

Arab Spectrum Management Group (ASMG) 30th ASMG Meeting

20 to 23 February, Dubai

The Arab Ministerial Council for ICT established the Arab Spectrum Management Group (ASMG) in 2001



Arab Spectrum Management Group ASMG The aim of the group is to establish cooperation in spectrum management

The group is responsible for sharing and exchanging views and information on the development of radio communications sector

The group is also responsible for managing and coordinating all issues related to spectrum management on the Arab and the ITU levels

Eng. Tariq Al Awadhi is re-elected to chair the ASMG for WRC-23 study cycle

ASMG

Working Groups

WG1	Fixed, Mobile & Broadcasting services
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Aeronautical & Maritime services

Science services

Satellite services

WG5 General issues and WRC-27 agenda items

TECH WG

WG2

WG3

WG4

Issues related to Emerging Technologies

1.1

1.2

1.3

Issues related to fixed, mobile and broadcasting services

Chaired by: Dr. Mohamed EL-MOGHAZI mmoghazi@tra.gov.eg +20235344297



Protection of stations of the aeronautical and maritime mobile services and review the pfd criteria in the frequency band 4 800-4 990 MHz

Identification of (IMT) in 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



9.1 c

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

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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

Primary allocation of the band 3 600-3 800 MHz to mobile service within Region 1 and take appropriate regulatory actions

Study the use of International Mobile Telecommunication system for fixed wireless broadband in the frequency bands allocated to the fixed services on primary basis

Issues related Aeronautical & Maritime services

1.6

1.7



New allocation for aeronautical mobile-satellite (R) service (AMS(R)S) for both the Earth-tospace and space-to-Earth directions in the frequency band 117.975-137 MHz

1.8

Accommodate the use of fixed-satellite service (FSS) networks by control and non-payload communications of unmanned aircraft systems

1.9

Accommodate digital technologies for commercial aviation safety-of-life applications in existing HF bands allocated to the aeronautical mobile (route) Chaired by: Dr. Halimouche Ramzi r.halimouche@anf.dz +213660773627



Possible new allocations for the aeronautical mobile service for the use of non-safety aeronautical mobile applications

1.11

1.10

Modernization of the Global Maritime Distress and Safety System and the implementation of e-navigation

9.1 b

Review of the amateur service and the amateursatellite 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) services

Issues related to Science services

Chaired by: Mr. Mohamed Abdelhaseeb mabdelhaseeb@tra.gov.eg +201003185791



New secondary allocation to the Earth exploration-satellite (active) service for spaceborne radar sounders within the range of frequencies around 45 MHz

1.13

1.12

Upgrade the allocation of the frequency band 14.8-15.35 GHz to the space research service **9.1** a

Spectrum requirements and appropriate radio service designations for space weather sensors

9.1 d

Protection of EESS (passive) in the frequency band 36-37 GHz from non-GSO FSS space stations

1.14

New primary frequency allocations to EESS (passive) in the frequency range 231.5-252 GHz

1.15

1.16

1.17

Issues related to Satellite services

Chaired by: Mr. Abdulrahman Al Najdi anajdi@citc.gov.sa +966114618204



Harmonize the use of the frequency band 12.75-13.25 GHz (Earth-to-space) by earth stations on aircraft and vessels communicating with geostationary space stations in the fixed-satellite service globally

1.18

Spectrum needs and potential new allocations to the mobile-satellite service for future development of narrowband mobile-satellite systems

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

1.19

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

The appropriate regulatory actions for the provision of inter-satellite links in specific frequency bands, or portions thereof

to consider possible changes, on advance publication, coordination, notification and recording procedures for frequency assignments pertaining to satellite networks,

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General issues and WRC-27 agenda items

Chaired by: Mr. Majdaldeen Musa magdaldeenmusa@gmail.com +249187171233



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

to review the Resolutions and Recommendations of previous conferences with a view to their possible revesion, replacement or abrogation

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); 9.2

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

9.3

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

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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);

WG-1

1.1) Protection of stations of the aeronautical and maritime mobile services and review the pfd criteria in the frequency band 4 800-4 990 MHz

• Emphasis on ensuring that allocated services in the 4800-4990 MHz band are protected and that no additional restrictions are imposed on them, and consider how the systems currently in use can coexist.

1.2) Identification of (IMT) in 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

- Regarding the 3300 3400 MHz band, support the allocation to the mobile service on a primary basis in the frequency allocation table and the identification for IMT to countries wishing to do so through a new footnote or revision of the regulatory conditions of footnote 5.429(b), with an emphasis on the protection of existing services and the without any additional restrictions on existing services.
- Regarding the 3800-3600 MHz band, support the use of this band for IMT within the mobile service and to agree on the possible conditions for the use of this band for IMT between Regions 1 and 2.
- Regarding the 6425 7125 MHz band, to follow-up studies regarding the identification of the frequency band 6425-7125 MHz, with an emphasis on protecting existing services and systems and not affecting them, and then to determine the Arab position on identifying the band for IMT systems in the last ASMG meeting.
- Regarding the 10.0-10.5 GHz band, to emphasis on not affecting or imposing any additional restrictions on services allocated in Region 1.

WG-1

1.3) Primary allocation of the band 3 600-3 800 MHz to mobile service within Region 1 and take appropriate regulatory actions

 To continue support for raising the frequency band 3800-3800 MHz for the mobile service on a primary basis in Region 1, and identifying for IMT systems without adding unnecessary restrictions on existing services and their future development."

1.4) 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

- To enable high-altitude platform stations as IMT base stations (HIBS) by developing relevant regulatory provisions and revision of footnotes applicable to HIBS in order to protect other services and applications in the proposed frequency bands for HIBS as well as in adjacent bands.
- To emphasis on the protection of existing services which have allocations on a primary basis in the bands under study and compatibility with systems operating within these bands and services operating in adjacent bands as appropriate, and taking into account not adding additional regulatory or technical restrictions on current and future uses of terrestrial mobile communication system applications, in addition to the required measures to coordinate with neighboring countries regarding exceeded coverage.

WG-1

1.5) 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

 To emphasis on the protection of existing services and systems, especially the broadcasting service, and not affecting them, and to study the possibility of allocating the band (470-694 MHz) or part of it (example: 614-694 MHz) for the mobile service and identifying it for applications of International Mobile Telecommunications (IMT) by the interested administrations in order to provide future flexibility in the utilization of the band by all services and to take a decision in this regard at the next World Radiocommunication Conference in 2023.

9.1) 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

 To consider bands that can be used for IMT fixed wireless broadband systems in frequency bands allocated primarily to the fixed service with emphasis on the protection of existing services and the possibility of revising Resolution 175 (WRC-19) or supporting a new draft Resolution for consideration and approval at the WRC-23 or the RA-23 to state for the identification, definition and use of IMT technologies and techniques for fixed wireless broadband applications in frequency bands allocated to the fixed service on a primary basis.

WG-2

- 1.6) Regulatory provisions to facilitate radiocommunications for suborbital vehicles
- Support the development of a draft new resolution for WRC-23 which includes the definition of suborbital vehicles (SOV) and the regulation of their trajectories starting from their launch and landing on the ground and regulatory provisions to facilitate the operation of SOV, under the condition of ensuring the operation of SOV do not affect the civil aviation traffic or systems and also not affect the current space launch system, and also not imposing any new restrictions to the incumbent radiocommunication services allocated on a primary basis.
- No change in Article 5 of the Radio Regulations
- 1.7) New allocation for aeronautical mobile-satellite (R) service AMS(R)S for both the Earth-to-space and space-to-Earth directions in the frequency band 117.975-137 MHz
- Support the introduction of a new allocation to the AMS(R)S in the frequency band 117.975-137 MHz, or parts thereof, according to the results of the studies, with the aim of promoting the aeronautical aviation systems operating in the very high frequency (VHF) band, with the condition of protecting the incumbent and adjacent services and not adversely impact its future development
- Insure that no additional restrictions are imposed on radiocommunication services and applications to which the frequency band is allocated on a primary basis

WG-2

1.8) Accommodate the use of fixed-satellite service (FSS) networks by control and non-payload communications (CNPC) for unmanned aircraft systems (UAS)

UAS CNPC links should operate in accordance with the safety and life-saving standards of the ICAO and provided that:

- UAS CNPC links shall not operate if the conditions for safe operation issued by the ICAO cannot be met
- Provision No. 10.4 does not apply to FSS networks using UAS CNPC links.
- No additional restrictions are imposed on terrestrial systems
- Not affecting existing coordination agreements between administrations that were concluded during FSS satellite coordination process or future coordination process in the relevant frequency bands by requesting additional protection moreover what agreed on in the current coordination procedures

1.9) Accommodate digital technologies for commercial aviation safetyof-life applications in existing HF bands allocated to the aeronautical mobile (route)

• Promote the optimal use of spectrum by supporting, in principle basis, the inclusion of the relevant part of the procedural rules relating to Appendix 27 of the Radio Regulations, provided the coexistence with existing analogue systems should be ensured.

WG-2

1.10) Possible new allocations for the aeronautical mobile service for the use of nonsafety aeronautical mobile applications

 Consider the possibility of the introduction of a new allocation to the aeronautical mobile off-route service for non-safety aeronautical mobile applications in the frequency range 15 GHz, according to the result of studies, with the condition of providing the appropriate protection to services operating in the frequency band under study as well as to the adjacent frequency bands.

1.11) Modernization of the Global Maritime Distress and Safety System and the implementation of e-navigation

- <u>Issue A:</u> Support regulatory procedures aiming to modernize the GMDSS system, with the definition of a time limit for administrations to start application and operation, with the need not to refer to any report or recommendation resulting from the ITU Radio Sector in any footnote to be added or amended in the Radio Regulations, and ensuring the protection of current and future systems.
- Issue B: Electronic Navigation: No change to the Radio Regulations
- <u>Issue C:</u> no objection to the introduction of a new satellite system for the GMDSS system, provided that all regulatory and coordination requirements must be met in accordance to the Radio Regulations to ensure the protection of existing services and other operating systems in the same system.

9.1 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) services

• Support the development of a new ITU-R Recommendation to protect RNSS receivers (space-to-Earth) from amateur and amateur satellite services in the frequency band 1240-1300 MHz, taking into consideration that there will be no change to the Radio Regulations.

WG-3

1.12) New secondary allocation to the Earth exploration-satellite (active) service for spaceborne radar sounders within the range of frequencies around 45 MHz

• Initial support to consider the possibility of upgrading the to the Earth exploration-satellite (active) service for spaceborne radar sounders within the frequency band 40 -50 MHz, if ITU-R technical and regulatory studies demonstrate that radio services in this frequency band and the adjacent frequency bands are protected.

1.13) Upgrade the allocation of the frequency band 14.8-15.35 GHz to the space research service

- Emphasize the protection of existing services in the frequency band 14.8-15.35 GHz and radio services in the adjacent bands without imposing any restrictions on the current use and future development of such systems and to provide the needed protection.
- Arab administrations will express their views during the next meeting, to support "No change method" in the Radio Regulations or to upgrade the status of the allocation of the Space Research Service (SRS).

1.14) New primary frequency allocations to EESS (passive) in the frequency range 231.5-252 GHz

- Support the possibility of adding new primary allocations to the EESS (passive) in the frequency bands 239.2-242.2 GHz and 244.2-247.2 GHz, with shifting the allocation of the fixed and mobile services from the frequency band 239.2-241 GHz to the frequency band 235-238 GHz, without imposing any restrictions on the fixed and mobile services in this frequency band.
- Emphasis that no restrictions will be imposed on the fixed and mobile services if they remain in the frequency band 239.2-241 GHz.

9.1 a) Spectrum requirements and appropriate radio service designations for space weather sensors

 Support the ongoing studies to identify priority bands that provide necessary data for recognition and protection of space weather systems and to develop appropriate definitions in the Radio Regulations (RR) used by space weather sensors without imposing any additional restrictions on existing services.

9.1 d) Protection of EESS (passive) in the frequency band 36-37 GHz from non-GSO FSS space stations

 Follow-up studies to identify the necessary regulatory and technical issues that ensure protection of EESS sensors (passive) in the band 36-37 GHz from interference of N-GSO FSS space stations in the band 37.5-38 GHz.

WG-4

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

- Support ongoing studies on the use of the 12.75-13.25 GHz frequency band (Earth-to-space) by earth stations on board aircraft and ships communicating with geostationary space stations in the fixed-satellite service while ensuring protection for services in those frequency bands and in adjacent bands , in accordance with Resolution 172 (WRC-19).
- The use of the frequency band 12.75-13.25 GHz by earth stations on board aircraft and ships shall not limit other administrations' access to their national resources contained in Appendix 30 B as well as the implementation of Resolution 170 (WRC 19).
- Earth stations on board aircraft and ships shall not claim protection from the assignment plan and assignments in List AP30B for national coverage and other services as well as terrestrial services to which the frequency band is allocated and operate in accordance with the provisions of the Radio Regulations.
- Emphasize that earth stations operating on board aircraft and ships in the 12.75-13.25 GHz band need to be able to restrict operations in the territories of those administrations where approval under No. 6.6 has been obtained and authorization for such operations has been granted.
- Confirmation that the operation of earth stations on board aircraft and ships in the frequency band 12.75-13.25 GHz within the territorial waters and/or airspace under the jurisdiction of an administration will only take place if authorized by the administration.
- Consider supporting Method B if the following conditions are met:
- 1. Completion of an interference management mechanism to deal with interference from the operation of earth stations in motion to other administrations to ensure clarification of how and by what means the administration affected by unacceptable interference can identify the notifying administration of the satellite system in which the ESIM operates.
- 2. Not to claim downlink protection for terrestrial mobile stations in the frequency bands 10.7-10.95 GHz and 11.2-11.45 GHz from terrestrial services having allocations in the same frequency bands and operating in accordance with the Radio Regulations and shall not adversely affect designations in the Plan or assignments contained in the list.
- 3. To develop a methodology to assist the Radiocommunication Bureau in checking the conformity of earth stations on board aircraft and ships in the event that an appropriate flux density is used to protect terrestrial services from moving earth stations, with the need to develop and agree on such a methodology before the conference.

WG-4

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

- 4. Define the role of the Network Monitoring and Control Center (NCMC), emphasizing that the notifying administration of the satellite network has the responsibility to operate mobile earth stations on board aircraft and ships to resolve any interference incident. The administrations licensed to operate these stations to provide services in their territories are not responsible for resolving interference incidents.
- 5. Selection of strict values for the minimum distance and EIRP density for earth stations on board ships, and for pfd masks for earth stations on board aircraft to ensure the protection of existing terrestrial services.
- 6. Develop regulatory, technical and registration procedures for the use of this type of ESIMs that may differ from the current FSS Appendix 30B Plan and List registration procedures. With the need to invite the Council to examine any cost arising from the possible implementation of Resolution 172.
- 7. Administrations responsible for using the List Appendix 30B assignment to operate earth stations on board aircraft and ships in the frequency band 12.75-13.25 GHz must obtain the express consent of all administrations affected by such use.
- 8-Select strict values for the minimum distance and EIRP density for earth stations on board ships, and for pfd masks for earth stations on board aircraft to ensure the protection of existing ground services.
- 9- Support the notification of frequency assignments to mobile earth stations to the Radiocommunication Bureau, noting that any frequency assignment is only notified by one administration, which is the notifying administration of the satellite network;
- 10- That the notifying administrations of the GSO network are only eligible to notify the mobile earth stations that will communicate with that network.
- -to invite Arab Administrations to express their views on the use of the assignments recorded in the List to Appendix 30b under § 6.17 only as supporting assignments by earth stations on board aircraft and ships communicating with GSO networks in the fixed-satellite service in the frequency band 12.75-13.25 GHz (Earth-to-space), if the registration of such assignments in the Master International Frequency Register (MIFR) with a favorable outcome under § 8.11 of Article 8 of Appendix 30b, except for assignments registered under § 25.6 of Article 6 of Appendix;

1.16) 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

- Supporting ongoing studies on the use of the FSS band of mobile earth stations operating with satellite systems in the non-GSO orbit 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 to ensure the protection of services in those and adjacent frequency bands, in accordance with Resolution 173 (WRC-19).
- Ensure that mobile earth stations that connect to non-GSO satellite networks in the fixed-satellite service do not claim protection from other services and their future developments in those frequency bands as well as adjacent bands, including terrestrial services as mentioned in footnote (5.542) in the scope of The frequency is 29.5-30 GHz. With a focus on developing strict procedures to ensure the protection of other services in the bands under study and neighboring bands.
- The possibility of supporting the method B if it complies with the following conditions:
- 1. Completion of an interference management mechanism to deal with interference from the operation of earth stations in motion to other administrations to ensure clarification of how and by what means the administration affected by unacceptable interference can identify the notifying administration of the satellite system in which the ESIM operates.
- 2. The characteristics of mobile earth stations operating with non-GSO systems must remain within the technical envelope of the characteristics of Typical earth stations operating with non-GSO satellites to protect space services.
- 3. Apply the EPFD values provided in Article 22 of the Radio Regulations for the protection of geostationary networks in the fixed-satellite service operating in the frequency bands 17.8-18.6 GHz, 19.7-20.2 GHz, 27.5-28.6 GHz and 29.5-30.0GHz.
- 4. For the protection of terrestrial services, terrestrial mobile stations operating with non-GSO systems must follow the same mechanism and protection criteria as contained in Resolutions 156 and 169

1.16) 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

- 5. For geostationary networks in bands where the epfd limits from mobile earth stations operating with non-GSO systems in the fixed-satellite service do not apply:
- a. Not cause more interference or claim more protection than typical earth stations operating in this non-GSO system
- B. Its operation shall comply with the coordination agreements obtained after applying the provisions under No. 9.11
- 6. Apply the values mentioned for stations in Annex 1 of the new draft resolution to protect fixed and mobile stations distributed and operating in accordance with the Radio Regulations in the frequency bands 27.5-29.1 GHz and 29.5-30 GHz (see No. 542.5 of the Radio Regulations).
- 7. Develop an appropriate screening methodology by the Bureau for terrestrial mobile stations operating with non-GSO systems to ensure the protection of terrestrial services to which the frequency bands are allocated and operated in accordance with the Radio Regulations. In the absence of such a methodology, the necessary transitional measures should be developed and approved by the Conference.
- 8. Support the notification of frequency assignments to mobile earth stations to the Radiocommunication Bureau, noting that any frequency assignment is only notified by one administration, which is the notifying administration of the satellite network;
- 9. Determine the role of the Network Control and Control Center (NCMC), taking into account that the notified
 administration of the satellite network bears the responsibility for operating mobile earth stations on board ships and
 planes and solving any problems of interference, while emphasizing that there is no responsibility for countries that issue
 operating licenses for those stations to provide services in its territory.
- 10- Obliging the Radiocommunication Bureau to ensure that the administrations notifying of earth stations aboard aircraft and ships comply with protection standards and publish them in the international bulletins of satellite services.

WG-4

1.17) The appropriate regulatory actions for the provision of inter-satellite links in specific frequency bands, or portions thereof

- Support the development of a regulatory framework and not impose additional regulatory or technical restrictions on services to which the frequency band is currently allocated on a primary basis as well as in those in adjacent bands, in particular current and future FSS and uplink services for assignments in Annex 30A.
- Supports the following organizational actions:
- 1. Supporting the concept within the cone, as the concept outside the cone has not been completed in studies.
- 2. Not to use the frequencies 11.7-12.7 GHz due to their use in the satellite broadcasting service.
- 3. Considering the possibility of initial support for the definition of satellite links from satellite to satellite under the name ISS, because the definition includes only links between space stations and not as an implicit definition within the fixed-satellite service, provided that the approach is approved in the ASMG (30th) meeting.
- 4. Support protection of geostationary satellites from satellite links using HARD LIMITS.
- 5. Supporting the protection of unstable systems from satellite links using HARD LIMITS technical limits and values.
- 6. Protect the EESS at 18 GHz with an OOB pfd mask.
- 7. Support defining the role and mechanism of the Network Control and Monitoring Center (NCMC) with regard to inter-satellite links.

WG-4

1.18) Spectrum needs and potential new allocations to the mobile-satellite service for future development of narrowband mobile-satellite systems

• No change to the Radio Regulations (NOC), taking into account the continuation of studies through revising Resolution 248 and adopting it at the World Radiocommunication Conference 2023 to complete the requirements of Agenda Item (2.13) of Resolution 812 due to the presence of a number of operators whose files are registered in accordance with Article 4.4 of the Radio Regulations

1.19) 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

Consider supporting Method B to amend the footnotes in Article 5 of the Radio Regulations referring to the allocation of the frequency band 17.3-17.7 GHz in Region 2 to the fixed-satellite service in the space-to-Earth direction, emphasizing that any new primary allocation must include the fixed service satellite in the frequency band 17.3-17.7 GHz in Region 2 Protect existing services in the frequency band and adjacent bands in Region 1 and not create undue restrictions on future developments of services in this band.

Confirm that a new assignment in Region (2) in the band 17.3-17.7 GHz will not claim protection from BSS feederlink earth stations operating under Appendix 30A, nor place any restrictions on the location of BSS feeder-link earth stations satellite.

WG-4

7A) Tolerances for certain orbital characteristics of non-GSO space stations in the FSS, BSS, and MSS

- Ensuring that the development of the definition of tolerances for non-GSO space stations in the fixed-satellite service, broadcast-satellite service and mobile-satellite service should be limited to the inclination of the orbital plane, the height from the apex of the space station, the height of the space station's perigee and the point argument perihelion of the orbital plane, to explain potential differences between reported and published orbital features.
- Consideration of method A2, which aims to prepare a new draft resolution on the implementation of tolerances for some orbital characteristics of non-geostationary satellites, taking into account the following regulations:
- 1. Tolerance support for non-GSO satellites operating in the fixed-satellite, broadcasting-satellite and mobilesatellite services (Option A).
- 2. Modifying the A2 method to specify a specific value that does not exceed the value of the orbital inequalities (it is suggested that it does not exceed 100 km).

WG-4

7B) NON-GSO system post milestone Reporting

- Support the development of Resolution 35 (WRC-19) to replace Resolution 19 to ensure that the content of the Master International Frequency Register for Non-GSO Systems closely aligns with what is already being published in space.
- Initial support for Method B2 taking into account the following regulatory requirements:
- 1. That the new Resolution include non-GSO systems subject to Resolution 35 (WRC-19).
- 2. Considering the operational characteristics of non-GSO systems with a small number of satellites.
- 3. Defining procedures in case of delay in reporting the reduction of the number of deployed satellites from the number reported in the Master International Frequency Register (MIFR).
- 4. Develop appropriate regulatory measures for frequency assignments to non-geostationary satellites that do not comply with the procedures of the new resolution.
- 5. Support for defining the Threshold for informing BR to initiate regulatory actions based on a different percentage based on the total number of satellites, noting that the existing equations listed in the CPM text should be improved to adjust the calculation for satellite systems with fewer than 50 satellites.
- 6. Not applying a fixed percentage to start regulatory procedures because it does not apply to small number of satellite systems because the loss of one of the satellites may lead to a decrease in the number of deployed satellites below the minimum.
- 7. The BR's application of Article 6.13 of the Radio Regulations is not a feasible solution to this issue.
- 8. Permission to reduce the deployed satellites by a percentage of the number of satellites reported in the Master International Frequency Register for a specific period (in principle not more than three years) without reducing the number of satellites reported in the MIFR, taking into account that this percentage depends on the total number of satellites in the system.
- 9. After the end of the three-year period, the notifying administration shall submit to the Radiocommunication Bureau the maximum number of satellites corresponding to the number of operationally published satellites to be adjusted in the frequency assignments recorded in the Master International Frequency Register (MIFR).

7C) Protection of geostationary satellite networks in the MSS operating in 7/8 and 20/30 GHz from emissions of nongeostationary satellite systems operating in the same frequency bands and identical directions

- Support Method C2 by adding a new provision, to No. 2.22 of the Radio Regulations, to extend the concept of No. 2.22 of the Radio Regulations to include GSO MSS networks in the frequency bands 7250-7500 MHz (space-to-Earth), 7 900-8 025 MHz (Earth-to-space), 20.2-21.2 GHz (space-to-Earth) and 30-31 GHz (Earth-tospace) to protect GSO mobile-satellite systems operating at 7/8 and 20/30 GHz from emissions from non-GSO satellite systems operating in the same frequency bands and directions matched.
- Option C2C is preferred since the concept of No. 22.2 includes the protection of GSO satellites from non-GSO satellites in the fixed-satellite service and the broadcasting-satellite service. Therefore the same concept could be extended to the mobile-satellite service, with the modification of footnote 5.462 to exclude the application of Article 21.9 in this case to protect satellites The geostationary satellite in the mobile-satellite

7D1) Modifications to Appendix 1 to Annex 4 of AP 30B

- Support the only method defined under this topic regarding modifications to Appendix 1 to Annex 4 of RR Appendix 30B to reflect the minimum orbital separation values as adopted by WRC-19 in §§ 1.1 and 1.2 of Annex 4 of RR Appendix 30B as is Approved at the World Radiocommunication Conference 2019 7D2) New Appendix 4 for Recommendation ITU-R S.1503 updates
- Support for proposed changes to Recommendation ITU-R S.1503 to request additional data elements. In order for the Radiocommunication Bureau to perform an examination of a non-GSO system for compliance with the EPFD limits of Article 22 of the Radio Regulations while ensuring FSS protection.

7D3) BR reminders fro BIU and BBIU

• Support for the Radio Bureau to send a reminder to the notifying administration to confirm the date of bringing into use/bringing into use under No. 11.44B., 11.44C 11.44D and 11.44E as appropriate, and for bringing into use or bringing into use initiated within 120 days from the end of the regulatory deadline sent by the Radiocommunication Bureau to the notifying administration.

7E) Improved procedures under Radio Regulations of Appendix 30B for new ITU Member States

- Support granting of new ITU Member States the same rights as those granted to other Member States in Appendix 30B, based on the principles set forth in Article 44 of the Constitution, Resolution 2 (REV.WRC-03) and those in Article 1 of Appendix 30B as well as the same privileges granted For administrations that do not have assignments in the Appendix 30B List or are under coordination, as adopted in Resolution 170 (WRC-19).
- Support ITU-R studies on improved procedures under Appendix 30B of the Radio Regulations for new ITU Member States.
- Initial support for E2 mode New ITU Member States are granted the same privileges granted by WRC 19 to administrations that do not have assignments in the RR Appendix 30B list or are subject to coordination.
- Ensure that technical studies of overlapping scenarios are undertaken for new ITU Member States so that the potential solution does not, to the greatest extent possible, affect the existing designations in the Plan and the assignments contained in the Appendix 30B list.
- Support a case-by-case solution, which can be compatible with the designations in the Plan and assignments in the Appendix 30B List, to meet the interference criteria specified in § 1.4 of Annex 1 to Appendix 30B for these new ITU Member States and encourage Member States Newcomers to the Union are encouraged to modify submissions in order to comply with the requirements in Paragraph 1.2 of Annex 1 to Appendix 30B.

WG-4

7F) Impact of excluding feeder-link/Up-link service and coverage areas in the bands subject to RR Appendix 30A and RR Appendix 30B

- 1- Support introduce provisions in Appendix 30A to the Radio Regulations allowing an administration to request exclusion of its national territory from the service area of another administration's satellite network.
- 2-The notifying administration of the interfering satellite network need to reconfigure the coverage of the receiving antenna outside its service area, in order to remove any obstacles to the deployment of national or regional satellite networks from other countries in each of Appendices 30A and 30B of the Radio Regulations



WG-4

7G) Amendments to Res 770(WRC-19)

 Initial support for Method 2 G2, which proposes an amendment to Resolution 770 for the development of non-GSO satellite systems in the V/Q frequency bands, while ensuring that there is no impact on GSO satellites

7H) Implicit agreement in AP30/30A/30B

Support studies related to this topic to provide a fair solution that ensures that the reference condition does not get affected due to the concept of "Implicit agreement" in AP30 / 30A / 30B, which leads to the improvement of the status of assignments / designations to these Appendices affected by the degradation of the reference condition (EPM Equivalent Margin of Protection) so that These assignments/allotments become usable effectively by the administrations concerned that wish to access Plans AP30 / 30A / 30B for the provision of the broadcasting-satellite service or the fixed-satellite service.

7I) Special agreements under RR Appendix 30B

Initial support for the second method, I2, which calls for a new type of agreement between the notifying administrations for a national designation and assignment, respectively. Under such an agreement, the National Assignment Administration shall allow the assignment to operate until the National Assignment is brought into use. At that time, the assignment administration is required to respect Section 2.2 of the pfd levels in Annex 4 over the national assignment territory. Since the national assignment and assignment will not operate simultaneously on the same frequency over the same area, mutual interference is not taken into account. and develop a new Resolution allowing the reporting of a national allotment, subject to agreements under § 6.15 of the Radio Regulations, Appendix 30B of the Radio Regulations to recover the appropriate overall aggregate carrier-to-interference levels without changing the orbital position of the national allotment.

WG-4

7J) MODs to Res 76 (Rev. WRC-15)

- Amending Resolution 76 (15-Rev.WRC) to introduce the concept of a "consultation/meeting process" and clarify which non-GSO systems are eligible to participate in the consultation meetings as well as:
- Develop a methodology for compliance urgently
- Apply the methodology to real systems that are running, regardless of the number of files the system is running
- Work on developing clear procedures for departments and operators to ensure that the agreed limits are met
- The Arab administrations prefer the J3 method as it includes annexes to the decision related to the technical characteristics of the NGSO-constellation satellite systems that will be taken into consideration during the consultative meetings related to evaluating the epfd as well as the administrative details that will be taken before or after the consultative meetings, with an emphasis on the following:
- 1. No meetings shall be held until after the technical method for evaluating the epfd produced by non-GSO satellite systems has been approved by the Radio Bureau.
- 2. The evaluation of the total equivalent power flux-density (EPFD) produced by all non-GSO satellite systems operating or planned to operate within one year from the date of the consultative meeting

WG-4

7K) MODs to Res. 553 (Rev. WRC 15)

- Possibility of applying the Special Procedure in Resolution 553(Rev. WRC-15) again if the requesting administration fails to bring the network into use even if the Special Procedure in Resolution 553(Rev. WRC-15) had been previously requested.
- Allow member States to use the Resolution if the Administration has only one network registered under No. 9.34 and published under No. 9.38 in the same orbital location as the network to which the procedure for Resolution 553 (Rev.WRC-15) is to be applied.

WG-5

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

- ASMG administrations support the principle of Resolution No. 27 (Rev.WRC19) to review and examine Recommendations incorporated by reference in the Radio Regulations with a view to update them as appropriate.
- Invite ASMG members to actively participate in ITU-R related working groups on revision of these recommendations and review the BR report related to this agenda.

4) To review the Resolutions and Recommendations of previous conferences with a view to their possible revesion, replacement or abrogation

- ASMG administrations support the principle of Resolution 95 (Rev.WRC-19) in order to ensure that Resolutions and Recommendations of previous WRCs remain relevant and up-to-date.
- Urge Arab administrations to review the resolutions and recommendations of previous radiocommunication conferences, which are currently included in the report of the Director of the Radiocommunication Bureau.
- Urge Arab administrations to follow up on the work and proposals submitted by other regional groups within this agenda item with regard to reviewing the resolutions and recommendations of previous radiocommunication conferences.

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);

- ASMG administrations support ITU-R activities aimed to achieve global or regional harmonization of spectrum utilization by removing country names from footnotes or adding country names to footnotes.
- Urge ASMG administrations to review the relevant footnotes.
- Urging the Arab administrations to follow up on the proposals by other regional groups.

WG-5

- 9.2) On any difficulties or inconsistencies encountered in the application of the Radio Regulations
- ASMG Administrations support measures to remove any difficulties or inconsistencies encountered in the application of the Radio Regulations.
- Urge Arab administrations to inform the Radio Communications Bureau of any difficulties or inconsistencies encountered in applying the Radio Regulations.

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

- Supports, as a matter of principle, the full implementation of Resolution 80 (Rev.WRC-07) as a primary mechanism to fulfill the principles embodied in the ITU Constitution.
- Urge Arab administrations to review the relevant report of the Radio Regulations Board.

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

- ASMG administrations support the principle of Resolution 812, which aims to set the agenda items for the upcoming radiocommunication conferences, to provide administrations with sufficient time for to examine the topics that intended to be included in the work of the next conferences.
- Urge the Arab administrations to state the topics to be included in the next conference agenda items.
- Invite the Arab administrations to review Resolution 812 and set their priorities from the currently proposed agenda items.
- Invite Arab administrations and stakeholders to provide the next meeting ASMG with topics and proposals for new agenda items for the next WCRs, with an explanation of the following:
- 1. The reason for the proposal and the expected impact of including the item on the Arab administrations.
- 2. The draft resolution related to the proposed item.

Technology Working Group

Issues related to Emerging Technologies

Chaired by: Sultan AlBalooshi Sultan.albalooshi@tdra.gov.ae +97147774066

600 MHz	 Sharing experiences in using the band for various radio services and related applications. coordination with Working Group (1) on the assessment of the various parts of the band to determine the part on which views can be coordinated within the sub-bands in the range 470-694 MHz. (New Report Under Discussion)
700 & 800 MHz	 Arab administrations to provide their contributions before the next meeting about: Use of IMT in these bands Harmonization of Channeling Arrangements used PPDR use in these bands
Internet systems on board aircraft (A2G) in the frequency band 2.1 GHz	 Develop a new report that includes the experiences of the Arab administrations regarding the uses of these systems in the domain, including a recommendation / guidance on the importance of the coordinated use of the domain at the level of the Arab administrations. (New Report Under Discussion)
2.6 & 3.5 GHz	 Current and future plans for using these frequency bands and channeling arrangements. Recommended standards to be considered for the issues related to operating networks at cross-borders (time Synchronization, Signal level, etc). Plans/mechanisms to achieve TDD Synchronization, taking into account the capabilities available to operators and the time required for this in neighboring Arab administrations in the border areas. (Under Discussion)
3.8-4.2 GHz	 Evaluation of current uses in this frequency band. Future Plans for this band and timing associated. IMT systems coexistence with in band services/systems and with services/systems in adjacent bands, including aeronautical radio altimeter systems. (Under Discussion)

Technology Working Group

Issues related to Emerging Technologies

Chaired by: Sultan AlBalooshi Sultan.albalooshi@tdra.gov.ae +97147774066

	Standards associated with the 6 GHz band for Wi-Fi 6 and 6e systems	 Latest developments related to the use of Wi-Fi 6 and Wi-Fi 6e systems in the 6 GHz band, and standardizing the technical specifications for these systems. Develop new report that includes the experiences and uses of Administrations in this scope, including the challenges associated with the backward services and applications, and that the report includes recommendations / guidelines / options about specifications and technical conditions / harmonized regulatory conditions for using the scope or part of it. (Under Discussion)
	Standards associated with the 6 GHz band for IMT systems	 Studying the spectrum needs in the 6 GHz band for IMT uses. Develop New report that includes the experiences and uses of the administrations, including the latest developments, device characteristics, and technical and operational standards related to the use of IMT systems in the 6 GHz band. (Under Discussion)
	Exchanging information on the uses of frequency bands to establish international mobile communications systems in the Arab region	 Current uses of IMT applications in the relevant bands and an explanation of the technologies used in each band Mechanism for updating and sharing information during the upcoming meetings of the Standards Development Working Group. (Under Discussion)
	Technological and Regulatory Developments for the deployment of 5G Applications/IMT2020 in the Mobile Satellite Service.	•Develop a new report that includes technical and organizational developments for introducing/deployment of IMT2020/5G applications in mobile satellite service. •(New Report Under Discussion)
	Issue of (RR No. 21.5), Document 550 of WRC-19	•No change to the RR No. 21.5 •Continue activities in Working Group (1)

ASMG Roadmap



ASMG Roadmap



Thank You