3rd ITU INTER-REGIONAL WORKSHOP ON WRC-23 PREPARATION

27 - 29 September 2023



Document WRC-23-IRW-23/3-E 19 September 2023 English only

RCC Regional Commonwealth in the Field of Communications

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



REGIONAL COMMONWEALT 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 WG2023/417 Annex 1 September 2023

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

(Version of 8 September 2023)

Telecommunication Administrations of the Member Countries of the Regional Commonwealth in the Field of Communications (RCC Administrations),

recognizing the need

- to improve the regulation and increase efficiency of usage of radio frequency spectrum and satellite orbits;
- to provide conditions for the development of radio communications and the implementation of new radio technologies;
- to maintain the balance of interests between existing and new allocations to various radiocommunication services;
- to take into account the technical and economic possibilities for the development of radio communications of the ITU Member States;
- to strengthen regional and international cooperation in developing radiocommunications and its systems,

developed

the following position on agenda items for the World Radiocommunication Conference 2023 (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 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 administrations of the RCC are of the view that the absence of an application procedure and registration of frequency assignments for stations operating in the Aeronautical Mobile Service (AMS) and Maritime Mobile Service (MMS) within the international space (international airspace or waters, i.e. outside national territories) renders such frequency assignments devoid of international recognition and exclusive rights for protection. Consequently, the applications of AMS and MMS in the international space are not prioritized over the applications of terrestrial services in the 4800-4990 MHz frequency band, whether within the international space or inside national territories.

The administrations of the RCC oppose the implementation of additional pfd limits in the 4800-4990 MHz frequency band to protect AMS and MMS stations situated in international space, as this places unreasonable constraints on the utilization of that band within national territories by other radio services.

The administrations of the RCC are of the view that, in accordance with RR No. 8.3, administrations should not consider the frequency assignments that are not included in MIFR for AMS and MMS stations located in the international space when conducting their own assignments.

The administrations of the RCC are of the view that the protection of frequency assignments for AMS and MMS stations in international airspace and waters, which results in restrictions on the use of frequency assignments within national territories, should only be implemented with the agreement of the affected administrations. Such agreement could be obtained, for instance, during the development of corresponding plans for spectrum utilization by AMS, MMS and other applications, while taking into account the standards adopted by ICAO and IMO, or through bilateral or multilateral agreements between the administrations involved.

The administrations of the RCC hold the view that agenda item 1.1 can be resolved in WRC-23 using Method F «Application of RR No. 9.21 and bilateral/multilateral coordination agreements with coastal States for the protection of AMS/MMS stations in international airspace and international waters».

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 are of the view that the identification of the possibility and conditions for the frequency bands allocations to the Mobile Service on a primary basis and/or their identification for IMT shall be based on the results of relevant ITU-R sharing and compatibility studies, taking into account the current and planned use of the considered and adjacent frequency bands.

3300-3400 MHz (Regions 1 and 2)

For Region 1. The RCC Administrations support the eventual WRC-23 decision on this frequency band, based on Method 1A or 1B of the CPM Report on agenda item 1.2, and, at the same time, the RCC Administrations are in favor of protection of radiolocation service in the frequency band 3 300-3 400 MHz, as well as protection of Fixed Satellite Service (FSS) in adjacent frequency band 3 400-4 200 MHz, when including any countries from Region 1 into the footnotes 5.429, 5.429A, 5.429B, 5.429C, 5.429B, 5.429F, 5.429F of Article 5 of the Radio Regulations. Protection of radiolocation service stations and FSS stations shall be provided on the basis of the results of ITU-R studies, carried out in preparation for the WRC-15 (including Reports ITU-R M.2481 and S.2368).

For Region 2. The RCC Administrations support the eventual WRC-23 decision on this frequency band, based on Method 2A or 2C of the CPM Report on agenda item 1.2, and, at the same time, the RCC band 3300-3400 MHz, as well as protection of Fixed Satellite Service in Region 1 in the

frequency band 3 400-4 200 MHz, when identifying the frequency band 3 300-3 400 MHz in Region 2 for IMT systems, taking into account the results of the ITU-R studies, carried out in preparation for the WRC-23.

3600-3800 MHz (Region 2)

The RCC Administrations support the eventual WRC-23 decision on this frequency band, based on Method 3A or 3D of the CPM Report on agenda item 1.2, and, at the same time, the RCC Administrations are of the view that, in the case of identifying 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 in 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 IMT compatibility with FSS earth stations, FS stations in the frequency band 3 600-3 800 MHz.

6425-6525 MHz (Region 1)

The RCC Administrations support the eventual WRC-23 decision on this frequency band, based on Method 4D of the CPM Report on agenda item 1.2.

In the case of identification of the frequency band 6 425-6 525 MHz (Region 1) or its individual parts for IMT systems, no additional regulatory and technical restrictions shall be imposed on FSS earth stations and FS stations.

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

The RCC Administrations are in favor of identifying the frequency band 6 525–7 025 MHz, or individual parts thereof, for IMT systems, taking into account the results of the ITU-R sharing and compatibility studies. The identification of frequency band 6525–7100 MHz, or individual parts thereof, for IMT systems can be under the following conditions:

- compatibility of IMT stations with non-GSO MSS (s-E) feeder links in the frequency band 6700-7075 MHz;
- compatibility of IMT stations with FSS space stations on GSO and HEO in the frequency band 6725-7025 MHz;
- retaining the possibility to further use the EESS (passive) in the frequency band 7075-7250 MHz.

The RCC Administrations are of the view that unwanted emissions from IMT stations shall comply with the requirements of Recommendation SM.329 for Category B.

Moreover, the identification of frequency band 6525–7100 MHz for IMT systems shall not impose additional regulatory or technical restrictions on FS stations, operating in this frequency band, as well as on SOS and SRS stations, operating in the frequency band 7100-7250 MHz.

Protection of radio astronomy service in the frequency band 6650–6675.2 MHz shall be provided based on the provisions of footnote 5.149 RR, and the adoption of additional measures is not required.

7100-7125 MHz (Regions 1, 2 and 3)

In the case of identification of the frequency band 7100–7125 MHz, or individual parts thereof, for IMT systems, the RCC Administration are:

- in favor of ensuring the interference protection to stations in existing radio services in the same and adjacent frequency bands (including FS stations, as well as space stations of SOS, SRS and EESS (passive)):
- against any additional regulatory and/or technical restrictions on the use of FS, SRS and SOS stations.

10.0 -10.5 GHz (Region 2)

The RCC Administrations support the eventual WRC-23 decision on this frequency band, based on Method 6A or 6C of the CPM Report on agenda item 1.2, and, at the same time, the RCC Administrations are in favour of ensuring the protection to services for which the frequency band 10–10.5 GHz is allocated within Region 1, as well as the protection to EESS (passive) in the frequency band 10.6-10.7 GHz. In the case of allocation of the frequency band 10.0–10.5 GHz, or

individual parts thereof, to the Mobile Service and its identification for IMT systems in Region 2, no additional regulatory and technical restrictions shall be imposed on stations of other services, operating in accordance with RR in the same 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 of the view that, for upgrading allocation of the frequency band 3600-3800 MHz to the primary status for mobile, excluding aeronautical mobile service in Region 1 is possible under following conditions:

- 1) ensure protection to the FSS (space-to-Earth), FS and other services operating in the frequency band 3600-3800 MHz and in adjacent frequency bands, without imposing constrain on these services and their future development,
- 2) obtain agreement of other administrations under No. 9.21 RR when pfd limit of -154.5 dBW/m² 4 kHz for MS stations is exceeded for more than 20% of the time at 3 m above ground at the border of the territory of any other administration.
- 3) Application of No. 9.17 and No. 9.18 RR for specific earth stations in the Fixed Satellite Service and stations in the Mobile Service, except aeronautical mobile service also apply.

The RCC Administrations believe that the technical limits for MS may be reviewed based on mutual consent of the administrations concerned through the conclusion of bilateral and multilateral agreements.

The RCC Administrations object to upgrading status of the allocation of the frequency band 3600-3800 MHz to the Maritime Mobile Service and Aeronautical Mobile Service to a primary one in Region 1 as this is not in accordance with Resolution 246 (WRC-19).

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 are of the view that, the identification of the possibilities and conditions for using HIBS in the frequency bands referred to in Resolution 247 (WRC-19), shall be based on the results of the appropriate ITU-R compatibility studies, taking into account the current and planned use of the considered and adjacent frequency bands.

The RCC Administrations are of the view that conditions for using HIBS in the frequency bands referred to in Resolution **247 (WRC-19)**, shall take into account the protection requirements for the existing services with primary allocations in these and adjacent frequency bands, including other uses of IMT systems (terrestrial systems).

The RCC Administrations are of the view that the use of HIBS in the frequency band 694-960MHz shall not cause interferences to and impose any additional restrictions on the use of frequency bands 645-862 MHz and 960-1164 MHz by the stations in the Aeronautical Radionavigation Service (ARNS); as well as the use of HIBS in the frequency bands 1710-1885 MHz, 1885-1980 MHz, 2010-2025 MHz and 2110-2170 MHz shall not cause interferences to and impose any additional restrictions on the use of frequency band 1675-1710MHz by the stations in the Meteorological Satellite Service; use of frequency band 2025-2110 MHz by SOS, SRS, EESS stations, and use of frequency bands 1980-2010 MHz, 2170-2200 MHz by MSS stations. At the same time:

- to protect terrestrial IMT systems in the territory of other administrations from HIBS emissions, a restriction as a maximum permissible level of power flux-density at the surface of the Earth in the territory of another administration shall be applied.
 - to protect the ARNS in the countries specified in RR Nos. 5.312 and 5.323 as well as terrestrial mobile stations in the frequency band 694-960 MHz the large separation distances for HIBS are required and this excludes possibility for using HIBS on practice.

- to protect MSS earth stations in the frequency band 2 170-2 200 MHz from out-of-band HIBS emissions, a restriction as a power flux-density level at the surface of the Earth shall be applied.
- to protect the Meteorological Satellite Service in the frequency band 1670-1710 MHz from HIBS operating in the frequency band 1710-1785 MHz, the HIBS operation shall be restricted to the reception.
- to protect SOS, SRS, EESS in the frequency band 2025-2110 MHz from HIBS operating in the frequency band 2110-2170 MHz, the HIBS operation shall be restricted to the transmission.
- to protect FS stations in the 2025-2110 MHz frequency band from HIBS out-of-band emissions, the power flux-density level at the surface of the Earth shall be applied.
- to protect FS stations in the frequency bands 1785-1980 MHz, 2010-2025 MHz and 2110-2170 MHz from main HIBS emissions, a restriction as a power flux-density level at the surface of the Earth shall be applied.

The RCC Administrations are of the view that the following Methods of the CPM Report can be used as the basis for a decision-making on WRC-23 agenda item 1.4, taking into account the required conditions set out in the relevant draft Resolutions:

- Method A1 Question A: HIBS in the frequency band 694 960 MHz;
- Method B3 Question B: HIBS in the frequency band 1710-1885 MHz;
- Method C3 Question C: HIBS in the frequency band 1 885-1 980 MHz, 2 010-2 025 MHz and 2 110-2 170 MHz;
- Method D3 Question D: HIBS in the frequency band 2 500-2 690 MHz.
- 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 are of the view that, when conducting ITU-R sharing and compatibility studies in the frequency band 470-694 MHz all services that have both primary and secondary allocations, shall be taken into account.

The RCC Administrations oppose any changes to the regulatory conditions for using the frequency band 470-694 MHz in Region 1 under this WRC-23 agenda item due to the current and future intensive use of the referred frequency band, as well as inability to ensure electromagnetic compatibility with the existing services that have primary and secondary allocations in the frequency band 470-694 MHz in Region 1, in accordance with the Table of Frequency Allocations RR.

The RCC Administrations are of the view that the Resolution 235 (WRC-15) does not provide for any regulatory action in the frequency band 694-960 MHz.

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, depending on the transmitted information, exclusively within the spectrum distributions to the following services:

- aeronautical mobile service;
- aeronautical radionavigation service;
- aeronautical mobile satellite service;
- radionavigation satellite services;
- space operation service.

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

The RCC Administrations consider the need to **proceed with the studies** based on modified Resolution 772 (WRC-19) to determine:

- 1) specific frequency bands and radio services in which it is possible to use stations for suborbital flights;
- 2) technical characteristics and criteria for the protection of stations intended for suborbital flights:
- 3) technical and regulatory conditions for combining stations intended for suborbital flights with stations of existing services and applications.

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 support a primary allocation of the frequency band 117.975-137 MHz, or part thereof, to the Aeronautical Mobile-Satellite (R) Service (AMS(R)S) to develop aeronautical VHF communications systems for both Earth-to-space and space-to-Earth directions, unless the necessary conditions are adopted to ensure the coexistence and protection of existing services.

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 coexistence of AMS(R)S of the one administration with the existing services of other administrations.

The RCC Administrations also consider that the decision on this agenda item should not impose any regulatory or technical restrictions on the affected existing services in the considered or adjacent frequency bands.

The RCC Administrations are of the view that a primary allocation of the frequency band 117.975-137 MHz, or part thereof, to the AMS(R)S can be possible only if the following conditions are met:

- 1. Restrictions on the use of AMS(R)S in the frequency band 117.975-137 MHz only by non-geostationary systems;
- 2. Development and adoption at WRC-23 of the conditions for ensuring the coexistence and protection of existing services, namely:
 - for the protection of existing AM(R)S, AM(OR)S and for compatibility between different AMS(R)S systems in the same frequency bands, coordination procedures shall be applied for AMS(R)S in accordance with RR No. 9.11A (RR 9.12, 9.14 and 9.15). At the same time, 9.16 RR should not apply to AM(R)S and AM(OR)S stations, so as not to limit the operation of existing systems;
 - when applying RR No. 9.14 for AMS(R)S space stations, the pfd limit should be used as the coordination threshold (see Appendix 1, RR Appendix 5). on the Earth's surface not higher than −140 dB(W/(m2 4 kHz));
 - to protect systems of existing aeronautical services (AM(R)S, AM(OR)S and ARNS) operating in adjacent frequency bands, the attenuation of unwanted emissions from AMS(R)S space stations should be no less than that provided for in the ICAO SARPs for aircraft AM(R)S stations in adjacent channels (see Section 6.3.4 of Annex 10 to the Convention on International Civil Aviation Aeronautical Telecommunications, Volume III Communication Systems, ICAO);
 - to protect radio astronomy in the frequency band 150.05-153 MHz, provisions of RR No. 5.208A for new AMS(R)S allocations in the frequency band 117.975-137 MHz should apply;
 - to protect scientific services operating in adjacent bands, it is necessary that unwanted emissions from AMS(R)S space stations in the frequency band 137-138 MHz do not exceed the following pfd levels. on the surface of the Earth:
 - $-211.93 \text{ dB}(\text{W/(m}^2 \text{ Hz}))$ at 0.001% of the time to protect SRS;

- $-179.93 \text{ dB}(\text{W/(m}^2 \text{ kHz}))$ at 1% of the time to protect the SOS;
- -146.93 dB(W/(m² 150 kHz)) 20% of the time for MetSat protection.

The RCC Administrations consider the Method B2 of the CPM Report as the most suitable for decision-making at WRC-23.

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 object to the use of frequency bands allocated to the fixed satellite service on a primary basis for the operation of UAS CNPC links, since there are no studies results demonstrating the possibility of ensuring the safety of UAS flights using such CNPC links in non-segregated airspace.

The RCC Administrations propose to suppress 5.484B of RR, as well as Resolutions 155 (Rev.WRC-19) and Resolution 171 (WRC-19).

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 object to the specification of list of emission classes in RR Appendix 27 used by stations of the Aeronautical Mobile (on route) Service in the frequency bands of their exclusive use in the frequency band between 2850 kHz and 22000 kHz (paragraphs 27/58, 27/60 of Appendix 27 RR).

The RCC Administrations do not object to limiting the maximum peak power of the envelope for the emission classes added in § 27/60 of RR Appendix 27 to values that will ensure compatibility of existing HF systems with modernized broadband 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 do not object to the new allocations to the Aeronautical Mobile Service in the frequency band 15.4 - 15.7 GHz, as well as to removal of restrictions for the use of the frequency band 22–22.21 GHz by the Aeronautical Mobile Service, providing the protection conditions for the following services:

- Radiolocation and Aeronautical Radionavigation Service in the frequency band 15.4-15.7 GHz, Fixed-Satellite Service in the frequency band 15.43-15.63 GHz and Fixed Service in the frequency band 22-22.21 GHz;
- Radio Astronomy Service in the frequency bands 15.35-15.4 GHz and 22.21-22.5 by limiting unwanted emissions from stations in the Aeronautical Mobile Service in these frequency bands. The stations in the Aeronautical Mobile Service in the frequency bands 15.4-15.7 GHz and 22-22.21 GHz, when operating outside the national territory, cannot claim protection from interference caused by stations of other primary services.
- 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 the Method A of the CPM Report for solving Issue A. At the same time, in order to use the frequency band 1645.5-1646.5 MHz by satellite EPIRB (emergency position-indicating radiobeacon), it is necessary to change RR No. 5.375 and Table 15-2 of RR Appendix 15 so that the frequency band 1645.5-1646.5 MHz would no longer be limited to be used exclusively by satellite EPIRBs (emergency position-indicating radiobeacons), but would be available to be used in GMDSS and for common maritime radio communications on a non-priority basis.

Issue B (implementation of e-navigation)

The RCC Administrations propose no changes to RR Article 5 (Method B of the CPM Report).

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

The RCC Administrations are of the view that, when solving Problem C, the decisions of the International Maritime Organization (IMO) on the GMDSS should be taken into account, as well as the real requirements for frequency bands for GMDSS satellite systems. The RCC Administrations believe that the GMDSS international system can be implemented on the basis of global and regional satellite systems that meet the requirements faced at GMDSS, and use standardized and affordable equipment installed on ships.

The RCC Administrations are of the view that, according to the ITU-R studies, the use of specific frequencies for new GMDSS satellite networks/systems is acceptable in accordance with the Method C4 of the CPM Report.

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 secondary allocation of the frequency band 40-50 MHz to the Earth exploration-satellite service (active) for spaceborne radar sounders, while ensuring the protection to existing services in this and adjacent frequency bands. In particular, the RCC Administrations believe that for adequate protection of these services, the application of pfd limits. from each radar sounder sensor on board the EESS spacecraft (active) must not exceed -156 dB(W/(m2 4 kHz)) more than 0.0002% of the time.

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 to FS and MS from interference in considered frequency band, and to Radio Astronomy Service in the frequency band 15.35-15.4 GHz, taking into account the results of sharing and compatibly studies. Upgrade of the allocation to SRS 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 support the Method B of the CPM Report on agenda item 1.14 (option 3), according to which:

- allocations to FS, MS in the frequency band 235-238 GHz are being included in the RR, but allocations to FS/MS in the frequency band 238-241 GHz are being removed;
- the conditions of use of EESS (passive) in the frequency band 235-238 GHz are being specified, the use of the frequency band 235-238 GHz is being limited to the EESS (passive) passive sensors for atmospheric clearance; the EESS (passive) passive sensors within this use shall not require protection from FS/MS stations;

- additional allocations to EESS (passive) are being added in the frequency bands 239.2-242.2 GHz and 244.2-247.2 GHz.

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, based on carried out studies, are in favor of developing technical requirements to ESIMs on aircraft and vessels and regulatory provisions to ensure harmonized operation of such earth stations, communicating with GSO FSS space stations in the frequency band 12.75-13.25 GHz (Earth-to-space), while ensuring protection to existing services and the services operated 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 favor of the need 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 possibility to use A-ESIM and M-ESIM, communicating with GSO FSS space stations in the frequency band 12.75-13.25 GHz. Such use of the frequency band 12.75-13.25 GHz (Earth-to-space) by A-ESIM and M-ESIM shall not result in any restrictions or changes to the existing allotments/assignments in the Plan/List and shall not adversely affect the criteria set forth in Annex 4, including the cumulative effect of multiple earth stations on aircraft and vessels.

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, notified within the base satellite network (supporting assignment), and also within the agreements reached by administrations under §§ 6.5, 6.6 and 6.16 of Article 6 of 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 base satellite networks, i.e. included into the List, in accordance with Article 6 of Appendix 30B RR, as well as included in accordance with §6.25 (taking into account §6.26), and registered in MIFR with favorable conclusion, in accordance with §8.11 of Article 8 of Appendix 30B RR.

The RCC Administration are of the view that 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 and/or waters, irrespective of the inclusion in the contour of the agreed service area of the base network of international spaces, shall submit to the BR the information on ESIMs together with information on re-notification of the base network for such ESIMs. Such submissions 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 be examined by the BR with a view to protect frequency allotments/assignments of the Plan and List of Appendix 30B RR against interference, carried out at BR-generated uplink nodes everywhere within the service area in international spaces of the corresponding A-ESIM and M-ESIM assignments, assuming that A-ESIM and M-ESIM are located at these uplink nodes

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 support the definition of compatibility conditions for Earth Stations In Motion (ESIMs) planned for operation in non-GSO FSS systems in the 17.7–18.6 GHz, 18.8–19.3 GHz, 19.7–20.2 GHz (space-to-Earth) and 27.5–29.1 GHz, 29.5–30 GHz (Earth-to-space) frequency bands, or parts thereof, with the services to which the indicated and adjacent frequency bands are allocated, without imposing additional restrictions on those services, based on the development of the methodologies and procedures specified in considering further section of Resolution 173 (WRC-19).

The RCC Administrations are of the view that ESIMs, operating in non-GSO FSS systems in the 17.7–18.6 GHz,18.8–19.3 GHz (space-to-Earth) frequency bands shall not claim protection from terrestrial services, which have allocations in the same frequency bands and are operating in accordance to the Radio Regulations.

The RCC Administrations are of the view that the use of ESIMs in non-GSO FSS systems is only possible if the following conditions are met:

- any frequency assignment for operation of ESIM shall be notified to the Radiocommunication Bureau by the administration notifying the non-GSO FSS system with which ESIM will communicate;
- technical and operational measures as well as possible regulatory changes to be established according to results of ITU-R studies shall not weaken the provisions of Article **22** of the RR regarding the protection of GSO networks from non-GSO FSS systems;
- ESIMs operation in non-GSO FSS systems shall be carried out within the specifications and in accordance with the conditions specified for frequency assignments to typical earth stations of non-GSO FSS systems as published in BR IFIC **Part II-S**, as well as within the framework of coordination agreements between administrations;
- the frequency assignments of ESIMs in non-GSO FSS systems shall not cause more interference and shall not require more protection than it has been specified for frequency assignments of typical earth stations of non-GSO FSS systems as published in BR IFIC **Part II-S**, as well as within the framework of coordination agreements between administrations;
- ESIMs in non-GSO FSS systems shall not be used or relied upon by safety-of-life applications, except in cases where RR clause No. **4.9** applies;
- for the protection of GSO FSS and GSO BSS networks operating in the 17.7–18.6/19.7–20.2 GHz and 27.5–28.6/29.5–30 GHz frequency bands, non-GSO FSS systems, using ESIMs shall comply with the applicable limitations of RR Article 22, including epfd limits referred to in Nos. 22.5C, 22.5D and 22.5F;
- RR clause No. **22.2** shall be applied to protect the GSO FSS and GSO BSS networks operating in the 17.7-17.8 GHz (space-to-Earth) frequency band from non-GSO FSS systems using ESIM,
- to protect terrestrial services from aeronautical and maritime ESIMs in the 27.5-29.1 GHz and 29.5-30.0 GHz frequency bands, the following limits shall be met:
- for maritime ESIMs, the power flux-density limit towards the territory of any coastal State and the minimum guard distance from the low water mark officially recognized by the coastal State;
- for aeronautical ESIMs, power flux-density limits on the Earth's surface within the territory of any administration;
- use of ESIMs in non-GSO FSS systems shall not increase the level of interference to EESS (passive) sensors operating in the 18.6-18.8 GHz frequency band. To ensure compatibility with EESS (passive) in the 18.6-18.8 GHz frequency band, it is suggested to introduce power flux-density limits for unwanted emission at the surface of the oceans produced by the non-GSO FSS satellites with which the ESIMs communicate. The RCC Administrations do not object to the adoption of uniform power flux-density limits for unwanted emission from non-GSO FSS satellites under WRC-23 Agenda Items 1.16 and 1.17;
- when operating ESIMs in non-GSO FSS systems, measures shall be taken to prevent unauthorized use of ESIMs in the territory of states that have not issued the appropriate authorizations (licenses).

The RCC Administrations are considering **Method B** of the CPM Report, which provides for the addition of the new footnote 5.A116 to RR Article 5 that refers to a new Resolution [RCC-A116] (WRC-23), containing technical and regulatory limitations for operation of ESIMs with the non-GSO FSS system, under the conditions that the regulatory and technical measures for operation of ESIM proposed in this Resolution will be considered and agreed upon at the Conference.

The RCC Administrations are also considering **Method A** of the CPM Report (**NOC**), provided that the proposals of the RCC Administrations are not agreed upon at the Conference.

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 bands 11.7-12.7 GHz, 18.1-18.6 GHz, 18.8-20.2 GHz and 27.5-30 GHz does not correspond to the FSS definition, and imposes additional restrictions on existing and future FSS systems/networks.

Regarding the 11.7-12.7 GHz frequency band the RCC Administrations support a "no change" to the ITU Radio Regulations.

The RCC Administrations are of the view that, the usage of «satellite-to-satellite» links shall ensure protection of existing primary services allocated in the same frequency bands 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 ISS allocations, for operation of «satellite-to-satellite» links in the frequency bands 18.1-18.6 GHz, 18.8-20.2 GHz and 27.5-30 GHz, or parts thereof, taking into account the outcomes of studies, including the development of a concept of work, that meets the above requirements.

The RCC Administrations considers Method A of the CPM Report as well as Method B upon the following conditions:

- Usage of the «satellite-to-satellite» link is possible only in framework of the new ISS allocations;
- Usage of the «satellite-to-satellite» link in framework of the new ISS allocations is possible only through the mandatory coordination in accordance with 9.11A of the RR;
- Usage of the «satellite-to-satellite» link in framework of the new ISS allocations is possible
 only under condition it shall not cause harmful interference to, or claim protection from FSS
 systems;
- For the Administrations shall be provided exclusion its territory from service area of the system, which is using «satellite-to-satellite» link in framework of the new ISS allocations;
- The role and mechanism of the Network Control and Monitoring Center (NCMC) with regard to inter satellite links shall be defined;
- Usage of the «satellite-to-satellite» link in framework of the new ISS allocations is possible only under the "within the cone" concept.

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 do not support new allocations for MSS in 1695-1710 MHz, 3300-3315 MHz and 3385-3400 MHz frequency bands.

The RCC Administrations are of the view that, new allocation for MSS in 2010-2025 MHz (Region 1) in «Earth-to-space» direction for future development of narrowband IoT systems is permissible if only technical and regulatory conditions of their use are determined, which allowing to protect existing and planned systems of radiocommunication services operated in the same and adjacent frequency bands in accordance with Article 5 RR.

The RCC Administrations support the consideration of the issue of a possible new primary allocation for mobile satellite service (including narrowband IoT systems) in frequency bands below 3 GHz at WRC-27

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 have no objection to the new primary allocation to the fixed-satellite service in the space-to-Earth direction of the frequency band 17.3-17.7 GHz in Region 2, provided

that existing Region 1 services in the band and in adjacent frequency bands are protected without imposing any additional restrictions on these services.

Considering that the frequency band 17.3-17.7 GHz (space-to-Earth) cannot be used by non-GSO FSS systems on a global basis, the RCC Administrations are in favor of limiting the use of the considered frequency band in Region 2 by GSO networks (Method C of the CPM Report).

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 CAs support the principle of Resolution 27 and do not object to amending the Radio Regulations regarding updating the reference to the latest version of Recommendation ITU-R M.585.

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) in order to ensure the relevance of the Resolutions and Recommendations of previous WRCs.

The RCC Administrations are in favor of maintaining the following Resolutions without changes: 18 (Rev.WRC-15), 20 (Rev.WRC-03), 81 (Rev.WRC-15), 205 (Rev.WRC-15), 207 (Rev.WRC-15), 207 (Rev.WRC-15), 217 (WRC-97), 331 (Rev.WRC-12), 344 (Rev.WRC-19), 354 (WRC-07), 356 (WRC-07), 417 (Rev.WRC-15), 422 (WRC-12), 612 (Rev.WRC-12), 749 (Rev.WRC-19), 760 (Rev.WRC-19).

The RCC Administrations are in favor of suppressing the following Resolutions: 85 (WRC-03), 160 (WRC-15), 161 (WRC-15).

The RCC Administrations are in favor of modification of Resolution 170 (WRC-19).

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

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

Topic A – Tolerances for certain orbital characteristics of non-GSO space stations of the FSS, BSS or MSS

The RCC Administrations are of the view that, the study of 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 should depend on the type of orbit of the space station and should not be applied 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 should comply with the operational requirements of non-GSO systems, so it will provide the necessary flexibility in their design and operation.

The RCC Administrations support Method A2 of the CPM Report, Option A2A4 proposed in draft new Resolution.

Topic B – Non-GSO bringing into use post-milestone procedure

The RCC Administrations are of the view that 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 should be taken into account. The reduction of the number

of satellites deployed by a percentage of the number of satellites registered in the MIFR should be allowed without changing the MIFR entries, given that this percentage depends on the total number of satellites in the system.

Post-milestone procedure should not impose additional restrictions on non-GSO satellite systems using the orbits with the apogee altitude greater than 15000 km.

The RCC Administrations support Method B2b of the CPM Report.

Topic C – Protection of geostationary satellite networks in the MSS 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

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 non-GSO satellite systems operating in the same frequency bands and same directions, without limiting the use of GSO and non-GSO satellite systems/networks in mobile satellite service. The RCC Administrations support Method C3 of the CPM Report.

Topic D, part D1 – Modifications to Appendix 1 to Annex 4 of RR Appendix 30B

The RCC Administrations support the adjustment of coordination are value set out in Appendix 1 to Annex 4 to RR Appendix 30B to the WRC-19 decision and the approved Rule of Procedure.

Topic D, part D2 – New RR Appendix 4 parameters for Recommendation ITU-R S.1503 updates
The RCC Administrations support the updating of the data elements in Annex 2 to RR Appendix 4 in order to comply with the latest version of the Recommendation ITU-R S.1503.

The RCC Administrations are of the view that, the possibility of using Radiocommunication Bureau software and data elements of RR Annex 2 Appendix 4 for epfd calculations, which has been developed in accordance with Recommendation ITU-R S.1503-2, should remain available.

Topic D, part D3 – BR Reminders for bringing into use (BIU) and bringing back into use (BBIU) The RCC Administrations support the addition of the new provision in Radio Regulations with regard to sending by the ITU Radiocommunication Bureau to the notifying administration an official deadline reminder for confirming BIU or BBIU frequency assignments to satellite networks/systems.

Topic E – RR Appendix 30B improved procedures for new ITU Member States

The RCC Administrations support granting to new ITU Member States 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 ITU Member State could be improved, while ensuring the protection of national allotments as well as assignments in the RR Appendix 30B List, based on consultations with affected administrations.

The RCC Administrations support Method E3 of the CPM Report.

Topic F – Excluding uplink service area in RR Appendix 30A for Regions 1 and 3 and RR Appendix 30B

The RCC Administrations do not object to the new provisions:

- concerning the exclusion of the territory from the service area for the feeder-link (uplink) of satellite networks in the frequency bands subject to RR Appendix 30A;
- aimed at bringing the coverage area of the satellite network in line with the actual service area of this satellite network in the frequency bands subject to RR Appendices 30A and 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 addressed in applying this resolution.

The RCC Administrations support Method G3 of the CPM Report.

Topic H – Enhanced protection of RR Appendices 30/30A in Regions 1 and 3 and RR Appendix 30B

The RCC Administrations are of the view that, the concept of "implicit agreement" with regard to the affected national assignments of the BSS Plan and the allotments of the FSS Plan may lead to

degradation of reference situation in RR Appendices 30/30A in Regions 1 and 3 and RR Appendix 30B.

The RCC Administrations support the proposal that the regulatory provisions for RR Appendices 30/30A in Regions 1 and 3 and RR Appendix 30B necessary need to be developed to eliminate the concept of "implicit agreement" with regard to the national assignments of the BSS Plan and allotments of the FSS Plan as well as assignments converted from FSS Plan allocations without changing parameters.

The RCC Administrations support Method H1D of the CPM Report with several amendments.

The RCC Administrations do not support the changes of tolerance of $0.25 \, dB$ instead of $0.45 \, dB$ with regard to the equivalent protection margin (EPM) for assignments in the BSS Plan for Regions 1 and 3 or assignments in the List, due to the difficulties of re-notifying additional systems after the end of the regulatory period (15 + 15 years) as specified in No. 4.1.24 of RR Appendices 30/30A

The RCC Administrations support Method H2A of the CPM Report.

Topic I – Special agreements under RR Appendix 30B

The RCC Administrations support the development of new regulatory provisions to RR Appendix 30B, allowing administrations to conclude special agreements among themselves in order to obtain agreement of administrations with affected national allotments in the FSS Plan, in accordance with § 6.5 of RR Appendix 30B.

The RCC Administrations are of the view that the new special agreement between administrations of the national allotment and the proposed assignment should remain in force until the national allotment is brought into use. The notifying administration of the proposed assignment undertakes to comply with Section 2.2 of Annex 4 of RR Appendix 30B on pfd limits since this national allotment has been brought into use.

The RCC Administrations support Method I2 of the CPM Report.

Topic J – Modifications to Resolution 76 (Rev. WRC-15)

The RCC Administrations support the inclusion in Resolution 76 (WRC-15) of the regulatory mechanism to ensure compliance with the aggregate epfd limits to protect GSO FSS and GSO BSS satellite networks from non-GSO FSS satellite systems.

Consultations/consultation meetings should take into account both operating and planned non-GSO systems, and criteria of participation should be established: when calculating the total epfd both satellites of each non-GSO system that have been brought into service by the time of the consultation meeting, as well as the satellites of non-GSO systems that are expected to be brought into use within one year from the date of the meeting should be taken into account.

Topic K – Modification to Resolution 553 (Rev. WRC-15) to remove certain restrictions that prevent administrations from taking effective advantage of the Resolution

The RCC Administrations do not oppose to modify Resolution 553 (WRC-15) to ensure equitable access to the frequency band 21.4–22 GHz.

The RCC Administrations support Method K2 of the CPM Report.

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)

The RCC Administrations support ITU-R activities aimed at global harmonization of radio frequency spectrum use by reducing the number of country-specific notes to Article 5 of RR, or removing country names from the notes.

The RCC Administrations believes that this agenda item is not intended to add country names to the notes, nor to create new notes to Article 5 of the RR.

Any modification of the notes to Article 5 of the RR under this agenda item requires consideration of the possible implications of such a modification and, accordingly, the consent of the affected Administrations.

The RCC Administrations believe that Resolution 26 (Rev. WRC-19) remains relevant and does not require revision.

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

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

The RCC Administrations are of the view that change in the approach to forming the Coordinated Universal Time (UTC) scale may lead to the need to refine the on-board equipment of Global Navigation Satellite Systems (GNSS), terrestrial 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, the definition of the transition date to a continuous time scale is directly related to the technical capabilities of the systems of various radiocommunication services (space and terrestrial), including the frequency and time signal service, and, accordingly, should be within the competence of the ITU.

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

- to retain the term "UTC", while proposing 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, before the WRC-27, the maximum value of the discrepancy between the time UT1 and UTC, taking into account constraints of technological systems that will disseminate this value, as well as content and structure of time signal to be disseminated by radiocommunication systems;
- to provide for maximum value of the discrepancy between UT1 and UTC not less than 100 s;
- to provide for a transition period, since the decision to switch to a new time scale has been made, but not earlier than 2040.
- 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 determining the frequency bands within allocations to MetAids for such applications in the Radio Regulations.

The RCC Administrations are of the view that, the changes to the RR Article 5 to specify frequency bands for being used by space weather sensors can be made only based on outcomes of studies, carried out under agenda item of future WRC.

b) to 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 support the reflection of technical and operational measures to ensure the protection of RNSS receivers from the interference caused by stations in the amateur and the amateur-satellite services in the frequency band 1 240-1 300 MHz, in the new Recommendation ITU-R M.[AS.GUIDANCE], which is being developed, and contained guidance on the use of the frequency band 1240-1300 MHz by stations in the amateur and amateur-satellite services.

At the same time, the RCC Administrations believe that the technical and operational measures presented in the new Recommendation ITU-R M.[AS.GUIDANCE] should ensure compatibility

with the RNSS receivers located not only on the surface of the Earth, but also in the air and in space Also, the Administrations believe that additional studies are required on the compatibility of amateur and amateur satellite services with EESS (active), to which the frequency band 1240-1300 MHz is allocated on a primary basis.

The RCC Administrations propose to modify Resolution 774 (Rev. WRC-19) so as to provide for the possibility of carrying out the necessary additional studies to ensure protection of airborne and space-based receivers operating within the RNSS and EESS (active). The results of these studies should be included by the Director of the Radiocommunication Bureau in his Report to WRC-27 in order to consider appropriate action.

c) to 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 modification to the Radio Regulations, including addition of a new or revision of existing Resolution, in response to WRC-23 agenda item 9.1 c) excluding suppression of Resolution 175 (WRC-19) (Alternative 2 of the CPM Report).

The RCC Administrations believe that IMT systems applications are intended for operation on the move and do not comply with definitions and requirements of the FS in the RR. The studies under this topic should focus on "IMT technologies" used for fixed wireless broadband within the current regulatory framework and should not focus on "IMT systems".

The RCC Administrations also believe that the use of IMT as fixed wireless broadband technology is possible along with other radio interface technologies for fixed broadband in the frequency bands allocated to the FS on a primary basis, provided that such use complies with the technical and regulatory requirements for FS systems, including sharing and compatibility between the incumbent services and its protection in these and adjacent bands.

The RCC Administrations further believe that aspects of use IMT technologies for fixed wireless access systems in the frequency bands, allocated to FS, may be taken into account by updating the existing ITU-R Recommendation(s), Report(s), Handbooks, which is part of the normal activities of ITU-R WP 5A and 5C. The development of new ITU-R Recommendations and Reports should only be considered when necessary if an analysis of existing ITU-R publications shows that they still do not adequately address the objectives of topic c) (Approach 2 of the CPM Report).

The RCC Administrations also believe that there is no need to study specific frequency bands for fixed wireless broadband systems using IMT technology.

d) protection of EESS (passive) in the frequency band 36-37 GHz from non-GSO FSS space stations (see WRC-19 Document $\underline{535}$)

The RCC Administrations support the limiting of maximum EIRP level of unwanted emissions of FSS space stations to ensure protection of EESS (passive) sensors in the frequency band 36-37 GHz (-31 dBW/100 MHz) from interference caused by non-GSO FSS space stations operating in the frequency band 37.5-38 GHz.

Additional Issue 1 (WRC-19 Document 550)

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

The RCC Administrations believe that the results of ITU-R studies on Document 550 of WRC-19 should be considered under agenda item 9.1, taking into account the following:

• in the case of notifying IMT stations using active antenna system (AAS), the Item Identifier 8AA "the power delivered to the antenna" (ref. Table 1 of RR Appendix 4) shall be determined 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 referred to in Resolution 243 (WRC-19) and Resolution 750 (Rev. WRC-19).

- the maximum power level referred to in RR Article 21 No. 21.5 should be unchanged, taking into consideration the need of using a correction rate for bandwidth radiated by IMT station using active antenna system, when setting the reference bandwidth of 200 MHz, until the studies on making changes to the RR Article 21 are completed.
- Table 21-2 of RR Article 21 should be modified 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. In addition modifications to Table 21-2 of RR Article 21 also should be done for the 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 as well as for the bands 43.5-45.5 GHz; 48.2-50.2 GHz; 50.4-51.4 GHz to ensure protection of satellite reception.

Additional Issue No. 2

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

The RCC Administrations believe that at present there is no need to make any changes to the Radio Regulations on this issue, since no proposals to change it were submitted during the study period. At the same time, Resolution 427 (WRC-19) is proposed to delete.

If consideration of this issue continues after WRC-23, the RCC Administrations believe that updating the provisions of the Radio Regulations relating to aeronautical services in ITU-R should ensure consistency of these provisions with existing and future applications of aviation 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 the interpretation of the existing provisions of the Radio Regulations related to aeronautical services.

9.2 on any difficulties or inconsistencies encountered in the application of the Radio Regulations ¹

The RCC Administrations support the work towards eliminating any difficulties or inconsistencies encountered in the application of the Radio Regulations.

In order to improve the preparation of the Report of the Director of the Radiocommunication Bureau for WRC, including WRC-23, the RCC Administrations propose to early consider at the level of the Radio Regulations Board, the Radiocommunication Advisory Group, as well as the relevant ITU-R Working Parties, the information submitted by the Radiocommunication Bureau, with regard to difficulties or inconsistencies encountered when applying the Radio Regulations.

The view of the RCC Administrations on the issues noted in the Report of the BR Director for the next WRC on any difficulties or inconsistencies encountered in the application of the Radio Regulations is reflected in Annex 2 of coordinator's material.

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

The view of the RCC Administrations on each section of the Report by the Radio Regulations Board to WRC-23 on Resolution 80 (Rev. WRC-07) is reflected in Table 4.3 - Analysis of the Report of the Radio Regulations Board to WRC-23 on Resolution 80 (Rev. WRC-07).

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 RCC Administrations consider it appropriate to include in WRC-27 agenda the following items:

• a new allocation on a secondary basis of frequency bands 3000-3100 MHz and 3300-3400 MHz to the EESS (active);

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.

- a possible regulatory and technical methods to ensure equitable access and rational use of orbital resources on non-GSO and related spectrum;
- identification of frequency bands below 10 GHz for the satellite segment of International Mobile Telecommunications (IMT), including possible additional allocations to the mobile satellite service on a primary basis;
- development of regulatory and technical provisions to obtain explicit consent from the administration to include its national territory in the service area of the non-GSO FSS satellite system and the level of radiation of the non-GSO FSS space station in the direction of its national territory;
- Identification of spectrum for International Mobile Telecommunications for the future development of IMT for the period up to 2030 and beyond in frequency bands 4400-4800 MHz, 10-10.5 GHz and 14.8-15.35 GHz;

The RCC Administrations do not object to include to the agenda of WRC-27 the following items 2.4, 2.5, 2.6, 2.11 and 2.13 as specified in Resolution 812 (WRC-19).

The RCC Administrations do not object to the inclusion to the agenda of WRC-27 item 2.2 from Resolution 812 (WRC-19), subject to modification of Resolution 176 (WRC-19).

The RCC Administrations oppose to include to the agenda of WRC-27 the following items 2.9 and 2.10 as specified in Resolution 812 (WRC-19).

The RCC Administrations believe that it is advisable to include the following item to the agenda of WRC-31:

• Identification of spectrum for International Mobile Telecommunications in the frequency bands 102-109.5 GHz, 151.5-164 GHz, 167-174.8 GHz, 209-226 GHz and 252-275 GHz for future development of IMT.

The RCC Administrations do not object to the inclusion to the agenda of WRC-31 item 2.12 as specified in Resolution 812 (WRC-19).