****

***Communications for all in East Africa***

**CHAPTER 5**

**General issues**

(Agenda items 2, 4 and 9.1 topics a), b), c) and d))

**Agenda item 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;*

Resolution **27 (Rev.WRC-19)** – *Use of incorporation by reference in the Radio Regulations*

**Status**

The Director of the Radio Communications Bureau will prepare a report to the second session of CPM-2. Countries are requested to review this report once it is ready.

**Agenda item 4**

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

Resolution **95 (Rev.WRC-19)** – *General review of the Resolutions and Recommendations of world administrative radio conferences and world radiocommunication conferences*

**Status**

The Director of the Radio Communications Bureau will prepare a report to the second session of CPM-2. Countries are requested to review this report once it is ready.

**Agenda item 9.1**

*9 to consider and approve the Report of the Director of the Radiocommunication Bureau, in accordance with Article 7 of the Convention:*

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

NOTE: Four topics have been identified by CPM23-1 under this agenda item.

**Agenda item 9.1(9.1-a)**

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

Resolution **657 (Rev.WRC-19)** – *Protection of radio spectrum-reliant space weather sensors used for global prediction and warnings*

(**WP 7C** / **WP 1B, WP 3J, WP 3K, WP 3L, WP 3M, WP 5A, WP 5B, WP 5C, WP 5D, WP 6A, WP 7D**)

**Status**

# Summary of the results of ITU-R studies

## WRC-23 agenda item 9.1, topic a) (Space weather)

The preparations for this WRC-23 agenda item are under the responsibility of WP 7C.

WP 7C received seven contributions ([7C/24](https://www.itu.int/md/R19-WP7C-C-0024/en), [67](https://www.itu.int/md/R19-WP7C-C-0067/en), [68](https://www.itu.int/md/R19-WP7C-C-0068/en), [69](https://www.itu.int/md/R19-WP7C-C-0069/en), [70](https://www.itu.int/md/R19-WP7C-C-0070/en), [71](https://www.itu.int/md/R19-WP7C-C-0071/en) and [98](https://www.itu.int/md/R19-WP7C-C-0098/en)) relating to WRC-23 agenda item 9.1, topic a).

The WMO position in 7C/24 on the topic a) was introduced.

Document 7C/67 proposed a work plan for completing the work necessary for WRC-23. Minor edits were agreed upon, and a revised version of the work plan was generated as an attachment to the Chairman’s Report as [Annex 6](https://www.itu.int/dms_ties/itu-r/md/19/wp7c/c/R19-WP7C-C-0105!N06!MSW-E.docx).

The input contributions 7C/68 and 7C/70, proposing working documents towards ITU-R Reports on space weather sensor spectrum requirements and on space weather sensor interference criteria, respectively, were considered and attached to the Chairman’s Report for further work at future meetings as [Annexes 8](https://www.itu.int/dms_ties/itu-r/md/19/wp7c/c/R19-WP7C-C-0105!N08!MSW-E.docx) and [9](https://www.itu.int/dms_ties/itu-r/md/19/wp7c/c/R19-WP7C-C-0105!N09!MSW-E.docx), respectively.

Document 7C/69, proposing edits to Report ITU-R RS.2456 was briefly discussed and converted to an attachment to the Chairman’s Report as [Annex 7](https://www.itu.int/dms_ties/itu-r/md/19/wp7c/c/R19-WP7C-C-0105!N07!MSW-E.docx).

Input contribution 7C/71 proposed a draft for a liaison statement to the contributing groups under topic a). After some discussions and edits to clarify why the request is also being made to WP 4A and WP 4C since they currently are not designated as contributing groups, the liaison statement was agreed to be sent ([1B/18](https://www.itu.int/md/R19-WP1B-C-0018/en) – [3J/62](https://www.itu.int/md/R19-WP3J-C-0062/en) – [3K/68](https://www.itu.int/md/R19-WP3K-C-0068/en) – [3L/32](https://www.itu.int/md/R19-WP3L-C-0032/en) – [3M/104](https://www.itu.int/md/R19-WP3M-C-0104/en) – [4A/104](https://www.itu.int/md/R19-WP4A-C-0104/en) – [4C/63](https://www.itu.int/md/R19-WP4C-C-0063/en) – [5A/146](https://www.itu.int/md/R19-WP5A-C-0146/en) – [5B/139](https://www.itu.int/md/R19-WP5B-C-0139/en) – [5C/97](https://www.itu.int/md/R19-WP5C-C-0097/en) – [5D/362](https://www.itu.int/md/R19-WP5D-C-0362/en) – [6A/102](https://www.itu.int/md/R19-WP6A-C-0102/en) – [7D/36](https://www.itu.int/md/R19-WP7D-C-0036/en)).

Document 7C/98 was considered and discussed briefly. The document proposes to include additional sensor systems, in addition to the systems addressed in the documents above, in the work of WP 7C.

**Recommendations**

Countries are requested to follow up on the ongoing studies on this Agenda item.

**Agenda item 9.1(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) service operating in the same band in accordance with Resolution 774 (WRC-19)*

Resolution **774 (WRC-19)** – *Studies on technical and operational measures to be applied in the frequency band 1 240-1 300 MHz to ensure the protection of the radionavigation-satellite service (space-to-Earth)*

(WP 5A / WP 3M, WP 4C, WP 7C)

**Status**

# Summary of the results of ITU-R studies

## *WRC-23 agenda item 9.1, topic b) (Studies in the band 1 240-1 300 MHz to protect RNSS)*

[CPM23-1 in its report [CA/251](https://www.itu.int/md/R00-CA-CIR-0251/en), split the work on agenda item 9.1b between WP 4C and WP 5A with WP 5A being the responsible group. WP 4C was responsible for the detailed interference analysis required by resolves to invite ITU-R 2 of Resolution **774 (WRC-19)** between stations of the amateur service and receivers of the radionavigation-satellite service. The results of the studies undertaken by WP 4C were sent to WP 5A so that it could draft the CPM text for WRC-23 and produce a final ITU-R report on the agenda item. WP 5A was also responsible for the review of amateur service applications and the development of appropriate and relevant parameters of amateur service stations for the studies undertaken by WP 4C.]

WP 7C noted the preliminary position of WMO on this agenda item ([7C/24](https://www.itu.int/md/R19-WP7C-C-0024/en)). Otherwise, no inputs documents were received on this topic.

**Recommendations**

Countries are requested to follow up on the ongoing studies on this Agenda item.

**Agenda item 9.1(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 a primary basis, in accordance with Resolution 175 (WRC-19)*

Resolution **175 (WRC-19)** – *Use of International Mobile Telecommunication systems for fixed wireless broadband in the frequency bands allocated to the fixed service on a primary basis*

(**WP 5A and WP 5C** / **WP 1B, WP 4A, WP 4C, WP 5D, WP 6A, WP 7B, WP 7C, WP 7D**)

# Status

# Summary of the results of ITU-R studies

No Status from 5A and 5C

WP 7C noted the preliminary position of WMO on this agenda item ([7C/24](https://www.itu.int/md/R19-WP7C-C-0024/en)). Otherwise, no inputs documents were received on this topic.

**Recommendations**

Countries are requested to follow up on the ongoing studies on this Agenda item.

**Agenda item 9.1(9.1-d)**

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

See [WRC-19 Document 535](https://www.itu.int/md/R16-WRC19-C-0535/en), 2nd section of the Annex.

(**WP 7C** / **WP 4A, WP 5A, WP 5C, WP 5D**)

# Status

# Summary of the results of ITU-R studies

Among the studies considered under WRC-19 agenda item 1.6, a preliminary study on the protection of EESS (passive) sensors operating in the 36-37 GHz was submitted to the ITU-R. This preliminary study indicated that it may be necessary to not exceed an out-of-band e.i.r.p. of −34 dBW/100 MHz, for all angles greater than 71.4 degrees from nadir, for FSS non-GSO space stations operating in the frequency band 37.5-38 GHz. In addition, interference into the cold calibration channel of the EESS (passive) sensor operating in the frequency band 36-37 GHz has not been studied.

WRC-19 invites ITU-R to conduct further study of this topic and develop Recommendations and/or Reports, as appropriate, and report back to WRC-23 to take action, if necessary.

The preparations for this WRC-23 agenda item are under the responsibility of WP 7C.

During the previous meeting of WP7C from 28th September - 2nd October 2020, input Document [7C/56](https://www.itu.int/md/R19-WP7C-C-0056/en) was received. Based on this contribution, a liaison statement to WP 4A ([4A/74](https://www.itu.int/md/R19-WP4A-C-0074/en)) was developed on the issue of the protection of EESS (passive) in the band 36-37 GHz from unwanted emissions of NGSO FSS systems operating in the band 37.5-38 GHz. This liaison statement requests additional information on parameters, including unwanted emission masks, to be considered in the studies under this agenda item.

**Recommendations**

Countries are requested to follow up on the ongoing studies on this Agenda item.

**Annex 1**

**Information on WRC-23 agenda item 10**

**Agenda item 10**

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

Resolution **804 (Rev.WRC-19)** – *Principles for establishing agendas for world radiocommunication conferences*

# A1/2.1 WRC-27 preliminary agenda item 2.1

*2.1 to consider, in accordance with Resolution* ***663 (WRC-19)****, additional spectrum allocations to the radiolocation service on a co-primary basis in the frequency band 231.5-275 GHz and identification for radiolocation applications in frequency bands in the range 275-700 GHz for millimetre and sub-millimetre wave imaging systems;*

Resolution **663 (WRC-19)** – *New allocations for the radiolocation service in the frequency band 231.5-275 GHz, and new identification for radiolocation service applications of frequency bands in the range 275-700 GHz*

(**SG 1/SG 5** / **WP 1A, WP 3J, WP 3K, WP 3M, WP 5A, WP 5B, WP 5C, WP 7C, WP 7D**)

# A1/2.2 WRC-27 preliminary agenda item 2.2

*2.2 study and develop technical, operational and regulatory measures, as appropriate, to facilitate the use of the frequency bands 37.5-39.5 GHz (space-to-Earth), 40.5-42.5 GHz (space-to-Earth), 47.2-50.2 GHz (Earth-to-space) and 50.4-51.4 GHz (Earth-to-space) by aeronautical and maritime earth stations in motion communicating with geostationary space stations in the fixed-satellite service, in accordance with Resolution* ***176 (WRC-19)****;*

Resolution **176 (WRC-19)** – *Use of the frequency bands 37.5-39.5 GHz (space-to-Earth), 40.5-42.5 GHz (space-to-Earth), 47.2-50.2 GHz (Earth-to-space) and 50.4-51.4 GHz (Earth-to-space) by aeronautical and maritime earth stations in motion communicating with geostationary space stations in the fixed-satellite service*

(**SG 4** / **WP 3M, WP 4A, WP 5A, WP 5C, WP 5D, WP 7B, WP 7C, WP 7D**)

A1/2.3 WRC-27 preliminary agenda item 2.3

*2.3 to consider the allocation of all or part of the frequency band [43.5-45.5 GHz] to the fixed-satellite service, in accordance with Resolution* ***177 (WRC-19)****;*

Resolution **177 (WRC-19)** – *Studies relating to spectrum needs and possible allocation of the frequency band 43.5-45.5 GHz to the fixed-satellite service*

(**SG 4** / **WP 3M, WP 4A, WP 4C, WP 5A, WP 7D**)

# A1/2.4 WRC-27 preliminary agenda item 2.4

*2.4 the introduction of pfd and e.i.r.p. limits in Article* ***21*** *for the frequency bands 71-76 GHz and 81-86 GHz in accordance with Resolution* ***775 (WRC-19)****;*

Resolution **775 (WRC-19)** – *Sharing between stations in the fixed service and satellite services in the frequency bands 71-76 GHz and 81-86 GHz*

(**SG 4/SG 5** / **WP 3J, WP 3M, WP 4A, WP 4C, WP 5A, WP 5B, WP 5C**)

# A1/2.5 WRC-27 preliminary agenda item 2.5

*2.5 the conditions for the use of the 71-76 GHz and 81-86 GHz frequency bands by stations in the satellite services to ensure compatibility with passive services in accordance with Resolution* ***776 (WRC-19)****;*

Resolution **776 (WRC-19)** – *Conditions for the use of the frequency bands 71-76 GHz and 81-86 GHz by stations in the satellite services to ensure compatibility with passive services*

(**WP 7C** / **WP 3J, WP 3M, WP 4A, WP 7D**)

# A1/2.6 WRC-27 preliminary agenda item 2.6

*2.6 to consider regulatory provisions for appropriate recognition of space weather sensors and their protection in the Radio Regulations, taking into account the results of ITU-R studies reported to WRC-23 under agenda item 9.1 and its corresponding Resolution* ***657 (Rev.WRC-19)****;*

Resolution **657 (Rev.WRC-19)** – *Protection of radio spectrum-reliant space weather sensors used for global prediction and warnings*

(**WP 7C** / **WP 1B, WP 3J, WP 3K, WP 3L, WP 3M, WP 5A, WP 5B, WP 5C, WP 7D**)

# A1/2.7 WRC-27 preliminary agenda item 2.7

*2.7 to consider the development of regulatory provisions for non-geostationary fixed-satellite system feeder links in the frequency bands 71-76 GHz (space-to-Earth and proposed new Earth-to-space) and 81-86 GHz (Earth-to-space), in accordance with Resolution* ***178 (WRC-19)****;*

Resolution **178 (WRC-19)** – *Studies of technical, operational issues and regulatory provisions for non-geostationary fixed-satellite service satellite system feeder links in the frequency bands 71-76 GHz (space-to-Earth and proposed new Earth-to-space) and 81-86 GHz (Earth-to-space)*

(**SG 4** / **WP 3J, WP 3K, WP 3M, WP 4A, WP 5A, WP 5B, WP 5C, WP 7C, WP 7D**)

# A1/2.8 WRC-27 preliminary agenda item 2.8

*2.8 to study the technical and operational matters, and regulatory provisions, for space-to-space links in the frequency bands [1 525-1 544 MHz], [1 545-1 559 MHz], [1 610-1 645.5 MHz], [1 646.5-1 660.5 MHz] and [2 483.5-2 500 MHz] among non-geostationary and geostationary satellites operating in the mobile-satellite service, in accordance with Resolution* ***249 (WRC-19)****;*

Resolution **249 (WRC-19)** – *Study of technical and operational matters, and regulatory provisions, for space-to-space transmissions in the Earth-to-space direction in the frequency bands [1 610-1 645.5 and 1 646.5-1 660.5 MHz] and space-to-Earth direction in the frequency bands [1 525-1 544 MHz], [1 545-1 559 MHz], [1 613.8-1 626.5 MHz] and [2 483.5-2 500 MHz] among non-geostationary and geostationary satellites operating in the mobile-satellite service* [[1]](#footnote-1)\*

(**SG 4** / **WP 3M, WP 4C, WP 5A, WP 5C, WP 7D**)

# A1/2.9 WRC-27 preliminary agenda item 2.9

*2.9 to consider possible additional spectrum allocations to the mobile service in the frequency band 1 300-1 350 MHz to facilitate the future development of mobile-service applications, in accordance with Resolution* ***250 (WRC-19)****;*

Resolution **250 (WRC-19)** – *Studies on possible allocations to the land mobile service (excluding IMT) in the frequency band 1 300-1 350 MHz for use by administrations for the future development of terrestrial mobile-service applications*

(**SG 5** / **WP 3K, WP 3M, WP 4C, WP 5A, WP 5B**)

# A1/2.10 WRC-27 preliminary agenda item 2.10

*2.10 to consider improving the utilization of the VHF maritime frequencies in Appendix* ***18****, in accordance with Resolution* ***363 (WRC-19)****;*

Resolution **363 (WRC-19)** – *Considerations to improve the utilization of the VHF maritime frequencies in Appendix* ***18***

(**SG 5** / **WP 5A, WP 5B, WP 5C**)

# A1/2.11 WRC-27 preliminary agenda item 2.11

*2.11 to consider a new EESS (Earth-to-space) allocation in the frequency band 22.55-23.15 GHz, in accordance with Resolution* ***664 (WRC-19)****;*

Resolution **664 (WRC-19)** – *Use of the frequency band 22.55-23.15 GHz by the Earth exploration-satellite service (Earth-to-space)*

(**WP 7B** / **WP 3M, WP 4C**)

# 1/2.12 WRC-27 preliminary agenda item 2.12

*2.12 to consider the use of existing IMT identifications in the frequency range 694-960 MHz by consideration of the possible removal of the limitation regarding aeronautical mobile in the IMT for the use of IMT user equipment by non-safety applications, where appropriate, in accordance with Resolution* ***251 (WRC-19)****;*

Resolution **251 (WRC-19)** – *Removal of the limitation regarding aeronautical mobile in the frequency range 694-960 MHz for user equipment non-safety International Mobile Telecommunications applications*

(**SG 5** / **WP 3K, WP 3M, WP 4A, WP 4C, WP 5A, WP 5B, WP 5C, WP 5D, WP 6A**)

# A1/2.13 WRC-27 preliminary agenda item 2.13

*2.13 to consider a possible worldwide allocation to the mobile-satellite service for the future development of narrowband mobile-satellite systems in frequency bands between the range [1.5-5 GHz], in accordance with Resolution* ***248 (WRC-19)****,*

Resolution **248 (WRC-19)** – *Studies relating to spectrum needs and potential new allocations to the mobile-satellite service in the frequency bands 1 695-1 710 MHz, 2 010-2 025 MHz, 3 300-3 315 MHz and 3 385-3 400 MHz for future development of narrowband mobile-satellite systems*

(**SG 4** / **WP 3M**)

1. \* The appearance of square brackets around certain frequency bands in this Resolution is understood to mean that WRC-23 will consider and review the inclusion of these frequency bands with square brackets and decide, as appropriate. [↑](#footnote-ref-1)