Edition 2016) for the consideration of the Conference under Agenda item 9.2.

The following proposals give the details of the proposed editorial changes which concern only the Chinese version of the Radio Regulations. No changes are required for other language versions.

Proposals

ARTICLE 5

Frequency allocations

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

(MOD) CHN/209/1

5.323 *Additional allocation:*  in Armenia, Azerbaijan, Belarus, the Russian Federation, Kazakhstan, Uzbekistan, Kyrgyzstan, Tajikistan, Turkmenistan and Ukraine, the band 862-960 MHz, in Bulgaria the bands 862-890.2 MHz and 900-935.2 MHz, in Poland the band 862-876 MHz until 31 December 2017, and in Romania the bands 862-880 MHz and 915-925 MHz, are also allocated to the aeronautical radionavigation service on a primary basis. Such use is subject to agreement obtained under No. **9.21** with administrations concerned and limited to ground-based radiobeacons in operation on 27 October 1997 until the end of their lifetime.    (WRC‑12)

**Reasons:** Chinese only.

(MOD) CHN/209/2

5.484A The use of the bands 10.95-11.2 GHz (space-to-Earth), 11.45-11.7 GHz (space-to-Earth), 11.7-12.2 GHz (space-to-Earth) in Region 2, 12.2-12.75 GHz (space-to-Earth) in Region 3, 12.5-12.75 GHz (space-to-Earth) in Region 1, 13.75-14.5 GHz (Earth-to-space), 17.8-18.6 GHz (space-to-Earth), 19.7-20.2 GHz (space-to-Earth), 27.5-28.6 GHz (Earth-to-space), 29.5-30 GHz (Earth-to-space) by a non-geostationary-satellite system in the fixed-satellite service is subject to application of the provisions of No. 9.12 for coordination with other non-geostationary-satellite systems in the fixed-satellite service. Non-geostationary-satellite systems in the fixed-satellite service shall not claim protection from geostationary-satellite networks in the fixed-satellite service operating in accordance with the Radio Regulations, irrespective of the dates of receipt by the Bureau of the complete coordination or notification information, as appropriate, for the non-geostationary-satellite systems in the fixed-satellite service and of the complete coordination or notification information, as appropriate, for the geostationary-satellite networks, and No. 5.43A does not apply. Non-geostationary-satellite systems in the fixed-satellite service in the above bands shall be operated in such a way that any unacceptable interference that may occur during their operation shall be rapidly eliminated.     (WRC‑2000)

**Reasons:** Chinese only.

(MOD) CHN/209/3

66-81 GHz

|  |  |  |
| --- | --- | --- |
| Allocation to services | | |
| Region 1 | Region 2 | Region 3 |
| 66-71 INTER-SATELLITE  MOBILE 5.553 5.558  MOBILE-SATELLITE  RADIONAVIGATION  RADIONAVIGATION-SATELLITE  5.554 | | |
| 71-74 FIXED  FIXED-SATELLITE (space-to-Earth)  MOBILE  MOBILE-SATELLITE (space-to-Earth) | | |
| 74-76 FIXED  FIXED-SATELLITE (space-to-Earth)  MOBILE  BROADCASTING  BROADCASTING-SATELLITE  Space research (space-to-Earth)  5.561 | | |
| 76-77.5 RADIO ASTRONOMY  RADIOLOCATION  Amateur  Amateur-satellite  Space research (space-to-Earth)  5.149 | | |
| 77.5-78 AMATEUR  AMATEUR-SATELLITE  RADIOLOCATION 5.559B  Radio astronomy  Space research (space-to-Earth)  5.149 | | |
| 78-79 RADIOLOCATION  Amateur  Amateur-satellite  Radio astronomy  Space research (space-to-Earth)  5.149 5.560 | | |
| 79-81 RADIO ASTRONOMY  RADIOLOCATION  Amateur  Amateur-satellite  Space research (space-to-Earth)  5.149 | | |

**Reasons:** Chinese only.

(MOD) CHN/209/4

5.562B In the bands 105-109.5 GHz, 111.8-114.25 GHz, 155.5-158.5 GHz and 217-226 GHz, the use of this allocation is limited to space-based radio astronomy only.     (WRC‑2000)

**Reasons:** Chinese only.

ARTICLE 22

Space services1

Section II − Control of interference to geostationary-satellite systems

(MOD) CHN/209/5

22.2 § 2 1) Non-geostationary-satellite systems shall not cause unacceptable interference to and, unless otherwise specified in these Regulations, shall not claim protection from geostationary-satellite networks in the fixed-satellite service and the broadcasting-satellite service operating in accordance with these Regulations. No. 5.43A does not apply in this case.     (WRC‑07)

**Reasons:** Chinese only.

RESOLUTION 34 (Rev.WRC‑15)

Establishment of the broadcasting-satellite service in Region 3   
in the 12.5‑12.75 GHz frequency band and sharing with space and   
terrestrial services in Regions 1, 2 and 3

(MOD) CHN/209/6

resolves

1 that, until such time as a plan may be established for the broadcasting-satellite service in the frequency band 12.5-12.75 GHz in Region 3, the relevant provisions of Sections A and B of Resolution **33 (Rev.WRC‑15)** or of Article **9**, as appropriate (see Resolution **33 (Rev.WRC‑15)**) shall continue to apply to the coordination between stations in the broadcasting-satellite service in Region 3 and:

*a)* space stations in the broadcasting-satellite and fixed-satellite services in Regions 1, 2 and 3;

*b)* terrestrial stations in Regions 1, 2 and 3;

2 that the ITU‑R shall study urgently the technical provisions which may be appropriate for the sharing between stations in the broadcasting-satellite service in Region 3 and:

*a)* space stations in the broadcasting-satellite and fixed-satellite services in Regions 1 and 2;

*b)* terrestrial stations in Regions 1 and 2;

3 that, until such time as technical provisions are developed by the ITU‑R and accepted by administrations concerned under Resolution **703** **(Rev.WRC‑07)** the sharing between space stations in the broadcasting-satellite service in Region 3 and terrestrial services in Regions 1, 2 and 3 shall be based on the following criteria as appropriate:

*a)* the power flux-density at the Earth’s surface, produced by emissions from a space station in the broadcasting-satellite service in Region 3 for all conditions and for all methods of modulation shall not exceed the limits given in Annex 5 of Appendix **30**;

*b)* in addition to *resolves*3 *a)* above, the provisions of Article **21** (Table **21‑4**) shall apply in the countries mentioned in Nos. **5.494** and **5.496**;

*c)* the limits given in *resolves*3 *a)* and *b)* above may be exceeded on the territory of any country provided the administration of that country has so agreed.

**Reasons:** Chinese only.

RESOLUTION 212 (Rev.WRC‑15)

Implementation of International Mobile Telecommunications in the frequency bands 1 885-2 025 MHz and 2 110-2 200 MHz

(MOD) CHN/209/7

considering

*a)* that Resolution ITU‑R 56 defines the naming for International Mobile Telecommunications (IMT);

*b)* that the ITU Radiocommunication Sector (ITU‑R), for WRC‑97, recommended approximately 230 MHz for use by the terrestrial and satellite components of IMT;

*c)* that ITU‑R studies forecast that additional spectrum may be required to support the future services of IMT and to accommodate future user requirements and network deployments;

*d)* that ITU‑R has recognized that space techniques are an integral part of IMT;

*e)* that, in No. **5.388**, WARC‑92 identified frequency bands to accommodate certain mobile services, now called IMT,

**Reasons:** Chinese only.

RESOLUTION 750 (Rev.WRC‑15)

Compatibility between the Earth exploration-satellite service (passive) and relevant active services

(MOD) CHN/209/8

resolves

1 that unwanted emissions of stations brought into use in the frequency bands and services listed in Table 1‑1 below shall not exceed the corresponding limits in that table, subject to the specified conditions;

2 to urge administrations to take all reasonable steps to ensure that unwanted emissions of active service stations in the frequency bands and services listed in Table 1‑2 below do not exceed the recommended maximum levels contained in that table, noting that EESS (passive) sensors provide worldwide measurements that benefit all countries, even if these sensors are not operated by their country;

3 that the Radiocommunication Bureau shall not make any examination or finding with respect to compliance with this Resolution under either Article **9** or **11**.

TABLE 1-1

|  |  |  |  |
| --- | --- | --- | --- |
| EESS (passive) band | Active service band | Active service | Limits of unwanted emission power from active service stations in a specified bandwidth within the EESS (passive) band1 |
| 1 400- 1 427 MHz | 1 427- 1 452 MHz | Mobile | −72 dBW in the 27 MHz of the EESS (passive) band for IMT base stations  −62 dBW in the 27 MHz of the EESS (passive) band for IMT mobile stations2, 3 |
| 23.6-24.0 GHz | 22.55-23.55 GHz | Inter-satellite | −36 dBW in any 200 MHz of the EESS (passive) band for non-geostationary (non-GSO) inter-satellite service (ISS) systems for which complete advance publication information is received by the Bureau before 1 January 2020, and −46 dBW in any 200 MHz of the EESS (passive) band for non-GSO ISS systems for which complete advance publication information is received by the Bureau on or after 1 January 2020 |
| 31.3-31.5 GHz | 31-31.3 GHz | Fixed (excluding HAPS) | For stations brought into use after 1 January 2012: −38 dBW in any 100 MHz of the EESS (passive) band. This limit does not apply to stations that have been authorized prior to 1 January 2012 |
| 50.2-50.4 GHz | 49.7-50.2 GHz | Fixed-satellite (E‑to‑s)4 | For stations brought into use after the date of entry into force of the Final Acts of WRC‑07:  −10 dBW into the 200 MHz of the EESS (passive) band for earth stations having an antenna gain greater than or equal to 57 dBi  −20 dBW into the 200 MHz of the EESS (passive) band for earth stations having an antenna gain less than 57 dBi |
| 50.2-50.4 GHz | 50.4-50.9 GHz | Fixed-satellite (E‑to‑s)4 | For stations brought into use after the date of entry into force of the Final Acts of WRC‑07:  −10 dBW into the 200 MHz of the EESS (passive) band for earth stations having an antenna gain greater than or equal to 57 dBi  −20 dBW into the 200 MHz of the EESS (passive) band for earth stations having an antenna gain less than 57 dBi |
| 52.6-54.25 GHz | 51.4-52.6 GHz | Fixed | For stations brought into use after the date of entry into force of the Final Acts of WRC‑07:  −33 dBW in any 100 MHz of the EESS (passive) band |
| 1 The unwanted emission power level is to be understood here as the level measured at the antenna port.  2 This limit does not apply to mobile stations in the IMT systems for which the notification information has been received by the Radiocommunication Bureau by 28 November 2015. For those systems, −60 dBW/27 MHz applies as the recommended value.  3 The unwanted emission power level is to be understood here as the level measured with the mobile station transmitting at an average output power of 15 dBm.  4 The limits apply under clear-sky conditions. During fading conditions, the limits may be exceeded by earth stations when using uplink power control. | | | |

TABLE 1-2

|  |  |  |  |
| --- | --- | --- | --- |
| EESS (passive) band | Active service band | Active service | Recommended maximum level of unwanted emission power from active service stations in a specified bandwidth within the EESS (passive) band1 |
| 1 400-1 427 MHz | 1 350-1 400 MHz | Radiolocation2 | −29 dBW in the 27 MHz of the EESS (passive) band |
| Fixed | −45 dBW in the 27 MHz of the EESS (passive) band for point-to-point |
| Mobile | −60 dBW in the 27 MHz of the EESS (passive) band for mobile service stations except transportable radio-relay stations  −45 dBW in the 27 MHz of the EESS (passive) band for transportable radio-relay stations |
| 1 427-1 429 MHz | Space operation (E-to-s) | −36 dBW in the 27 MHz of the EESS (passive) band |
| 1 427-1 429 MHz | Mobile except aeronautical mobile | −60 dBW in the 27 MHz of the EESS (passive) band for mobile service stations except IMT stations and transportable radio-relay stations3  −45 dBW in the 27 MHz of the EESS (passive) band for transportable radio-relay stations |
| Fixed | −45 dBW in the 27 MHz of the EESS (passive) band for point-to-point |
| 1 429-1 452 MHz | Mobile | −60 dBW in the 27 MHz of the EESS (passive) band for mobile service stations except IMT stations, transportable radio-relay stations and aeronautical telemetry stations  −45 dBW in the 27 MHz of the EESS (passive) band for transportable radio-relay stations  −28 dBW in the 27 MHz of the EESS (passive) band for aeronautical telemetry stations3 |
| Fixed | −45 dBW in the 27 MHz of the EESS (passive) band for point-to-point |
| 31.3-31.5 GHz | 30.0-31.0 GHz | Fixed-satellite (E‑to‑s)4 | −9 dBW into the 200 MHz of the EESS (passive) band for earth stations having an antenna gain greater than or equal to 56 dBi  −20 dBW into the 200 MHz of the EESS (passive) band for earth stations having an antenna gain less than 56 dBi |
| 86-92 GHz5 | 81-86 GHz | Fixed | −41 − 14(*f* − 86) dBW/100 MHz for 86.05 ≤ *f* ≤ 87 GHz  −55 dBW/100 MHz for 87 ≤ *f*≤ 91.95 GHz  where *f* is the centre frequency of the 100 MHz reference bandwidth expressed in GHz |
| 92-94 GHz | Fixed | −41 − 14(92 − *f*) dBW/100 MHz for 91 ≤ *f* ≤ 91.95 GHz  −55 dBW/100 MHz for 86.05 ≤ *f* ≤ 91 GHz  where *f* is the centre frequency of the 100 MHz reference bandwidth expressed in GHz |

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| *Notes to Table 1-2*:  1 The unwanted emission power level is to be understood here as the level measured at the antenna port.  2 The mean power is to be understood here as the total power measured at the antenna port (or an equivalent thereof) in the frequency band 1 400-1 427 MHz, averaged over a period of the order of 5 s.  3 The frequency band 1 429-1 435 MHz is also allocated to the aeronautical mobile service in eight Region 1 administrations on a primary basis exclusively for the purposes of aeronautical telemetry within their national territory (No. **5.342**).  4 The recommended maximum levels apply under clear-sky conditions. During fading conditions, these levels may be exceeded by earth stations when using uplink power control.  5 Other maximum unwanted emission levels may be developed based on different scenarios provided in Report ITU‑R F.2239 for the frequency band 86-92 GHz. |

**Reasons:** Chinese only.

RESOLUTION 809 (WRC‑15)

Agenda for the 2019 World Radiocommunication Conference

(MOD) CHN/209/9

resolves

to recommend to the Council that a world radiocommunication conference be held in 2019 for a maximum period of four weeks, with the following agenda:

1 on the basis of proposals from administrations, taking account of the results of WRC‑15 and the Report of the Conference Preparatory Meeting, and with due regard to the requirements of existing and future services in the frequency bands under consideration, to consider and take appropriate action in respect of the following items:

1.1 to consider an allocation of the frequency band 50-54 MHz to the amateur service in Region 1, in accordance with Resolution 658 (WRC‑15);

1.2 to consider in-band power limits for earth stations operating in the mobile-satellite service, meteorological-satellite service and Earth exploration-satellite service in the frequency bands 401-403 MHz and 399.9-400.05 MHz, in accordance with Resolution**765 (WRC‑15)**;

1.3 to consider possible upgrading of the secondary allocation to the meteorological-satellite service (space-to-Earth) to primary status and a possible primary allocation to the Earth exploration-satellite service (space-to-Earth) in the frequency band 460-470 MHz, in accordance with Resolution 766 (WRC‑15);

1.4 to consider the results of studies in accordance with Resolution **557 (WRC‑15)**, and review, and revise if necessary, the limitations mentioned in Annex 7 to Appendix **30 (Rev.WRC‑15)**, while ensuring the protection of, and without imposing additional constraints on, assignments in the Plan and the List and the future development of the broadcasting-satellite service within the Plan, and existing and planned fixed-satellite service networks;

1.5 to consider the use of the frequency bands 17.7-19.7 GHz (space-to-Earth) and 27.5‑29.5 GHz (Earth-to-space) by earth stations in motion communicating with geostationary space stations in the fixed-satellite service and take appropriate action, in accordance with Resolution **158 (WRC‑15)**;

1.6 to consider the development of a regulatory framework for non-GSO FSS satellite systems that may operate in the frequency bands 37.5-39.5 GHz (space-to-Earth), 39.5-42.5 GHz (space-to-Earth), 47.2-50.2 GHz (Earth-to-space) and 50.4-51.4 GHz (Earth-to-space), in accordance with Resolution **159 (WRC‑15)**;

1.7 to study the spectrum needs for telemetry, tracking and command in the space operation service for non-GSO satellites with short duration missions, to assess the suitability of existing allocations to the space operation service and, if necessary, to consider new allocations, in accordance with Resolution **659** **(WRC‑15)**;

1.8 to consider possible regulatory actions to support Global Maritime Distress Safety Systems (GMDSS) modernization and to support the introduction of additional satellite systems into the GMDSS, in accordance with Resolution **359** (**Rev.WRC‑15**);

1.9 to consider, based on the results of ITU‑R studies:

1.9.1 regulatory actions within the frequency band 156-162.05 MHz for autonomous maritime radio devices to protect the GMDSS and automatic identifications system (AIS), in accordance with Resolution **362 (WRC‑15)**;

1.9.2 modifications of the Radio Regulations, including new spectrum allocations to the maritime mobile-satellite service (Earth‑to‑space and space-to-Earth), preferably within the frequency bands 156.0125-157.4375 MHz and 160.6125-162.0375 MHz of Appendix **18**, to enable a new VHF data exchange system (VDES) satellite component, while ensuring that this component will not degrade the current terrestrial VDES components, applications specific messages (ASM) and AIS operations and not impose any additional constraints on existing services in these and adjacent frequency bands as stated in *recognizing* *d)* and *e)* of Resolution **360** (**Rev.WRC‑15**);

1.10 to consider spectrum needs and regulatory provisions for the introduction and use of the Global Aeronautical Distress and Safety System (GADSS), in accordance with Resolution **426 (WRC‑15)**;

1.11 to take necessary actions, as appropriate, to facilitate global or regional harmonized frequency bands to support railway radiocommunication systems between train and trackside within existing mobile service allocations, in accordance with Resolution **236 (WRC‑15)**;

1.12 to consider possible global or regional harmonized frequency bands, to the maximum extent possible, for the implementation of evolving Intelligent Transport Systems (ITS) under existing mobile-service allocations, in accordance with Resolution **237 (WRC‑15)**;

1.13 to consider identification of frequency bands for the future development of International Mobile Telecommunications (IMT), including possible additional allocations to the mobile service on a primary basis, in accordance with Resolution **238 (WRC‑15)**;

1.14 to consider, on the basis of ITU‑R studies in accordance with Resolution **160 (WRC‑15)**, appropriate regulatory actions for high-altitude platform stations (HAPS), within existing fixed-service allocations;

1.15 to consider identification of frequency bands for use by administrations for the land-mobile and fixed services applications operating in the frequency range 275-450 GHz, in accordance with Resolution**767 (WRC‑15)**;

1.16 to consider issues related to wireless access systems, including radio local area networks (WAS/RLAN), in the frequency bands between 5 150 MHz and 5 925 MHz, and take the appropriate regulatory actions, including additional spectrum allocations to the mobile service, in accordance with Resolution **239 (WRC‑15)**;

2 to examine the revised ITU‑R Recommendations incorporated by reference in the Radio Regulations communicated by the Radiocommunication Assembly, in accordance with Resolution **28 (Rev.WRC‑15)**, and to decide whether or not to update the corresponding references in the Radio Regulations, in accordance with the principles contained in Annex 1 to Resolution **27 (Rev.WRC‑12)**;

3 to consider such consequential changes and amendments to the Radio Regulations as may be necessitated by the decisions of the conference;

4 in accordance with Resolution **95 (Rev.WRC‑07)**, to review the Resolutions and Recommendations of previous conferences with a view to their possible revision, replacement or abrogation;

5 to review, and take appropriate action on, the Report from the Radiocommunication Assembly submitted in accordance with Nos. 135 and 136 of the Convention;

6 to identify those items requiring urgent action by the radiocommunication study groups in preparation for the next world radiocommunication conference;

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;

8 to consider and take appropriate action on requests from administrations to delete their country footnotes or to have their country name deleted from footnotes, if no longer required, taking into account Resolution **26 (Rev.WRC‑07)**;

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

9.1 on the activities of the Radiocommunication Sector since WRC‑15;

9.2 on any difficulties or inconsistencies encountered in the application of the Radio Regulations[[2]](#footnote-2)\*; and

9.3 on action in response to Resolution **80 (Rev.WRC‑07)**;

10to recommend to the Council items for inclusion in the agenda for the next WRC, and to give its views on the preliminary agenda for the subsequent conference and on possible agenda items for future conferences, in accordance with Article 7 of the Convention,

**Reasons:** Chinese only.

RESOLUTION 958 (WRC-15)

Urgent studies required in preparation for the  
2019 World Radiocommunication Conference

(MOD) CHN/209/10

ANNEX TO RESOLUTION 958 (WRC-15)

Urgent studies required in preparation for the   
2019 World Radiocommunication Conference

1) Studies concerning Wireless Power Transmission (WPT) for electric vehicles:

a) to assess the impact of WPT for electric vehicles on radiocommunication services;

b) to study suitable harmonized frequency ranges which would minimize the impact on radiocommunication services from WPT for electrical vehicles.

These studies should take into account that the International Electrotechnical Commission (IEC), the International Organization for Standardization (ISO) and the Society of Automotive Engineers (SAE) are in the process of approving standards intended for global and regional harmonization of WPT technologies for electric vehicles.

2) Studies to examine:

a) whether there is a need for possible additional measures in order to limit uplink transmissions of terminals to those authorized terminals in accordance with No.**18.1**;

b) the possible methods that will assist administrations in managing the unauthorized operation of earth station terminals deployed within its territory, as a tool to guide their national spectrum management programme, in accordance with Resolution ITU‑R 64 (RA‑15).

3) Studies on the technical and operational aspects of radio networks and systems, as well as spectrum needed, including possible harmonized use of spectrum to support the implementation of narrowband and broadband machine-type communication infrastructures, in order to develop Recommendations, Reports and/or Handbooks, as appropriate, and to take appropriate actions within the ITU Radiocommunication Sector (ITU-R) scope of work.

**Reasons:** Chinese only.

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1. \* This agenda item is strictly limited to the Report of the Director on any difficulties or inconsistencies encountered in the application of the Radio Regulations and the comments from administrations. [↑](#footnote-ref-1)
2. \* This agenda item is strictly limited to the Report of the Director on any difficulties or inconsistencies encountered in the application of the Radio Regulations and the comments from administrations. [↑](#footnote-ref-2)