



Arab Spectrum Management Group & Agenda Items of the WRC-19

As of 22nd Meeting, Abu Dhabi, United Arab Emirates: 15-20 April 2017



Structure of ASMG

Arab Spectrum Management Group (ASMG)

- The ASMG was established by the **Arab Ministerial Council for ICT** to cooperate and collaborate in the field of Spectrum Management and preparation to Radio Conferences.
- The twenty two Arab States utilize this platform for the following major activities:-
 - Coordinate among the Member States on all issues related to the Spectrum Management, including sharing views on the emerging radio aspects.
 - Negotiating to develop **common Arab proposals** for the agenda items of World Radio Conferences (WRC) held every four years at the ITU.
 - Preparing common contributions for the meetings of the ITU-R Study Groups and Working Parties.

ASMG Management Team

Chairman



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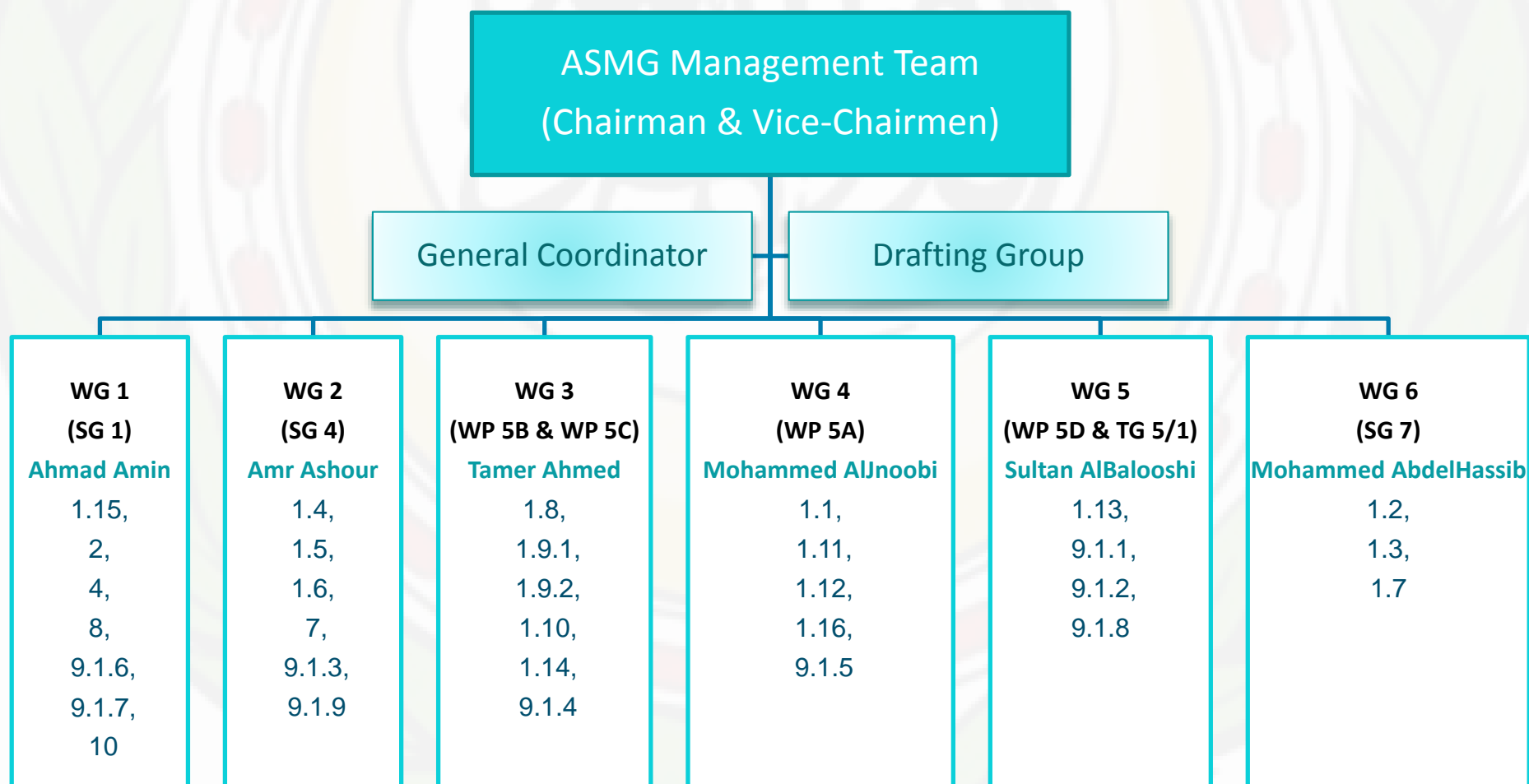
Dr. Majeed
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ASMG Structure

The Structure of the ASMG consists of:





22nd ASMG Meeting – 15-20 April 2017
(Abu Dhabi, UAE)

22nd ASMG Meeting

15-16 April 2017
(Working Groups Meetings)

- Meeting of 6 working groups held
- Reports on each agenda item prepared
- Participation from Industry representatives (Operators, Vendors and Organizations)

17-18 April 2017
(ASMG Plenary)

- Adoption of Reports by WG's Chairmen
- Positions on WRC-19 Agenda Items
- Discuss other issues (i.e. ASMG Mechanism, IMT-2020 Early Deployment and ESIM Regulatory Measures)

19-20 April 2017
(Regional Groups Coordination)

- Participation of representatives from (ATU, APT, CEPT, RCC)
- Comprehensive discussions regarding Agenda Item 1.13.
- Positions on WRC-19 Agenda Items

22nd ASMG Meeting – Discussions on AI 1.13

- It was also agreed to take into account the results of sharing and compatibility studies with existing services and the necessity to ensure protection of other services within or in the adjacent bands.
- Considering the importance of harmonizing frequency bands for IMT2020, the representatives of participating regional groups emphasized on the importance to focus the ITU work and studies on highly candidate frequency ranges to promote global harmonization.

22nd ASMG Meeting – Discussions on AI 1.13

ASMG

- Supports initiating studies in the following frequency bands, which are included in Resolution 238 (WRC 15), 24.25 - 27.5 GHz, 31.8 - 33.4 GHz, 40.5 - 42.5 GHz and 42.5 - 43.5 GHz.

APT

- No current position. Some APT members expressed their preferable bands which would be below 43.5 GHz as an public information.

ATU

- Emphasized that it is essential to prioritize the bands as early as possible for the sake of promoting global harmonization and in order to avoid unnecessary difficulties in the frequency overlap with other agenda items.

CEPT

- Supports studies on IMT spectrum needs in the listed frequency bands within the range 24.25-86 GHz with the focus on the frequency bands 24.25-27.5 GHz, 31.8-33.4 GHz and 40.5-43.5 GHz. CEPT intends to harmonize the 24.25-27.5 GHz band for 5G before WRC-19 and to promote it for worldwide harmonization, taking into account the compatibility with and protection of all existing services, including their future deployments, in the same and adjacent frequency bands.

RCC

- Considers performing the studies first on IMT system compatibility in the frequency bands 24.25 – 27.5 GHz, 31.8 – 33.4 GHz, 40.5 – 42.5 GHz and 66 – 71 GHz, where global harmonization could be achieved.



ASMG Positions to WRC-19 Agenda Items



Working Group 1

(Agenda Items: 1.15, 2, 4, 8, 9.1.6, 9.1.7, 10)

Agenda Item 1.15

- **“to consider identification of frequency bands for use by administrations for the land-mobile and fixed services applications operating in the frequency range 275-450 GHz, in accordance with Resolution 767 (WRC-15)”**
- **ASMG Position:**
 - Follow up and support the current studies to consider identification of frequency bands for use by administrations for the land-mobile and fixed services applications operating in the frequency range 275-450 GHz, while ensuring the protection of passive services identified in No 5.565, and not adding any additional constraints on these services.

Agenda Item 9.1, Issue 9.1.6

- **“Resolution 958 (WRC-15) – Annex item 1) Studies concerning Wireless Power Transmission (WPT) for electric vehicles”**
- **ASMG Position:**
 - Follow up and support the current studies to assess the impact of (WPT) for electric vehicles on radiocommunication services; and to study suitable harmonized frequency ranges which would minimize the impact on radiocommunication services from (WPT) for electrical vehicles.
 - Ensure the protection of the incumbent services and not add any additional constraints on these services.
 - Request ASMG administrations to identify their current and future uses in the frequency bands proposed in order to ensure the protection of these services in these bands.

Agenda Item 9.1, Issue 9.1.7

- **“to Resolution 958 (WRC-15) – Annex item 2) Studies to examine: a) whether there is a need for possible additional measures in order to limit uplink transmissions of terminals to those authorized terminals in accordance with No. 18.1; b) the possible methods that will assist administrations in managing the unauthorized operation of earth station terminals deployed within its territory, as a tool to guide their national spectrum management programme, in accordance with Resolution ITU-R 64 (RA-15)”**
- **ASMG Position:**
 - Support the current studies in order to assist administrations to manage the unauthorized operation of earth station terminals.
 - Support introducing any possible additional measures in order to limit uplink transmissions of terminals to those authorized terminals.

Agenda Item 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 Position:
 - ASMG administrations are invited to study this matter to discuss it further in the next ASMG meeting based on proposals received at this meeting.



Working Group 2

(Agenda Items: 1.4 ،1.5,1.6, 7, 9.1.3, 9.1.9)

Agenda Item 1.4

- **“to consider the results of studies in accordance with Resolution 557 (WRC-15), and review, and revise if necessary, the limitations mentioned in Annex 7 to Appendix 30 (Rev.WRC-15), while ensuring the protection of, and without imposing additional constraints on, assignments in the Plan and the List and the future development of the broadcasting-satellite service within the Plan, and existing and planned fixed-satellite service networks”**
- **ASMG Position:**
 - Follow-up studies.
 - Not supporting the removal of any restrictions that may have a potential impact on the current allocations or allotments of the plan.
 - Protection of assignments included in the Plan and List and the future of BSS networks.

Agenda Item 1.5

- **“to consider the use of the frequency bands 17.7-19.7 GHz (space-to-Earth) and 27.5-29.5 GHz (Earth-to-space) by earth stations in motion communicating with geostationary space stations in the fixed-satellite service and take appropriate action, in accordance with Resolution 158 (WRC-15)”**
- **ASMG Position:**
 - The division of use ESIM stations in the frequency bands and 05/27 to 05/29 07/17 to 07/19 GHz to three main types:
 - Stations on ships
 - Stations on board aircraft
 - Earth stations
 - Invite Arab states to study the impact of these uses on the radio services allocated in the frequency bands 27.5-29.5 and 17.7-19.7 GHz with respect to different types of ESIM stations.
 - Preliminary position in support of No change to the Radio Regulations for the frequency bands 19.7 - 17.7 GHz and 29.5 - 27.5 GHz with respect to ESIM usage.

Agenda Item 1.6

- **“to consider the development of a regulatory framework for non-GSO FSS satellite systems that may operate in the frequency bands 37.5-39.5 GHz (space-to-Earth), 39.5-42.5 GHz (space-to-Earth), 47.2-50.2 GHz (Earth-to-space) and 50.4-51.4 GHz (Earth-to-space), in accordance with Resolution 159 (WRC-15)”**
- **ASMG Position:**
 - Protect the fixed-satellite service systems in GSO either by adequate epfd levels or any other methodologies or according to wave propagation models in the frequency bands above 30 GHz.
 - Consult the satellite operators of the team to determine the epfd value that ensures the protection of the satellite networks in the geostationary orbital positions and the opinion for the proposed mechanism.

Agenda Item 7

- **“to consider possible changes, and other options, in response to Resolution 86 (Rev. Marrakesh, 2002) of the Plenipotentiary Conference, an advance publication, coordination, notification and recording procedures for frequency assignments pertaining to satellite networks, in accordance with Resolution 86 (Rev.WRC-07), in order to facilitate rational, efficient and economical use of radio frequencies and any associated orbits, including the geostationary-satellite orbit”**

Agenda Item 7, Issue A: Non-GSO BIU

- ASMG Position:

- Initial support for explicit provisions of the Radio Regulations regarding the status of non-geostationary systems along the lines of the regulatory status of geostationary systems.
- Follow-up of the results of the studies of the options presented and the achievement of the following basic objectives:
 - To achieve the appropriate equivalence between optimal utilization and equitable access to spectrum and orbital resources for non-geostationary satellite networks and other satellite networks
 - Not to create opportunities for misuse of notification procedures for the operation of the geostationary constellation and without complicated regulatory procedures that are difficult to achieve or implemented.
- Consult with Bureau for consideration of the question of providing tools for querying and reporting on the operation of the non-geostationary satellite network for various options under consideration.
- Support the decision of the Radio Regulations Board regarding the designation of interim procedures for the development of satellite networks in the BIU service, but that such procedures should be modified in accordance with the results of the 2019 Conference.

Agenda Item 7, Issue B: Modification of recorded AP30/30A assignments

- ASMG Position:
 - Follow-up on ongoing studies.
 - Initial support to propose amendments to list assignments in Appendices 30 / 30A limited to reduction only, while ensuring that such amendments does not impact the current status for national allotments and assignments in the list.

Agenda Item 7, Issue C: RR Article 11 and AP30/30A/30B discrepancies

- ASMG Position:
 - Follow-up studies under this issue.

Agenda Item 7, Issue D: Identification of coordination

- ASMG Position:
 - Follow-up studies under this issue.
 - Support No change to the Radio Regulations as the amendments proposed of the CR/C and CR / D Special Sections could be implemented without further amendments to the Radio Regulations.
 - Initial endorsement of method D1, taking into account the facilitation of the operative provisions of the Radio Regulations.

Agenda Item 7, Issue E: Harmonization of RR AP30B with AP30/30A

- ASMG Position:
 - Follow-up studies under this issue.
 - To study the implications of proposals to align Appendix 30B with Appendices 30 / 30A and to take appropriate decision later meeting.

Agenda Item 7, Issue F: Enhancement of AP30B

- ASMG Position:
 - Follow-up studies under this issue.
 - Further Studies to assess the implications of the proposals submitted is needed.
 - Arab states to consider the draft contribution to next WP4A meeting, urging further studies with respect to regional subsystems and special procedures.

Agenda Item 7, Issue G Updating the AP30/30A reference situation

- ASMG Position:
 - Follow-up studies under this issue.
 - Study the implications of the proposals submitted.
 - Consider the possibility of modifying (extend - reduce - delete) the period of time of provisional recording towards definitive recording, which allows operators to ensure that the utilizing frequency assignments.

Agenda Item 7, Issue XXX: difficulties for PARTB examinations of Appendix30B

- ASMG Position:
 - Arab states are invited to consider the draft contribution next WP4A meeting with respect to difficulties associated with PARTB examinations.

Agenda Item 9.1, Issue 9.1.3

- **“Resolution 157 (WRC-15) – Study of technical and operational issues and regulatory provisions for new non-geostationary-satellite orbit systems in the 3 700-4 200 MHz, 4 500-4 800 MHz, 5 925-6 425 MHz and 6 725-7 025 MHz frequency bands allocated to the fixed-satellite service”**
- **ASMG Position:**
 - Protection of assignments and allotments of Appendix 30B and not to impose any restrictions for further deployment or current recordings.
 - Not supporting the modification of the epfd spectrum density previously assigned to protect fixed satellite service systems in these bands.
 - Not to support the designation of different epfd values in radio regulations, to be considered to the extent of ITU recommendations regarding coordination procedures between GSO and NGSO.
 - Follow up existing studies related to this issue.
 - invite concerned working groups in ASMG to follow-up this issue in order to ensure the protection of fixed services, especially in adjacent bands.

Agenda Item 9.1, Issue 9.1.9

- **“Resolution 162 (WRC-15) – Studies relating to spectrum needs and possible allocation of the frequency band 51.4-52.4 GHz to the fixed-satellite service (Earth-to-space).”**
- **ASMG Position:**
 - Follow up current studies on this item.
 - Ensure the protection of existing services, especially the fixed and mobile services that may be used extensively in Arab states.
 - Consult with satellite operators with respect to their needs of spectrum in the frequency range 52.4 - 51.4 GHz.
 - Consultation with concerned groups in ASMG on the proposed allocation of this band for IMT.



Working Group 3

(Agenda Items: 1.8, 1.9.1, 1.9.2, 1.10, 1.14, 9.1.4)

Agenda Item 1.8

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

- **ASMG Position:**

Due to the need for modern communications systems in the field of global maritime distress and safety services (GMDSS) in accordance with Resolution 359 (REV.WRC 15), and due to its important contribution to maritime safety, ASMG supports:

- the consideration of possible regulatory actions to support the modernization of (GMDSS).
- the introduction of additional satellite systems in the GMDSS system while ensuring compatibility and interconnection among the new and the current systems.
- following-up studies to be undertaken by ITU-R on the protection of frequency bands being used in the future.

Agenda Item 1.9.1

- **“to consider, based on the results of ITU-R studies: regulatory actions within the frequency band 156-162.05 MHz for autonomous maritime radio devices to protect the GMDSS and automatic identifications system (AIS), in accordance with Resolution 362 (WRC-15)”**
- **ASMG Position:**
 - Support the development of regulatory frameworks for autonomous maritime radio devices (AMRD) for the purpose of protecting the Global maritime distress and safety services (GMDSS) and the Automatic Identification System (AIS).

Agenda Item 1.9.2

- **“to consider, based on the results of ITU-R studies: modifications of the Radio Regulations, including new spectrum allocations to the maritime mobile-satellite service (Earth-to-space and space-to-Earth), preferably within the frequency bands 156.0125-157.4375 MHz and 160.6125-162.0375 MHz of Appendix 18, to enable a new VHF data exchange system (VDES) satellite component, while ensuring that this component will not degrade the current terrestrial VDES components, applications specific messages (ASM) and AIS operations and not impose any additional constraints on existing services in these and adjacent frequency bands as stated in recognizing d) and e) of Resolution 360 (Rev.WRC-15)”**
- **ASMG Position:**
 - Support the ongoing studies in ITU-R on the development of the necessary protection criteria for the satellite receiving equipment of VDES system while ensuring the protection of services allocated to the candidate frequency bands and adjacent bands.

Agenda Item 1.10

- “to consider spectrum needs and regulatory provisions for the introduction and use of the Global Aeronautical Distress and Safety System (GADSS), in accordance with Resolution 426 (WRC-15)”
- ASMG Position:
 - Support following-up studies and ensuring the protection of existing services in the case of new allocations are made.

Agenda Item 1.14

- “to consider , on the basis of ITU-R studies in accordance with Resolution 160 (WRC-15), appropriate regulatory actions for high-altitude platform stations (HAPS), within existing fixed-service allocations”
- ASMG Position:
 - ASMG doesn't support any additional identifications to applications of HAPS irrespective of results of ongoing studies under AI 1.6 and AI 1.13.

Agenda Item 9.1, Issue 9.1.4

- **“Resolution 763 (WRC-15) – Stations on board sub-orbital vehicles;”**
- **ASMG Position:**
 - Support following-up on-going studies in ITU-R.



Working Group 4

(Agenda Items: 1.1, 1.11, 1.12, 1.16, 9.1.5)

Agenda Item 1.1

- **“to consider an allocation of the frequency band 50-54 MHz to the amateur service in Region 1, in accordance with Resolution 658 (WRC-15)”**
- **ASMG Position:**
 - Some administrations support frequency allocation for amateur service within the band 50-54 MHz on a primary basis, with following -up studies on this regard and emphasis on protecting the existing services without imposing new restrictions on them.
 - Some administration prefers to wait and follow up the studies at this stage.

Agenda Item 1.11

- **“to take necessary actions, as appropriate, to facilitate global or regional harmonized frequency bands to support railway radiocommunication systems between train and trackside within existing mobile service allocations, in accordance with Resolution 236 (WRC-15)”**
- **ASMG Position:**
 - Follow-up the studies about railway radio systems between the train and trackside within the current allocations of the mobile service.
 - Ensuring protection of the existing services without imposing any new restrictions on them.
 - Encourage the administrations to study spectrum requirements for these applications in order to reach to harmonized frequency bands.

Agenda Item 1.12

- **“to consider possible global or regional harmonized frequency bands, to the maximum extent possible, for the implementation of evolving Intelligent Transport Systems (ITS) under existing mobile-service allocations, in accordance with Resolution 237 (WRC-15)”**
- **ASMG Position:**
 - Follow-up studies, and request administrations to consider the possibility of identifying appropriate frequency bands for these systems within the current allocations of the mobile service.

Agenda Item 1.16

- **“to consider issues related to wireless access systems, including radio local area networks (WAS/RLAN), in the frequency bands between 5 150 MHz and 5 925 MHz, and take the appropriate regulatory actions, including additional spectrum allocations to the mobile service, in accordance with Resolution 239 (WRC-15)”**
- **ASMG Position:**
 - Follow-up studies.
 - Do not support the identification of new bands for (WAS / RLAN), unless the studies show possibility of coexistence with current services.
 - Ensure protection of the existing services without adding any new restrictions on them.

Agenda Item 9.1, Issue 9.1.5

- **“Resolution 764 (WRC-15) – Consideration of the technical and regulatory impacts of referencing Recommendations ITU-R M.1638-1 and ITU-R M.1849-1 in Nos. 5.447F and 5.450A of the Radio Regulations;”**
- **ASMG Position:**
 - Follow up the studies and ensure protection of the existing services without adding new restrictions on them.



Working Group 5

(Agenda Items: 1.13, 9.1.1, 9.1.2, 9.1.8)

Agenda Item 1.13

- “to consider identification of frequency bands for the future development of International Mobile Telecommunications (IMT), including possible additional allocations to the mobile service on a primary basis, in accordance with Resolution 238 (WRC-15)”
- **ASMG Position:**
 - Support initiating studies in the frequency bands listed below, which are included in Resolution 238 (WRC 15):
 - **24.25 - 27.5 GHz**
 - **31.8 - 33.4 GHz**
 - **40.5 - 42.5 GHz**
 - **42.5 - 43.5 GHz**
 - Not supporting discussing any study or contribution on the frequency bands which are not included in Resolution 238 (WRC 15) in the work of Task Group 5/1 (TG 5/1).

Agenda Item 9.1, Issue 9.1.1

- **“Resolution 212 (Rev.WRC-15) – Implementation of International Mobile Telecommunications in the frequency bands 1 885-2 025 MHz and 2 110-2 200 MHz;”**
- **ASMG Position:**
 - Follow up the studies on this issue in the ITU Radio Sector Working Groups and support technical, operational and procedural measures for IMT systems to ensure compatibility between the terrestrial and satellite components of IMT systems in the frequency bands 1885-2025 MHz and 2110-2200 MHz.
 - Invite Arab administrations to clarify their preference for using either the terrestrial component or the satellite component or both.

Agenda Item 9.1, Issue 9.1.2

- **“Resolution 761 (WRC-15) – Compatibility of International Mobile Telecommunications and broadcasting-satellite service (sound) in the frequency band 1 452-1 492 MHz in Regions 1 and 3”**
- **ASMG Position:**
 - Follow up technical studies and note the technical characteristics of satellite broadcasting systems to ensure that there are no restrictions on the use of IMT applications for the frequency band 1452-1492 MHz.

Agenda Item 9.1, Issue 9.1.8

- **“Resolution 958 (WRC-15) – Annex item 3) Studies on the technical and operational aspects of radio networks and systems, as well as spectrum needed, including possible harmonized use of spectrum to support the implementation of narrowband and broadband machine-type communication infrastructures, in order to develop Recommendations, Reports and/or Handbooks, as appropriate, and to take appropriate actions within the ITU Radiocommunication Sector (ITU-R) scope of work”**
- **ASMG Position:**
 - Support regionally or globally harmonized usage of frequency bands identified for IMT systems, for Internet of Things (IoT) and Machine Type Communication (MTC) applications and systems.

Cont. ,,,, Agenda Item 9.1, Issue 9.1.8

- ASMG Position:

- **Narrowband IoT and MTC:** Support the harmonized use of the A9 arrangement in ITU-R Recommendation 1036 (2x3 MHz, 733-736 / 788-791 MHz) which is identified for IMT in the 700 MHz band for narrowband IoT and MTC, with the possibility of using this arrangement (2x3) in the 700 MHz band for other applications within IMT systems, and the possibility of using other frequency bands identified for IMT systems for IoT and MTC applications and systems based on availability of frequency bands in different states.
- **Broadband IoT and MTC:** Support the use of existing bands identified for IMT systems to support the implementation of broadband communications infrastructure for IoT and MTC.
- Support follow-up studies to nominate other bands identified to IMT systems for narrowband and broadband IoT and MTC systems and application.



Working Group 6

(Agenda Items: 1.2, 1.3, 1.7)

Agenda Item 1.2

- **“to consider in-band power limits for earth stations operating in the mobile-satellite service, meteorological-satellite service and Earth exploration-satellite service in the frequency bands 401-403 MHz and 399.9-400.05 MHz, in accordance with Resolution 765 (WRC-15)”**
- **ASMG Position:**
 - Follow up the ongoing studies in the ITU-R.
 - Supporting the ongoing studies in order to establish in-band power limits for earth stations operating in Mobile satellite service (MSS), Meteorological satellite service (MetSat) and Earth exploration service in the frequency bands 401-403MHz and 399.9-400.05MHz, in order to ensure the protection of the existing services without imposing any additional constraints in these services due to the massive usage of the fixed and mobile services in these frequency bands in the countries.

Agenda Item 1.3

- **“to consider possible upgrading of the secondary allocation to the meteorological-satellite service (space-to-Earth) to primary status and a possible primary allocation to the Earth exploration-satellite service (space-to-Earth) in the frequency band 460-470 MHz, in accordance with Resolution 766 (WRC-15)”**
- **ASMG Position:**
 - These frequency bands are widely used in Arab countries for mobile and fixed services.
 - ASMG doesn't support the possible upgrading of the secondary allocation to the meteorological satellite service (space-to-earth) to primary status and a primary allocation to the Earth exploration satellite service (space-to-earth) in the frequency band 460-470MHz.
 - Follow up studies under this agenda item and ensure the protection of the existing services.

Agenda Item 1.7

- **“to study the spectrum needs for telemetry, tracking and command in the space operation service for non-GSO satellites with short duration missions, to assess the suitability of existing allocations to the space operation service and, if necessary, to consider new allocations, in accordance with Resolution 659 (WRC-15)”**
- **ASMG Position:**
 - Some administration within the ASMG support the usage of non-geostationary short-term satellite (Pico/Nano satellites) to be used in universities and scientific institutes.
 - Follow up the studies in the ITU-R, also support the results of these studies ensuring the protection of the existing services.

THANK YOU!

Presented by

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