

ITUEvents

3rd ITU Inter-regional Workshop on WRC-19 Preparation

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**3rd ITU INTER-REGIONAL WORKSHOP
ON WRC-19 PREPARATION
(Geneva, 4-6 September 2019)**

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

*Arab Spectrum
Management Group
(ASMG)*



Organized by:





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

As of 25th Meeting, Cairo, Egypt: 27 July - 01 August 2019



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



Mr. Tariq Al Awadhi



Dr. Alsayed
Azzouz
Vice-Chairman



Mr. Mustapha
Bessi
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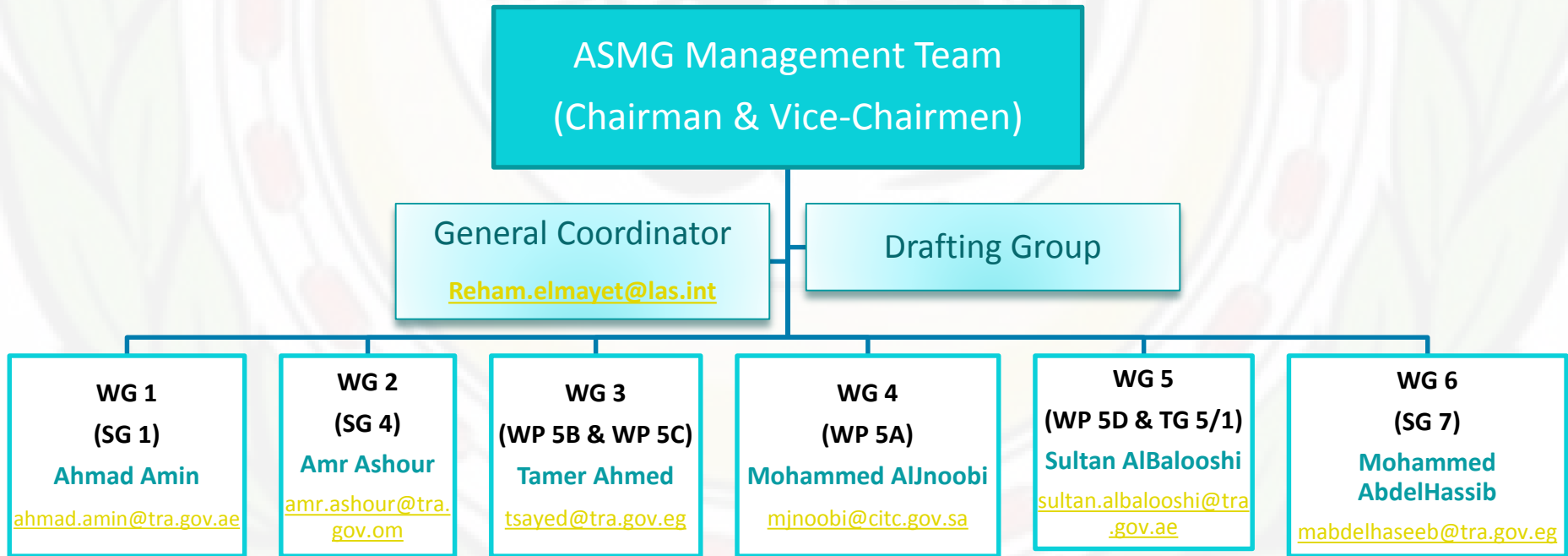
Dr. Majeed
AbdulRahman
Vice-Chairman



Mr. Kati Smail
Vice-Chairman

ASMG Structure

The Structure of the ASMG consists of:



ASMG Preparations for WRC-19

ASMG-24 (9-13 December 2018), Amman - Jordan

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

ASMG-23 (7-11 April 2018), Marrakech - Morocco

ASMG-25 (27 July – 1 August 2019), Cairo - Egypt

ASMG-21 (17-20 July 2016), Sharm El-Sheikh - Egypt



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:
 - Method E: Adding a new footnote RR No. 5.E115 and modifying the existing footnote RR No. 5.565 are proposed for FS/LMS applications in portions of the 275-450 GHz band.

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:**
 - Support the conclusion of the study on this agenda item that there is no need for activity related to WRC-19 to amend the RR.

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 Issue 2a Option 2: Develop a new WRC Resolution to introduce additional measures in order to address the issue of unauthorized uplink transmissions of earth station.
 - Support Issue 2b: To further assist administrations in managing (identifying and geolocating) the unauthorized operation of earth stations deployed within their territory, the ITU-R needs to provide necessary guidelines on satellite monitoring capabilities, along with possible revision and further development of ITU-R Reports or Handbooks in this regard. These may provide guidance and support for administrations in managing the unauthorized operation of earth stations deployed within their territory and tools to guide their national spectrum management.

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:**

Initial ASMG proposals for AI 10:

- to consider identification of additional frequency bands for future development of International Mobile Telecommunications (IMT), including possible additional allocations to the mobile service on a primary basis and identifying those bands for IMT applications, in the frequency bands:
 - 3.3 – 3.4 GHz
 - 3.6 – 3.8 GHz
 - 3.8 – 4.2 GHz
 - portions of 6 – 24 GHz
 - 470 – 694 MHz or portions
- to consider the use of the frequency bands within the range 37.5 – 51.4 GHz by earth stations in motion communicating with geostationary space stations in the fixed-satellite service.



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:
- ASMG Supports Method A

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:**
- **ASMG Supports Method B, and including the following:**
- **For Maritime ESIMs operates within 70 km distance of low water mark of a country are subject to the prior agreement of the concerned coastal State.**
- **For Aeronautical ESIMs, when within line-of-sight of the territory of an administration, the maximum pfd produced at the surface of the Earth on the territory of an administration by emissions from a single aeronautical ESIM shall not exceed Option 1 pfd mask and No altitude limit for Aero ESIM**
- **For Land ESIMs: ASMG will consider remove Annex 3 if all requirements are included in the Body of the Resolution**

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:**
- For Issue 1: ASMG Supports Method B
- For Issue 2: ASMG supports Option A

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 – Bringing into use of frequency assignments to all non-GSO systems, and consideration of a milestone-based approach for the deployment of non-GSO systems in specific frequency bands and services

• ASMG Position:-

For Continuous BIU

- ASMG Supports option A (retain 90 days)

For Milestone BIU Approach

- ASMG Supports Option F.

For frequency bands subject to the milestone approach:

- ASMG Supports frequency bands agreed at CPM19-2 (Table 1)
- For other frequency bands, ASMG is not supporting to include other bands particularly for frequency bands below 4 GHz.

For transitional measure issue:

- ASMG Supports option (1) in concept
- For non-GSO systems with frequency assignments reaching the end of their seven-year regulatory period after a date to be set by the Conference, the commencement of the milestone period will be the actual date of the end of the seven-year regulatory period.
- For the non-GSO systems with a regulatory period that ends before the date to be set by the Conference, the commencement of the milestone process is proposed to be **1 January 2021**.

Agenda Item 7 Issue B – Application of coordination arc in the Ka-band, to determine coordination requirements between the FSS and other satellite services

- ASMG Supports the single method proposed

Issue C – Issues for which consensus was achieved in ITU-R and a single method has been identified

- ASMG has No Objection to implement single method proposed

Issue D – Identification of those specific satellite networks and systems with which coordination needs to be effected under RR Nos. 9.12, 9.12A and 9.13

- ASMG Supports Method D1

Issue E: Resolution related to RR Appendix 30B

- ASMG Supports the single method proposed

Issue F – Measures to facilitate entering new assignments into the RR Appendix 30B List

- ASMG Supports Method F1

Issue G – Updating the reference situation for Regions 1 and 3 networks under RR Appendices 30 and 30A when provisionally recorded assignments are converted into definitive recorded assignments

- ASMG Supports Method G1

Issue H – Modifications to RR Appendix 4 data items to be provided for non-geostationary satellite systems

- ASMG Supports the single method proposed

Issue I – Modified regulatory procedure for non-GSO satellite systems with short-duration missions

- ASMG Supports Method I2

Issue J – Pfd limit in Section 1, Annex 1 of RR Appendix 30

- ASMG Supports Method J2

Issue K – Difficulties for Part B examinations under § 4.1.12 or 4.2.16 of RR Appendices 30 and 30A and § 6.21 c) of RR Appendix 30B

- ASMG Supports the single method proposed

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:-**
- **ASMG Supports No Change to Radio Regulations**

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:-**
- ASMG Supports FSS allocation in the frequency band 51.4-52.4 GHz
- To ensure the protection of GSO EESS satellites (passive), ASMG supports Option (2).
- ASMG is considering to amend Option (2) to identify recording status of orbital locations for GSO EESS



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:
 - Issue A: Modernization of the GMDS system
Supporting method A2
 - Issue B: Introduction of additional satellite systems into GMDSS
Support method B2b but with modifying the footnote No. 5.GMDSS-B2b to be:
“Maritime mobile earth stations receiving in the band 1 621.35-1 626.5 MHz shall not impose constraints to maritime mobile earth stations transmitting in the band 1 626.5-1 660.5 MHz. (WRC-19)”

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:
 - AMRD Group A: Support method A
 - AMRD Group B: Support method B3

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 method A

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 is to support:
 - Support method C

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 is to support:
 - Support Method A

Agenda Item 9.1, Issue 9.1.4

- **“Resolution 763 (WRC-15) – Stations on board sub-orbital vehicles;”**
- **ASMG Position:**
 - Support the item conclusion "There is no requirement for any change to the Radio Regulations at WRC-19"



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:**
 - ASMG have different views for this agenda item, some administrations support the allocation for Amateur in this band, while other administrations support the no change method.

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:**
 - ASMG support method (C) with modifications.
 - **Method C:** Add a new Resolution [B111-METHOD C] (WRC-19) without specifying frequency ranges for RSTT, while referencing the most recent version of Recommendation ITU-R M.[RSTT_FRQ] and consequently suppress the Resolution 236.
 - **The modification:**

to continue the development of the relevant ITU-R Recommendation that contains frequency bands for global or regional harmonization for RSTT, without referring to any ITU-Recommendation in the resolution .

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:**
 - ASMG supports method A, which is No change to the Radio Regulations and suppress Resolution 237(WRC-15)

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:**
 - **Frequency Band (A) (5 150-5 250) MHz:** ASMG have different views for band.
 - **Frequency Bands (B, C, E):** The Arab administrations support the no change method in the bands.
 - **Frequency Bands (D) (5 725-5 850) MHz :** ASMG support Method D1, which is No change in this frequency band.

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:**
 - ASMG support Method B.



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:**
 - Not supporting discussing any frequency band not mentioned in Resolution 238 (WRC-15) in CPM or in WRC-19 such as 28 GHz (27.5 – 29.5 GHz).
 - Views of ASMG on each of the frequency bands mentioned in Resolution 238 (WRC-15) and related conditions are as follows.

Agenda Item 1.13- Item A: 24.25 – 27.5 GHz 1/2

- ASMG Position:

- ASMG supports identification of this band for IMT in accordance with the alternative that implies to allocate the 24.25-25.25 GHz frequency band to the MS (except aeronautical mobile) on a primary basis in Regions 1 and 2 and identify the 24.25-27.5 GHz frequency band for the terrestrial component of IMT in Regions 1, 2 and 3. (*Method A2 in accordance with Alternative 2*).
- **For Condition A2a: Protection measures for the the EESS (passive) in the 23.6-24 GHz frequency band:**
 - ASMG supports no strict measures and restrictions on the use of IMT in this band, with possibility of a new ITU-R Recommendation (Option 3) to include the following values of OOB limits to the band 23.6-24 GHz from the BSs and UEs operating in the band 24.25-27.5 GHz, In case of need for these additional measures as appropriate:
 - BS OOB Limits: - **32** dBW/200 MHz
 - UE OOB Limits: - **28** BW/200 MHz

Agenda Item 1.13- Item A: 24.25 – 27.5 GHz 2/2

- **ASMG Position:**

- **For Condition A2b: Protection measures for the EESS (passive) in the 50.2-50.4 GHz and 52.6-54.25 GHz frequency bands:**
 - No condition is necessary
- **For Condition A2c: Protection measures for earth stations in the SRS/EESS:**
 - No condition is necessary
- **For Condition A2d: Measures related to transmitting earth stations in the FSS (Earth-to-space) at known locations:**
 - No condition is necessary
- **For Condition A2e: Protection measures for the ISS and FSS (Earth-to-space) receiving space stations:**
 - No condition is necessary
- **For Condition A2f: Protection measures for the RAS:**
 - No condition is necessary
- **For Condition A2g: Protection measures for multiple services:**
 - No condition is necessary

Agenda Item 1.13- Item B: 31.8 – 33.4 GHz

- ASMG Position:
 - ASMG supports No change to the Radio Regulations According to Method B1.

Agenda Item 1.13- Item C: 37-40.5 GHz

- ASMG Position:
 - ASMG supports No change to the Radio Regulations According to Method C1.

Agenda Item 1.13- Item D: 40.5-42.5 GHz

- ASMG Position:

- ASMG supports Identification of the frequency band 40.5-42.5 GHz for IMT in accordance with the Alternative 2 which implies to upgrade the existing secondary allocation to the MS in the frequency band 40.5-42.5 GHz to a primary allocation in the Table of Frequency Allocations and identify the frequency band for the terrestrial component of IMT. (*Method D2 in accordance with Alternative 2*).
- **For Condition D2a: Protection measures for the FSS (space-to-Earth)**
No condition is necessary
- **For Condition D2b: Protection measures for the RAS**
No condition is necessary
- **For Condition D2c: Protection measures for multiple services**
No condition is necessary

Agenda Item 1.13- Item E: 42.5-43.5 GHz

- ASMG Position:

- ASMG supports Identification of the frequency band 40.5-42.5 GHz for IMT in accordance with the Alternative 2 which implies identify the frequency band for the terrestrial component of IMT. (*Method E2 in accordance with Alternative 2*).
- **For Condition E2a: Protection measures for the FSS (Earth-to-space)**
No condition is necessary
- **For Condition E2b: Protection measures for the RAS**
No condition is necessary
- **For Condition E2c: Protection measures for multiple services:**
No condition is necessary

Agenda Item 1.13- Item F: 45.5-47 GHz

- ASMG Position:
 - ASMG supports No change to the Radio Regulations according to Method F1.

Agenda Item 1.13- Item G: 47-47.2 GHz

- ASMG Position:
 - ASMG supports No change to the Radio Regulations according to Method G1.

Agenda Item 1.13- Item H: 47.2- 50.2 GHz

- ASMG Position:
 - ASMG supports No change to the Radio Regulations according to Method H1.

Agenda Item 1.13- Item I: 50.4-52.6 GHz

- ASMG Position:
 - ASMG supports No change to the Radio Regulations according to Method I1.

Agenda Item 1.13- Item J: 66-71 GHz

- ASMG Position:
 - ACP to supports identification of the 66-71 GHz frequency band for the terrestrial component of IMT in Regions or globally, and remove the frequency band from RR No. 5.553. (*Method J2 in accordance with Alternative 2*).

Agenda Item 1.13- Item K: 71-76 GHz

- ASMG Position:
 - ASMG supports No change to the Radio Regulations according to *Method K1*.

Agenda Item 1.13- Item L: 81-86 GHz

- ASMG Position:
 - ASMG supports No change to the Radio Regulations according to *Method L1*.

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:
 - ACP to support **view 2** in the CPM report.

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:
 - ASMG supports no restrictions on the use of IMT applications for the frequency band 1452-1492 MHz.
 - ACP to support **Possible Action 3** with implementation of **Alternative 2** on the pfd limits.

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:**
 - ACP to support the only conclusion to this issue in the CPM report where there is no need to take any regulatory action in the Radio Regulations with respect to specific spectrum for the use of those applications in the Radio Regulations. Encouraging the harmonized use of spectrum to support the implementation of narrowband and broadband MTC could be further accomplished through the course of the work in ITU-R Study Groups including the development of ITU-R Recommendations, Reports and/or Handbooks.

Agenda Item 9.1, Issue 9.1.8 – Cont.

- For Broadband MTC and IoT applications: Support the use of existing bands identified for (IMT) systems to support the implementation of broadband communications infrastructure from machine to machine and (IoT).
- For Narrowband MTC and IoT applications: Support the possibility of using example(s) of the potential harmonized use of IMT-based MTC, based on IMT frequency arrangements provided by Recommendation ITU-R M.1036, can be found in ITU-R Report M. 2440-0



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:
 - For the frequency band (399.9 – 400.05) MHz (Method C)
 - For the frequency band (401 - 403) MHz (Method E)

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:
 - Supports Method A- No Change to the RR

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:
 - Support Method A (NOC)



THANK YOU!

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