



Received: 18 November 2022

Document WRC-23-IRW-22/7-E
18 November 2022

**REGIONAL COMMONWEALTH IN THE FIELD OF COMMUNICATIONS
WP RA/WRC**

**PRELIMINARY RCC POSITION ON AGENDA ITEMS FOR THE
WORLD RADIOCOMMUNICATION CONFERENCE 2023**

(version of 3 June 2022)

Annex 1
to the Decision of
RCC Commission on RFS and SO
No. 21/6 of 03.06.2022



REGIONAL COMMONWEALTH IN THE FIELD OF COMMUNICATIONS

RCC Commission on
the Regulation of the Usage of the Radio
Frequency Spectrum and Satellite Orbits
WG RA/WRC

Document WG2023/104
Annex 6
June 2022

WP RA/WRC

PRELIMINARY RCC POSITION ON AGENDA ITEMS FOR THE WORLD RADIOCOMMUNICATION CONFERENCE 2023

(version of 3 June 2022)

Administrations of the countries of the Regional Commonwealth in the field of Communications (RCC),

recognizing the need

- to improve regulation and increase efficiency of radio spectrum and satellite orbits;
- to establish conditions for the development of radiocommunications and introduction of new radio technologies;
- to maintain the balance of interests between existing and new allocations to different radiocommunication services;
- to take into account technical and economic opportunities in the development of radiocommunications within the ITU Member State;
- to strengthen regional and international cooperation in the development of radiocommunication equipment and systems,

developed

the following position on agenda items for the 2023 World Radiocommunication Conference (WRC-23):

1.1 to consider, based on the results of the 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 (AMS and MMS) located in international airspace and waters from other stations located within national territories, and to review the pfd criteria in No. 5.441B in accordance with Resolution 223 (Rev.WRC-19);

The RCC Administrations believes that due to the absence of a procedure for the application and registration of frequency assignments for the *aeronautical* mobile service (AMS) stations and the *maritime* mobile service (MMS) stations in international space (international airspace or in

international waters, i.e. outside national territories), such frequency assignments do not have international recognition and exclusive rights to protection. Accordingly, the use of *AMS* and *MMS* in international space does not have any priority over other applications of the terrestrial services in the 4800-4990 MHz frequency band used both in international space and on the national territories of countries.

The RCC Administrations object to the additional application of the pfd limits in the frequency band 4800-4990 MHz for the protection of *AMS* and *MMS* stations located in international space, since this unreasonably restricts the use of this band within national territories by other radiocommunication services.

The RCC Administrations believe that, taking into account Nos. 8.1 and 8.3 RR, frequency assignments to the *AMS* and the *MMS* stations located in international space and not listed in the Master Register and not included in the relevant Plans should not be taken into account when Administrations carry out their own assignments.

The RCC Administrations believe that the protection of frequency assignments to the *AMS* and the *MMS* stations in international airspace and international waters, leading to the restriction of the use of frequency assignments in national territories, can be provided only with the consent of the affected administration(s). Such consent can be obtained, for example, when developing appropriate spectrum use plans for the *AMS*, *MMS* and other applications, taking into account standards adopted by ICAO and IMO, or by interested Administrations on a bi/multilateral basis.

1.2 to consider identification of the frequency bands 3 300-3 400 MHz, 3 600-3 800 MHz, 6 425-7 025 MHz, 7 025-7 125 MHz and 10.0-10.5 GHz for International Mobile Telecommunications (IMT), including possible additional allocations to the mobile service on a primary basis, in accordance with Resolution 245 (WRC-19);

The RCC Administrations consider that the assessment of possibilities and conditions for frequency allocation to the MS on a primary basis and (or) identification of bands for IMT should be based on the results of the relevant ITU-R on frequency sharing and compatibility studies taking into account current and planned use of the bands in question, as well as adjacent bands.

3300–3400 MHz (Regions 1 and 2)

For Region 1. The RCC Administrations are in favour of the protection of radiolocation service in the frequency band 3 300-3 400 MHz, fixed satellite service in the adjacent frequency band 3400-4200 and when including any Region 1 countries into Radio Regulations Article 5 footnotes 5.429, 5.429A, 5.429B, 5.429C, 5.429D, 5.429E and 5.429F. Protection of stations in radiolocation service, FSS shall be ensured based on the results of ITU-R studies carried out in preparation for the WRC-15 (including Reports ITU-R M.2481, S.2368).

For Region 2. The RCC Administrations are in favour of the protection of radiolocation service within Region 1 in the frequency band 3300-3400 MHz and, fixed satellite-service in Region 1 in the frequency band 3400-4200, when identifying the frequency band 3 300-3 400 MHz within Region 2 for IMT systems taking to account the results of the studies carried out by ITU-R in preparation for WRC-23.

3600–3800 MHz (Region 2)

The RCC Administrations consider that in case of the identification of this frequency band for IMT systems in Region 2, it is necessary to adopt such RR provisions which provide protection to FSS and FS in Region 1. Protection shall be provided based on the results of the studies carried out by ITU-R

in preparation for WRC-07, WRC-12 and WRC-15 (including Report ITU-R F.2328, Report ITU-R M.2109, Report ITU-R S.2199, Report ITU-R S.2368 and Report ITU-R M.2111) taking into account the results of new ITU-R studies on the compatibility of IMT with FSS Earth stations in the frequency band 3600-3800 MHz.

6425–6525 MHz (Region 1)

The RCC Administrations believe that as a result of ITU-R studies on the possible use of IMT in the frequency band 6425-6525 MHz in Region 1, conditions should be determined to ensure the protection of the fixed satellite service (FSS) space stations and the fixed service (FS) stations, taking into account possible interference from the terrestrial service stations in other Regions.

In case of the identification of all or part of the frequency band 6425–6525 MHz (Region 1) for IMT systems, no additional regulatory and technical constraints shall be imposed on FSS Earth stations (Earth-to-space) and FS stations.

6525–7025 MHz (Region 1), 7025–7100 MHz (Regions 1, 2, 3)

The RCC Administrations are in favour of the identification of all of the frequency band 6 525–7100 MHz or its sub-bands for IMT systems, taking into account the results of the ITU-R sharing and compatibility studies. Identifying all or part of the frequency band 6525–7100 MHz for IMT systems shall provide:

- compatibility of IMT stations with non-GSO MSS feeder links (space-to-Earth) in the frequency band 6700-7075 MHz;
- compatibility between IMT stations and GSO and HEO FSS space stations in the frequency band 6725–7025 MHz;
- protection of SOS and SRS stations in the frequency band 7100-7250 MHz from unwanted emissions from IMT stations operating in the frequency band 6525-7100 MHz;
- maintaining an opportunity for the further usage of EESS (passive) in the frequency band 7075-7250 MHz.

Moreover, identifying all or part of the frequency band 6525–7100 MHz for IMT systems shall not pose additional regulatory and technical constraints on the FS stations and the SOS and SRS stations operating in the frequency band 7100-7250 MHz.

The protection of the radioastronomy service in the frequency band 6650-6675.2 MHz shall be carried out on the basis of the provisions of RR 5.149 and additional measures are not required.

7100–7125 MHz (Regions 1, 2, 3)

In case of identification of the frequency band 7100-7125 MHz or its sub-bands for IMT systems, the RCC Administrations are in favour of:

- for ensuring the protection of existing stations of radio communication services from interference in coinciding and adjacent frequency bands (including space stations in SOS, SRS and EESS (passive));
- against any additional regulatory and/or technical constraints shall be imposed on stations in FS, SRS and SOS.

10.0 –10.5 GHz (Region 2)

The RCC Administrations are in favour of the protection of services for which the frequency band 10–10.5 GHz is allocated within Region 1, as well as the protection of EESS (passive) in the frequency band 10.6-10.7 GHz. In case of the allocation of all or part of the frequency band 10.0–10.5 GHz to mobile service and their identification for IMT systems in Region 2, no additional

regulatory and technical constraints shall be imposed on stations in other radio services operating in accordance with RR within and adjacent frequency bands.

1.3 to consider primary allocation of the band 3 600-3 800 MHz to mobile service within Region 1 and take appropriate regulatory actions, in accordance with Resolution 246 (WRC-19);

The RCC Administrations are in favour of the protection of FSS (space-Earth), FS and other services of RCC countries operating in the frequency band 3 600-3 800 MHz and in adjacent frequency bands, without imposing undue constraints on these services and their further development, taking into account the existing results of ITU-R studies on frequency sharing and compatibility in the frequency band 3400–4200 MHz (Reports ITU-R S.2368, ITU-R M.2109 and ITU-R M.2111), as well as the results of studies during the current ITU-R study cycle.

For the land mobile service stations pfd limits shall be used at the border of neighboring states. The allowed pfd level shall not exceed the values adopted for the frequency band 3400-3600 MHz, however, an additional protection criterion for FSS ES is feasible to be considered, to take into account the short-term interferences.

The RCC Administrations object to updating the status of the allocation of the 3600-3800 MHz frequency band to the primary in Region 1 to the maritime mobile service without conducting appropriate compatibility studies.

1.4 to consider, in accordance with Resolution 247 (WRC-19), the use of high-altitude platform stations as IMT base stations (HIBS) in the mobile service in certain frequency bands below 2.7 GHz already identified for IMT, on a global or regional level;

The RCC Administrations believe that the conditions for the use of HIBS in the frequency bands mentioned in Resolution 247 (WRC-19):

- shall be based on the results of relevant ITU-R compatibility studies with respect to the current and planned use of the considered and adjacent frequency bands . ;
- should take into account the requirements for the protection of services with the primary allocation in these and adjacent frequency bands, including other uses of IMT systems.

The RCC Administrations believe that the use of HIBS:

- in the 694-960 MHz frequency band shall not cause interference and impose additional restrictions on the use of the 645-862 MHz and 960-1164 MHz frequency bands by aeronautical radio navigation service stations;
- in the frequency bands 1710-1885 MHz, 1885-1980 MHz, 2010-2025 MHz and 2110-2170 MHz should not cause interference and impose additional restrictions on the use:
 - of the frequency band 1675-1710 MHz by Meteorological Satellite Service stations,
 - of the frequency band 2025-2110 MHz by SOS, SRS, EESS stations and
 - of the frequency bands 1980-2010 MHz, 2170-2200 MHz by MSS stations.

1.5 to review the spectrum use and spectrum needs of existing services in the frequency band 470-960 MHz in Region 1 and consider possible regulatory actions in the frequency band 470-694 MHz in Region 1 on the basis of the review in accordance with Resolution 235 (WRC-15);

The RCC Administrations believe that when conducting ITU-R studies on frequency sharing and compatibility in the 470-694 MHz frequency band, all services allocated on a primary or secondary basis should be taken into account.

The RCC Administrations oppose to modify the regulatory conditions for the use of the 470-694 MHz frequency band in Region 1 under this agenda item of WRC-23 due to the current and future intensive use of this frequency band, as well as inability to ensure compatibility with services allocated on a primary or secondary basis in accordance with the RR.

The RCC Administrations believe that Resolution 235 (WRC-15) does not envisage any regulatory actions in the 694-960 MHz frequency band.

1.6 to consider, in accordance with Resolution 772 (WRC-19), regulatory provisions to facilitate radiocommunications for sub-orbital vehicles;

The RCC Administrations consider that, since the stations on board sub-orbital vehicles shall provide voice/data communications, navigation, surveillance, telemetry, tracking and command, they shall operate only within the current frequency allocations to:

- the aeronautical mobile (OR) service;
- mobile, except aeronautical mobile on route (R) service;
- aeronautical radionavigation service;
- mobile satellite, except for aeronautical mobile satellite on route (R);
- radionavigation satellite services;
- space operation service, depending on the transmitted information.

The RCC Administrations also consider that stations on board a sub-orbital vehicle shall ensure its safe flight in international airspace and its interoperability with civil aviation systems, moreover, these stations shall not cause unacceptable interference to the operation of stations on board launch vehicles.

1.7 to consider a new aeronautical mobile-satellite (R) service (AMS(R)S) allocation in accordance with Resolution 428 (WRC-19) for both the Earth-to-space and space-to-Earth directions of aeronautical VHF communications in all or part of the frequency band 117.975-137 MHz, while preventing any undue constraints on existing VHF systems operating in the AM(R)S, the ARNS, and in adjacent frequency bands;

The RCC Administrations do not oppose the new allocation of the frequency band 117.975-137 MHz, or part thereof, to the aeronautical mobile-satellite (R) service on the primary basis to develop aeronautical VHF communications systems for Earth-to-space and space-to-Earth directions, subject to development and adoption at WRC-23 of:

- mechanism for ensuring compatibility in this and adjacent frequency bands between AMS(R)S systems of one Administration with AM(R)S, AM(OR)S, ARNS systems of another Administration, especially when such Administrations are located in different airspaces or different Regions;
- protective measures for the systems of SOS, SRS and meteorological satellite service in the frequency band 137-138 MHz;
- compatibility conditions between AMS(R)S systems of different administrations.

The RCC Administrations consider that the standardization and frequency planning carried out within the ICAO for AM(R)S systems are insufficient to ensure the compatibility of AM(R)S of one Administration with the above-mentioned radio services of other Administrations.

The RCC Administrations also consider that the above conditions should be met without imposing regulatory or technical restrictions on the affected services within this band or adjacent frequency bands.

1.8 to consider, on the basis of ITU-R studies in accordance with Resolution 171 (WRC-19), appropriate regulatory actions, with a view to reviewing and, if necessary, revising Resolution 155 (Rev.WRC-19) and No. 5.484B to accommodate the use of fixed-satellite service (FSS) networks by control and non-payload communications of unmanned aircraft systems;

The RCC Administrations are of the view that:

- for operation of control and non-payload communication links of UAS, only ITU registered frequency assignments to FSS satellite networks, for which the coordination has been successfully completed, shall be used;
- the control and non-payload communication links of UAS shall operate in accordance with ICAO international Standards and Recommended Practices (SARPs), covering all aviation safety issues;
- the links of FSS networks which are not compliant with the ICAO SARPs requirements for UAS control and communications links, shall not be used for control and communications of UAS;
- revision of current Resolution 155 (Rev.WRC-19) or development of new Resolution shall be based on the results of the ITU-R compatibility studies for UAS CNPC links with the systems of existing services, operating within this band and if necessary in adjacent frequency bands;
- UAS CNPC links shall not cause more interference and shall not claim more protection than stations in FSS satellite networks which have been coordinated and registered in ITU;
- UAS CNPC links shall not restrict future development and impose additional restrictions on existing services, which have RR allocations within this band or adjacent frequency bands.

1.9 to review Appendix 27 of the Radio Regulations and consider appropriate regulatory actions and updates based on ITU-R studies, in order to accommodate digital technologies for commercial aviation safety-of-life applications in existing HF bands allocated to the aeronautical mobile (route) service and ensure coexistence of current HF systems alongside modernized HF systems, in accordance with Resolution 429 (WRC-19);

The RCC Administrations do not oppose modifications to RR Appendix 27, aimed at the use of digital technologies for commercial aviation AM(R)S safety-of-life applications in existing HF bands allocated to the aeronautical mobile (route) service when ensuring coexistence of current HF systems alongside modernized HF systems.

1.10 to conduct studies on spectrum needs, coexistence with radiocommunication services and regulatory measures for possible new allocations for the aeronautical mobile service for the use of non-safety aeronautical mobile applications, in accordance with Resolution 430 (WRC-19);

The RCC Administrations consider that, when identifying possible new allocations to aeronautical mobile service in the frequency band 15.4 – 15.7 GHz as well as when removing constraints on the use of the frequency band 22 – 22.21 GHz by aeronautical mobile service, it is necessary to provide protection of:

- radiolocation and aeronautical radionavigation services in the frequency band 15.4-15.7 GHz, of fixed satellite service in the frequency band 15.43-15.63 GHz, and of fixed service in the frequency band 22-22.21 GHz;
- radioastronomy service in the frequency bands 15.35-15.4 GHz and 22,21-22,5 GHz by means of unwanted emissions' limits of aeronautical mobile service stations in these frequency bands.

1.11 to consider possible regulatory actions to support the modernization of the Global Maritime Distress and Safety System and the implementation of e-navigation, in accordance with Resolution 361 (Rev.WRC-19);

Issue A (Modernization of GMDSS)

The RCC Administrations support a single Method A for Issue A.

Issue B (implementation of e-navigation)

The RCC Administrations support the only Method B which provides no change to RR Article 5.

Issue C (Introduction of additional satellite systems into the GMDSS by IMO)

The RCC Administrations are of the view that, Issue C may be solved by implementing Option 2 to Method 2, according to which the IMO spectrum requirement in the frequency band 1610-1621.35 MHz (Earth-to-space) can be used by GSO MSS satellite systems within the GMDSS, provided that No. 4.10 RR is not applied within such use.

1.12 to conduct, and complete in time for WRC-23, studies for a possible new secondary allocation to the Earth exploration-satellite (active) service for spaceborne radar sounders within the range of frequencies around 45 MHz, taking into account the protection of incumbent services, including in adjacent bands, in accordance with Resolution 656 (Rev.WRC-19);

The RCC Administrations do not oppose a new secondary allocation to the Earth exploration-satellite (active) service within the range of frequencies around 45 MHz provided protection of existing services in the 40-50 MHz band.

1.13 to consider a possible upgrade of the allocation of the frequency band 14.8-15.35 GHz to the space research service, in accordance with Resolution 661 (WRC-19);

The RCC Administrations are in favour of upgrading the allocation of the frequency band 14.8-15.35 GHz to the space research service (SRS), while ensuring protection of FS and MS from interference in considered frequency band and radioastronomy service in the frequency band 15.35-15.4 GHz, taking into account the results of sharing and compatibility studies. Upgrade of the SRS allocation shall not impose restrictions on existing systems of FS and MS in the frequency band 14.8-15.35 GHz, which are eligible for international recognition in accordance with Article 8 RR.

1.14 to review and consider possible adjustments of the existing or possible new primary frequency allocations to EESS (passive) in the frequency range 231.5-252 GHz, to ensure alignment with more up-to-date remote-sensing observation requirements, in accordance with Resolution 662 (WRC-19);

The RCC Administrations consider the need to adjust and to allocate frequency band 231.5-252 GHz to EESS (passive).

1.15 to harmonize the use of the frequency band 12.75-13.25 GHz (Earth-to-space) by earth stations on aircraft and vessels communicating with GSO FSS space stations in the fixed-satellite service globally, in accordance with Resolution 172 (WRC-19);

The RCC Administrations consider that the use of ESIM on aircraft and vessels in the frequency band 12.75-13.25 GHz (Earth-to-space) is allowed within the frequency assignments to satellite networks submitted and recorded in accordance with provisions of Articles 6 and 8 of RR Appendix **30B**.

The RCC Administrations are in favour of developing technical requirements to ESIMs on aircraft and vessels and regulatory provisions, based on ITU-R studies, for harmonized operation of these Earth stations with GSO FSS space stations in the band 12.75-13.25 GHz (Earth-to-space), while ensuring protection of existing services within the band and in adjacent frequency bands (particularly, EESS (active) in the frequency band 13.25–13.75 GHz), taking into account the provisions of Appendix 30B.

The RCC Administrations are in favour to ensure protection of allotments in the Plan and assignments in the List of Appendix **30B** RR, in accordance with criteria provided in Annex 4 to Appendix **30B**, when considering the use of the Earth stations on aircraft and vessels operating with GSO space stations in the FSS in the frequency band 12.75-13.25 GHz. Such use of the frequency band 12.75-13.25 GHz (Earth-to-space) by the earth stations on aircraft and vessels shall not result in any restrictions or changes to the existing allotments/assignments in the Plan/List and shall not adversely affect the criteria in Annex 4, including the cumulative effect.

The RCC Administrations are of the view that ESIMs on aircraft and vessels shall operate in the frequency band 12.75-13.25 GHz (Earth-to-space) within the characteristics of Earth stations, filed within the satellite network, and also within the agreements reached by Administrations under §§ 6.5, 6.6 and 6.16 of Article 6 Appendix **30B** RR.

The RCC Administrations are of the view that the use of ESIMs on aircraft and vessels in the frequency band 12.75-13.25 GHz (Earth-to-space) is allowed within frequency assignments of the satellite networks, filed and registered in accordance with the provisions of Articles 6 and 8 Appendix **30B** RR.

The Administrations which are planning to use ESIMs on aircraft and vessels in the frequency band 12.75-13.25 GHz (Earth-to-space) in international airspace or waters, shall submit to the BR the information on notification of these ESIMs. Such notifications shall be considered as new notifications of frequency assignments to satellite networks with a new date of receiving by the BR, and they are subject to examination by the BR with a view to protect frequency allotments/assignments of the Plan and List of Appendix **30B** RR against interference, taking into account the worst-location of test points outside the land and space above it.

1.16 to study and develop technical, operational and regulatory measures, as appropriate, to facilitate the use of the frequency bands 17.7-18.6 GHz and 18.8-19.3 GHz and 19.7-20.2 GHz (space-to-Earth) and 27.5-29.1 GHz and 29.5-30 GHz (Earth-to-space) by non-GSO FSS earth stations in motion, while ensuring due protection of existing services in those frequency bands, in accordance with Resolution 173 (WRC-19);

The RCC Administrations are in favour of the development of regulatory provisions and technical requirements for earth stations in motion (aeronautical and maritime ESIMs) planned for operation in non-GSO FSS systems in the frequency bands 17.7–18.6/18.8–19.3/19.7–20.2 GHz (space-to-Earth) and 27.5–29.1/29.5–30 GHz (Earth-to-space), or parts thereof, in order to ensure protection of GSO satellite networks and other services, including terrestrial services, within these or adjacent frequency bands, including passive services, and not imposing additional restrictions on them, based on the development of appropriate methodologies and procedures stipulated in *considering further* of Resolution **173** (WRC-19).

The RCC Administrations are of the view that, ESIMs operating in non-GSO FSS systems in the frequency bands 17.7–18.6/18.8–19.3 GHz (space-to-Earth) shall not claim protection from terrestrial services to which these frequency bands are currently allocated according to the Radio Regulations. The RCC Administrations are of the view that ESIMs could be used in non-GSO FSS systems, only if the following conditions are met:

- the technical and operational measures and the possible regulatory changes, which will be established according to results of ITU-R studies, shall not relax the provisions of Article 22 RR related to the protection of GSO networks from non-GSO FSS systems;
- ESIMs in non-GSO FSS systems shall operate within the characteristics and in accordance with the conditions specified for frequency assignments of typical Earth stations of non-GSO FSS systems, published in BR IFIC Part II-S, as well as within the coordination agreements between Administrations;
- ESIMs in non-GSO FSS systems shall not be used by safety-of-life applications;
- the non-GSO FSS systems, using ESIMs, shall comply with epfd limits referred to in Nos. 22.5C, 22.5D and 22.5F RR to protect GSO networks in FSS and BSS operating in the frequency bands 17.7–18.6/19.7–20.2 GHz and 27.5–28.6/29.5–30 GHz;
- the No. 22.2 RR is applied to protect GSO systems in FSS and BSS, operating in the frequency bands 17.7–18.6 GHz;
- exclude unauthorized use of ESIMs in the territory of States, that have not granted relevant authorizations (licenses).

1.17 to determine and carry out, on the basis of the ITU-R studies in accordance with Resolution 773 (WRC-19), the appropriate regulatory actions for the provision of inter-satellite links in specific frequency bands, or portions thereof, by adding an inter-satellite service allocation where appropriate;

The RCC Administrations are of the view that, the use of satellite-to-satellite links in the frequency bands 11.7-12.7 GHz, 18.1-18.6 GHz, 18.8-20.2 GHz, and 27.5-30 GHz, in current concept, does not correspond to the FSS definition, and imposes additional restrictions on the use of the existing and future FSS systems/networks, including in the national territories.

The RCC Administrations are of the view that, conditions for operation of satellite-to-satellite links in the above mentioned frequency bands shall ensure the protection of existing primary services in the same or adjacent bands, including passive services, and shall not impose additional restrictions on the use of current and future systems of these services.

The RCC Administrations support the development of technical and operational conditions, as well as regulatory provisions, including new allocations to the inter-satellite service (ISS), for operation

of satellite-to-satellite links in the frequency bands 11.7-12.7 GHz, 18.1-18.6 GHz, 18.8-20.2 GHz and 27.5-30 GHz, or parts thereof, taking into account the concept of operation, that meets the above requirements developed based on the results of ITU-R studies.

1.18 to consider studies relating to spectrum needs and potential new allocations to the mobile-satellite service for future development of narrowband mobile-satellite systems, in accordance with Resolution 248 (WRC-19);

The RCC Administrations are of the view that, such new allocation is possible if only technical and operational characteristics of narrowband mobile-satellite systems are determined, as well as regulatory conditions of their use, allowing to exclude unacceptable interference towards existing and planned systems of radiocommunication services operated in the same or in adjacent frequency bands in accordance with RR Article 5.

The RCC Administrations are of the view that, the e.i.r.p. limits of 27 dBW for space stations, set out in Resolution 248 (WRC-19), shall be applied to each station, but not to the entire system as a whole.

1.19 to consider a new primary allocation to the fixed-satellite service in the space-to-Earth direction in the frequency band 17.3-17.7 GHz in Region 2, while protecting existing primary services in the band, in accordance with Resolution 174 (WRC-19);

The RCC Administrations are of the view that, considering a new primary allocation of frequency band 17.3-17.7 GHz to the fixed-satellite service in the space-to-Earth direction in Region 2, the existing services in Region 1 within this and adjacent frequency bands shall be protected.

2 to examine the revised ITU-R Recommendations incorporated by reference in the Radio Regulations communicated by the Radiocommunication Assembly, in accordance with further resolves of Resolution 27 (Rev.WRC-19), and to decide whether or not to update the corresponding references in the Radio Regulations, in accordance with the principles contained in resolves of that Resolution;

The RCC Administrations support the principles set out in Resolution 27 (Rev.WRC-19) and supports the revision of the ITU-R Recommendations incorporated by reference in the Radio Regulations with a view to updating them as necessary.

4 in accordance with Resolution 95 (Rev.WRC-19), to review the Resolutions and Recommendations of previous conferences with a view to their possible revision, replacement or abrogation;

The RCC Administrations support the principle of Resolution 95 (Rev.WRC-19) to ensure the relevance of Resolutions and Recommendations of previous WRCs.

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;

The RCC Administrations consider it necessary to further improve the procedures for notification, coordination and recording procedures for frequency assignments to satellite networks in different services to ensure equitable access to orbital and frequency resource for ITU Member States.

Topic A - *studying tolerances for certain orbital characteristics of non-GSO space stations of the fixed-satellite, mobile-satellite or broadcasting satellite services to account for potential differences between the notified and deployed orbital characteristics for the inclination of the orbital plane, the altitude of the apogee of the space station, the altitude of the perigee of the space station and the argument of the perigee of the orbital plane.*

The RCC Administrations are of the view that, studying tolerances for certain orbital characteristics of non-GSO space stations should only be carried out with respect to systems in the fixed-satellite, mobile-satellite and broadcasting satellite services subject to Resolution 35 (WRC-19). Tolerances for the inclination of the orbital plane, the altitude of the apogee of the space station, the altitude of the perigee of the space station and the argument of the perigee of the orbital plane shall depend on the type of orbit of the space station. The specified tolerances shall not apply to the satellite systems with the altitude of the apogee exceeding 15000 km.

The RCC Administrations are of the view that, the regulatory mechanisms for temporarily excess of the established tolerances need to be developed, in order to meet the operational requirements of non-GSO systems.

Topic B - *developing post-milestone procedure taking into account the reporting defined in resolves 19 of Resolution 35 (WRC-19)*

The RCC Administrations are of the view that, developing a new Resolution regarding post-milestone procedure in accordance with *resolves 19 of Resolution 35 (WRC-19)*, the operational features of non-GSO systems with a small number of satellites need to be taken into account. The developed post-milestone procedure shall not impose additional restrictions on non-GSO satellite systems using highly elliptical orbit.

Topic C - *protecting geostationary satellite networks in the MSS operating in 7/8 and 20/30 GHz from emissions of non-geostationary satellite systems operating in the same frequency bands and identical directions*

The RCC Administrations support the development of technical and regulatory mechanisms for protecting GSO systems in the mobile satellite service operating in 7/8 and 20/30 GHz from emissions of the non-geostationary (non-GSO) satellite systems operating in the same frequency bands and same direction, without limiting the use of GSO and non-GSO satellite systems/networks in mobile satellite service.

Topic D - *Changing Appendix 1 to Annex 4 of RR Appendix 30B*

The RCC Administrations support the value of the coordination arc in Appendix 1 to Annex 4 to RR Appendix 30B to be aligned with the WRC-19 decision and the Rule of Procedure approved.

Topic E - *Improving RR Appendix 30B procedures for new Member States of the Union*

The RCC Administrations support granting to new Member States of the Union the same rights that are granted to other Member States in Annex 30B, based on the principles set out in Article 44 of the ITU Constitution.

The RCC Administrations are of the view that, the procedure for the addition of a national allotment to the Plan of RR Appendix 30B for a new Member State of the Union, can be improved, while ensuring the protection of national allotments and assignments in the RR Appendix 30B List, based on consultations with affected Administrations.

Topic F - Impact of excluding feeder-link/Up-link service and coverage areas in the bands subject to RR Appendix 30A and RR Appendix 30B

The RCC Administrations support further ITU-R studies on the impact of excluding feeder-link/Up-link service and coverage areas in the bands subject to RR Appendix 30A and RR Appendix 30B.

Topic G - Revisions to Resolution 770 (WRC-19) to allow its implementation

The RCC Administrations support the revision of Resolution 770 (WRC-19) in accordance with the results of ITU-R studies in order to eliminate difficulties applying this resolution.

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-19), and take appropriate action;*

The RCC Administrations support the ITU-R activities towards global harmonization of spectrum utilization by deleting the number of country footnotes of RR Article 5 or to have their country name deleted from footnotes.

The RCC Administrations are of the view that, this agenda item is not intended for adding country names into existing footnotes, as well as adding new footnotes to RR Article 5.

Any change to footnotes of RR Article 5 under this agenda item requires consideration of possible consequences with regard to such changes and, accordingly, obtaining the consent of the affected Administrations.

9.1 on the activities of the Radiocommunication Sector since WRC-19;

In accordance with the Guidelines of CPM23-1 under this agenda item no method to address issues/topics as well as regulatory and procedural considerations in the CPM Report for WRC-23 shall be developed.

a) *In accordance with Resolution 657 (Rev.WRC-19), review the results of studies relating to the technical and operational characteristics, spectrum requirements and appropriate radio service designations for space weather sensors with a view to describing appropriate recognition and protection in the Radio Regulations without placing additional constraints on incumbent services*

The RCC Administrations are of the view that, the space weather sensors may be considered as application of the Meteorological aids service (MetAids).

The RCC Administrations are of the view that, it is not allowed to use the space weather sensors without identification of the frequency bands within *MetAids* allocations for such applications in the Radio Regulations.

The RCC Administrations are of the view that, changes to the RR Articles 1, 4 and 5 can be made only based on outcomes of ITU-R studies, carried out under agenda item of future WRC.

b) *Review of the amateur service and the amateur-satellite service allocations in the frequency band 1 240-1 300 MHz to determine if additional measures are required to ensure protection of the radionavigation-satellite (space-to-Earth) service operating in the same band in accordance with Resolution 774 (WRC-19)*

The RCC Administrations are of the view that, based on the results of ITU-R studies, the technical and operational measures to ensure the protection of RNSS receivers from the stations in the amateur and the amateur-satellite services in the frequency band 1 240-1 300 MHz need to be defined.

c) Study the use of International Mobile Telecommunication system for fixed wireless broadband in the frequency bands allocated to the fixed services on primary basis, in accordance with Resolution 175 (WRC-19)

The RCC Administrations oppose modifications of the Radio Regulations in response to WRC-23 agenda item 9.1 c) other than the suppression of Resolution 175 (WRC-19).

The RCC Administrations are of the view that, the applications of IMT systems are intended for operation in motion and do not comply with RR definitions and requirements for the FS. Therefore, studies on this topic should not focus on “IMT systems”, but on “IMT technologies” used for fixed wireless broadband within current regulatory structure.

The RCC Administrations are of the view that, current RR provisions do not contradict with the usage of various IMT technologies for fixed wireless access.

The RCC Administrations are further of the view that, considering the feasibility of using IMT technologies for the fixed wireless broadband understanding of existing RR provision for such applications shall be as follows:

- FS stations shall be considered only as fixed stations in strict compliance with the definitions as of “Fixed station” and “Fixed service” in the Radio Regulations;
- FS stations shall not cause more interference and claim more protection in comparison with the existing FS stations;

The RCC Administrations are of the view that use of IMT technologies for fixed wireless access in the frequency bands allocated to the FS can be taken into account through the updating of existing ITU-R Recommendations/Reports/Handbooks, which is part of the routine activities of ITU-R WPs 5A and 5C.

The RCC Administrations are also of the view that, taking into account the existing RR provisions there is no need to study the specific frequency bands for using of IMT technologies for the fixed wireless broadband applications.

Any RR changes are out of scope of the topic c) of the WRC-23 agenda item 9.1.

d) Protection of EESS (passive) in the frequency band 36–37 GHz from non-GSO FSS space stations (see Document [535](#) WRC-19)

The RCC Administrations support to limit maximum e.i.r.p. level of unwanted emissions of FSS space stations in order to ensure protection of EESS (passive) sensors operating in the frequency band 36-37 GHz (–34 dBW/100 MHz) from interference caused by non-GSO FSS space stations operating in the frequency band 37.5-38 GHz.

Additional Issue No. 1 (Contribution 550 WRC-19)

Verification of No. 21.5 limits for the notification of IMT stations operating in the frequency band 24.45-27.5 GHz which use an antenna that consists of an array of active elements

Regarding "notification" the RCC Administrations consider that, provisionally, pending a decision of WRC-23, when notifying IMT stations with active antenna arrays Item Identifier 8AA "the power delivered to the antenna" (see RR Appendix 4 Table 1) shall be specified as the "total radiated power" (TRP), defined as the integral of the power transmitted from all antenna elements in different directions over the entire radiation sphere, as defined in Resolution 243 (WRC-19) and Resolution 750 (Rev.WRC-19).

Regarding the "*verification*" issue, the RCC Administrations propose to keep unchanged the limit of power level referred to in RR Article 21 No. 21.5, taking into consideration the need of using a correction factor for bandwidth radiated by IMT station using active antenna system, when setting the reference bandwidth of 200 MHz, till the completion of studies on making changes to the RR Article 21.

Regarding the "*the frequency band*" issue, the RCC Administrations are in favour to modify Table 21-2 of RR Article 21 with respect to the frequency band 24.45-27.5 GHz due to additional allocation of part of this frequency band to the mobile service, and consider the need of modifications to Table 21-2 of RR Article 21 concerning frequency bands shared by terrestrial and space services:

- 40-40.5 GHz; 42.5-43.5 GHz; 45.5-47 GHz; 47.2-48.2 GHz; 66-71 GHz, which are identified for IMT and might be used by base stations with active antenna systems;
- 43.5-45.5 GHz; 48.2-50.2 GHz; 50.4-51.4 GHz.

Additional Issue No. 2

Resolution 427 (WRC-19) "Updating provisions related to aeronautical services in ITU-R"

The RCC Administrations are of the view that, updating of provisions of Radio Regulations related to aeronautical services shall ensure harmonization of these provisions with current and future applications of aeronautical systems.

The RCC Administrations are also of the view that, updating of provisions of Radio Regulations related to aeronautical services in the ITU-R, shall not contradict to the RR existing provisions related to aeronautical services.

Additional Issue No. 3

Resolution 655 (WRC-15) "Definition of time scale and dissemination of time signals via radiocommunication systems"

The RCC Administrations are of the view that, changes of the Coordinated Universal Time (UTC) scale may lead to the need to modify on-board equipment of Global Navigation Satellite Systems (GNSS), ground stations of the standard frequency and time signal service, transmitting reference signals of frequency and time, as well as navigation and frequency-time consumer equipment.

The RCC Administrations are of the view that, in the case to switch to a new time scale, it is necessary:

- to keep the UTC term, while it is proposed to revise the limits on the maximum discrepancy between UT1 and UTC times, to meet the needs of current and future user communities;
- to determine the maximum value of the discrepancy between the UT1 and UTC times;
- to establish a transition period, the duration of which should take into account the planned lifetime of the equipment, and ensure the principle of backward compatibility for consumers of all categories.

9.2 on any difficulties or inconsistencies encountered in the application of the Radio Regulations¹

¹ This agenda sub-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. Administrations are invited to inform the Director of the Radiocommunication Bureau on any difficulties or inconsistencies encountered in the Radio Regulations.

The RCC Administrations support measures to eliminate any difficulties or inconsistencies encountered in the application of the Radio Regulations.

In order to improve preparation to WRC of ITU Member States, the RCC Administrations propose early consideration by Radio Regulations Board, the Radiocommunication Advisory Group, as well as the relevant ITU-R Working parties of the information submitted by Radiocommunication Bureau on difficulties or inconsistencies encountered in the application of the Radio Regulations, taking into consideration WRC-19 materials, which were not sufficiently reviewed due to time constraints.

9.3 on action in response to Resolution 80 (Rev.WRC-07)

The position is under development.

10 to recommend to the Council items for inclusion in the agenda for the next WRC, and items for the preliminary agenda of future conferences, in accordance with Article 7 of the Convention and Resolution 804 (Rev.WRC-19)

The position is under development.
