



28-29 Aug 2023 ICAO WRC-23 Positions 1

Summary of Agenda Items



- 1.1: Aeronautical and maritime mobile services protection in or above International waters
- 1.2: International Mobile Telecommunications allocations
- 1.3: Mobile service allocation (Region 1)
- 1.4: High-altitude platform stations as IMT base stations (HIBS)
- 1.11: Global Maritime Distress and Safety System (GMDSS)
- 1.13: Space research service allocation upgrade
- 1.15: Harmonize the frequency band 12.75-13.25 GHz
- 1.16: Non-geo fixed-satellite service earth stations in motion
- 1.17: Inter-satellite links
- 9.1(b):Review of amateur service and amateur-satellite service
- 4: Review the Resolutions and Recommendations
- 8: Deletion of country footnotes

Supplemental slides

Supporting Info



- ICAO WRC-23 position document
 - Updated 19 July 2023
 - ICAO Position
- ITU-R list of WRC-23 Agenda Items
 - Identifies lead ITU-R study group for each item
 - Links to latest work (requires ITU TIES account)
 - ITU-R Preparatory Studies for WRC-23
- Final CPM text available
 - Final CPM Report for WRC-23
- ITU-R Resolutions
 - ITU-R Radio Regulations Volume III



"to consider, based on the results of the ITU-R studies, possible measures to address, in the frequency band 4 800-4 990 MHz, protection of stations of the aeronautical and maritime mobile services located in international airspace and waters from other stations located within national territories, and to review the pfd criteria in No. 5.441B in accordance with Resolution 223 (Rev.WRC 19)."



- Methods A and B No change to RR
 - A retains resolves 5 of Resolution 223
 - B removes resolves 5 of Resolution 223
- Methods C and D Modify Protection Criteria
 - Many alternatives / different values and distances
 - C retains resolves 5 of Resolution
 - D removes resolves 5 of Resolution
- Method E Extend list of exempted countries
- Method F Application of 9.21 and bi/multi lateral agreements

Agenda Item 1.1 – ICAO Position



"To support any measures based on the results of studies taken to ensure the protection of flight testing in international airspace, especially those stations operated in accordance with RR No. **5.440A**.

To oppose any proposed measure that is not in line with the results of studies and reduces the level of protection of flight test operations in international airspace and above international waters, especially those operated in accordance with RR No. **5.440A**.

To ensure that the proposed methods to satisfy this agenda item do not have a negative impact on the use of aviation systems in other frequency bands."



"to consider identification of the frequency bands 3 300-3 400 MHz, 3 600 3 800 MHz, 6 425-7 025 MHz, 7 025-7 125 MHz and 10.0-10.5 GHz for International Mobile Telecommunications (IMT), including possible additional allocations to the mobile service on a primary basis, in accordance with Resolution 245 (WRC 19)"



- Band 1 (3 300-3 400 MHz in Region 1)
 - Method 1A No change to RR
 - Method 1B Ammend Footnote
 - Applies to interested countries south of 30° parallel north
 - Method 1C Ammend Footnote
 - Applies to any interested country in Region 1
 - Method 1D New Footnote
 - Primary allocation to mobile service except aeronautical mobile
 - Method 1E Ammend Article 5
 - Primary allocation to mobile service except aeronautical mobile
 - Method 1F Ammend Article 5
 - Primary allocation to mobile service



- Band 2 (3 300-3 400 MHz in Region 2)
 - Method 2A No change to RR
 - Method 2B Ammend Article 5 & Footnotes
 - Elevate Mobile from secondary to primary
 - Shall not cause harmful interference to, or claim protection from, systems in the radiolocation service
 - Method 2C Ammend Article 5 & Footnotes
 - Elevate Mobile from secondary to primary
 - Except aeronautical mobile
 - Shall not cause harmful interference to, or claim protection from, stations in the radiolocation service



- Band 3 (3 600-3 800 MHz in Region 2)
 - Method 3A No change to RR
 - Method 3B Ammend Footnote (for full range)
 - Allow all countries in region to use allocation
 - Remove all coordination requirments
 - Method 3C Ammend Footnote (for full range)
 - Allow all countries in region to use allocation
 - Applicable PFD limit
 - Method 3D Ammend Footnote (for full range)
 - Allow all countries in region to use allocation
 - Applicable PFD limit and additional conditions
 - Method 3E Ammend Footnote (for 3 600 3 700)
 - Add countries to footnote
 - Method 3F Ammend Footnote (for 3 600 3 700)
 - Allow all countries in region to use allocation



- Band 4 (6 425-7 025 MHz in Region 1)
 - Method 4A No change to RR
 - Method 4B Add Footnote
 - Allow all countries in region to use allocation without conditions
 - Method 4C Add Footnote
 - Allow all countries in region to use allocation with conditions
 - Conditions apply to entire band
 - Example conditions include suggested pointing limits, site coordination
 - Method 4D Add Footnote
 - Allow all countries in region to use allocation with conditions
 - Conditions apply to portion of band
 - Example conditions include suggested pointing limits, site coordination
 - Method 4E Add Footnote
 - Allow all countries in region to use allocation with conditions
 - Sets expexted use to beyond 2030



- Band 5 (7 025-7 125 MHz globally)
 - Method 5A No change to RR
 - Method 5B Add Footnote
 - Allow all countries in region to use allocation without conditions
 - Method 5C Add Footnote
 - Allow all countries in region to use allocation with conditions
 - Example conditions include suggested pointing limits, site coordination
 - Method 5D Add Footnote
 - Allow all countries in region to use allocation
 - Must protect SOS E2S operations in band 7 100 7 155
 - Method 5E Add Footnote
 - Allow all countries in region to use allocation with conditions
 - Sets expexted use to beyond 2030



- Band 6 (10.0-10.5 GHz in Region 2)
 - Method 6A No change to RR
 - Method 6B Ammend Article 5 and modify and Footnotes
 - Primary allocation to mobile
 - Adjust list of countries in footnote for fixed service use
 - Add footnote reflects focus on IMT and sets conditions
 - Method 6C Ammend Article 5 and modify and Footnotes
 - Primary allocation to mobile except aeronautical mobile
 - Adjust list of countries in footnote for fixed service use
 - Add footnote reflects focus on IMT and sets conditions
 - Add condition to protect radiolocation operations

Agenda Item 1.2 – ICAO Position



"To ensure that any IMT identification in the Region 2 in the frequency bands 3 600-3 800 MHz would include technical conditions to protect FSS in order to continue the use of these bands by the FSS for the provision of aeronautical services.

In case of any IMT identification in the frequency band 6 425-6 575 MHz in Region 1, regulatory provisions would be required for protecting FSS uplinks in order to continue the use of these bands by GSO FSS networks used for the provision of aeronautical services.

In case of any IMT identification in the frequency band 6 425-6 700 MHz in Region 1, to ensure that the flight test operations in accordance with Resolution **416** (WRC-07) would not be affected in Region 2."



"To consider primary allocation of the band 3 600 3 800 MHz to mobile service within Region 1 and take appropriate regulatory actions, in accordance with Resolution 246 (WRC 19)"



- Method A No change to RR
- Method B Amend Article 5
 - Mobile, except aeronautical mobile, secondary to primary
 - No conditions
- Method C Amend Article 5
 - Mobile, except aeronautical mobile, secondary to primary
 - Application of conditions (5 alternatives)
- Method D Amend Article 5
 - Like Method B but with specific identification for IMT
- Method E Amend Article 5
 - Like Method C but with specific identification for IMT

Agenda Item 1.3 – ICAO Position



"To ensure that any mobile allocation in Region 1 in the frequency bands 3 600-3 800 MHz would include technical conditions to protect FSS in order to continue the use of these bands by the FSS for the provision of aeronautical services, including GSO MSS feeder links for the purpose of supporting aeronautical services."



"to consider, in accordance with Resolution 247 (WRC 19), the use of high-altitude platform stations as IMT base stations (HIBS) in the mobile service in certain frequency bands below 2.7 GHz already identified for IMT, on a global or regional level"



- Issue D: HIBS in the frequency band 2 500-2 690
 MHz
 - Method D1 No change to RR
 - Method D2 Add footnote
 - HIBS use in all regions
 - Application of resolution with limits such as PFD limits
 - Method D3 Add footnote
 - Mobile, except aeronautical mobile, secondary to primary
 - Application of resolution with limits such as PFD limits
 - HIBS shall not claim protection from existing primary services
 - Method D4 Add multiple footnotes
 - Like method D2 with footnotes for each region

Agenda Item 1.4 – ICAO Position



"To ensure that any identification of frequency bands for high-altitude platform stations as IMT base stations (HIBs) should include provisions for the protection of aeronautical systems operating in the frequency bands 960-1 164 MHz and 2 700-2 900 MHz.

To oppose the use of HIBS within the frequency band 2 500-2 690 MHz or parts thereof if agreed studies have not demonstrated the protection of aeronautical systems."



"to consider possible regulatory actions to support the modernization of the Global Maritime Distress and Safety System (GMDSS) and the implementation of e-navigation, in accordance with Resolution 361 (Rev.WRC 19)"



- Issue A: global maritime distress and safety system modernization
 - Method A: Frequency bands of impact are:

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    495-505 kHz − 4 063-4 438 kHz − 6 200-6 525 kHz
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- 8 195-8 815 kHz − 12 230-13 200 kHz − 16 360-17 410 kHz
- 22 000-22 855 kHz
- Issue B: E-Navigation
 - Method B: No Change to RR
- Issue C: Introduction of additional satellite systems into the global maritime distress and safety system
 - Method C1: No Change to RR
 - Methods C2, C3, and C4: Amend footnotes
 - Comply with the protection of existing services

Agenda Item 1.11 – ICAO Position



"To ensure that any change to the regulatory provisions and spectrum allocations resulting from this agenda item do not adversely impact on the capability of search and rescue aircraft, including helicopters, to effectively communicate with vessels during disaster relief operations.

With respect to Resolution **361** (**Rev. WRC-19**), resolves 3, to ensure that any regulatory provisions in response to this agenda item do not adversely affect the compliance of aeronautical mobile-satellite (route) service systems in the frequency band 1 610–1 626.5 MHz with international Standards and Recommended Practices and procedures established in accordance with the Convention on International Civil Aviation."



"to consider a possible upgrade of the allocation of the frequency band 14.8-15.35 GHz to the space research service, in accordance with Resolution 661 (WRC 19)"



- Method A No change to RR
- Method B Amend Article 5
 - Upgrade SRS (space-to-space) from secondary to primary
- Method C Amend Article 5
 - Upgrade SRS except active and passive applications from secondary to primary
- Method D Amend Article 5
 - Upgrade SRS from secondary to primary
 - Additional provisions to protect in-band systems
- Method E Amend Article 5
 - Upgrade SRS from secondary to primary
 - Additional provisions to protect in-band and adjacent-band systems

Agenda Item 1.13 – ICAO Position



"To ensure that any radio regulatory action taken as a result of agreed studies does not adversely affect the provision of aeronautical services."



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



- Method A: No Change to RR
- Method B: Add footnote
 - ESIM subject to resolution [A115]
 - shall not cause unacceptable interference to nor claim protection from the aeronautical radionavigation service (ARNS)

Agenda Item 1.15 – ICAO Position



"To ensure that any radio regulatory action, taken as a result of this agenda item, does not adversely affect the provision of aeronautical safety-of-life services."



"to study and develop technical, operational and regulatory measures, as appropriate, to facilitate the use of the frequency bands 17.7-18.6 GHz, 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-geostationary fixed-satellite service earth stations in motion, while ensuring due protection of existing services in those frequency bands, in accordance with Resolution 173 (WRC 19)"



- Method A: No change to RR
- Method B: Add footnote
 - ESIM subject to resolution [A116]
 - "with respect to satellite networks or systems of other administrations non-GSO ESIMs characteristics shall remain within the envelope characteristics of typical earth stations associated with the non-GSO satellite system with which ESIMs communicate to prevent potential interference caused to or claimed from those non-GSO ESIMs"

Agenda Item 1.16 – ICAO Position



"To ensure that any radio regulatory action taken as a result of this agenda item:

- does not adversely affect the provision of UAS CNPC under Resolution 155 (Rev. WRC-19);
- makes a clear regulatory distinction between satellite networks or satellite network resources providing UAS CNPC and those providing non-safety ESIMs applications such that it does not set a precedent that could adversely affect the provision of aeronautical safety-of-life services."



"to determine and carry out, on the basis of ITU R studies in accordance with Resolution 773 (WRC 19), the appropriate regulatory actions for the provision of intersatellite links in specific frequency bands, or portions thereof, by adding an inter-satellite service allocation where appropriate"



- Method A No change to RR
- Methods B Allow satellite-to-satellite operation
 - Multiple alternatives and options within the method
 - Alternative allocation proposals considering
 - FSS using "within the cone" concept
 - ISS "Within the cone" concept
 - Two concept of operations
 - "within the cone"
 - "expanded-cone"
 - Proposed sharing mechanisms
 - Coordination
 - Hard-limit

Agenda Item 1.17 – ICAO Position



"To ensure that, given the overlap in frequency bands, any radio regulatory action taken as a result of this agenda item does not adversely affect the protection of the GSO stations in the frequency bands listed in Resolution 155 (Rev. WRC-19)."

Agenda Item 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."

Agenda Item 9.1(a) – CPM Updates



- View A Studies have not been completed and changes to the RR are outside the scope of WRC-23 agenda item 9.1
- View B Changes to the RR Articles 1 and 4 follow resolves 3 of Resolution 657 (Rev.WRC-19) and are thus covered by the Resolution.
 - Creates a new resolution to set the foundation for possible future studies on space weather sensors
- View C Address a notification issue and wait to a future WRC for Article 5 changes
- View D RR Articles 1 and 4 could be resolved by the elaboration of a WRC Resolution related for a new space weather agenda item with changes of the RR at WRC-23

Agenda Item 9.1(a) – ICAO Position



"To support continuation of ITU-R studies and support appropriate recognition in the Radio Regulations of space weather sensors, provided that space weather sensors do not impact current or planned aeronautical systems or applications."

Agenda Item 9.1(b)



"to consider and approve the Report of the Director of the Radiocommunication Bureau, in accordance with Article 7 of the ITU Convention;

on the activities of the ITU Radiocommunication Sector since WRC 19:

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) service operating in the same band in accordance with Resolution 774 (WRC 19)"

Agenda Item 9.1(b) – CPM Updates



- Studies indicate there is harmful interference
 - Impact generally depends on the bandwidth and power of the interfering signal
- ITU-R is developing a Recommendation providing guidelines.
 - Recommendation could include:
 - Encouragement of the use of specific sub-bands

Agenda Item 9.1(b) – ICAO Position



"To ensure that any mitigation measures taken under this agenda item will not impact the protection of aeronautical radar systems operating under the existing aeronautical radionavigation or radiolocation service allocations."

Agenda Items 4 + 8



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"

Agenda Item 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)"

Agenda Item 4 – ICAO Position



Resolution No.	Title	Action recommended
18 (Rev. WRC-15)	Relating to the procedure for identifying and announcing the position of ships and aircraft of States not parties to an armed conflict.	No change
20 (Rev. WRC-03)	Technical cooperation with developing countries in the field of aeronautical telecommunications.	No change
26 (Rev. WRC-19)	Footnotes to the Table of Frequency Allocations in Article 5 of the Radio Regulations.	No change
27 (Rev. WRC-19)	Use of incorporation by reference in the Radio Regulations.	No change
63 (Rev. WRC-12)	Protection of radiocommunication services against interference caused by radiation from industrial, scientific and medical (ISM) equipment.	No change
76 (Rev. WRC-15)	Protection of geostationary fixed-satellite service and geostationary broadcasting-satellite service networks from the maximum aggregate equivalent power flux-density produced by multiple non- geostationary fixed-satellite service systems in frequency bands where equivalent power flux- density limits have been adopted.	No change
95 (Rev. WRC19)	General review of the resolutions and recommendations of world administrative radio conferences and world radiocommunication conferences.	No change
114 (Rev. WRC-15)	Studies on compatibility between new systems of the aeronautical radionavigation service and the fixed-satellite service (Earth-to-space) (limited to feeder links of the non-geostationary mobile- satellite systems in the mobile-satellite service) in the frequency band 5 091-5 150 MHz.	No change



Resolution No.	Title	Action recommended
140 (Rev. WRC-15)	Measures and studies associated with the equivalent power flux-density (epfd) limits in the band 19.7-20.2 GHz.	No change
154 (WRC-15)	Consideration of technical and regulatory actions in order to support existing and future operation of fixed-satellite service earth stations within the band 3 400-4 200 MHz, as an aid to the safe operation of aircraft and reliable distribution of meteorological information in some countries in Region 1.	No change
155 (Rev. WRC-19)	Regulatory provisions related to earth stations on board unmanned aircraft which operate with geostationary-satellite networks in the fixed- satellite service in certain frequency bands not subject to a plan of Appendices 30, 30A and 30B for the control and non-payload communications of unmanned aircraft systems in non-segregated airspaces.	Subject to WRC-23 Agenda Item 1.8.
156 (WRC-15)	Use of the frequency bands 19.7-20.2 GHz and 29.5-30.0 GHz by earth stations in motion communicating with geostationary space stations in the fixed-satellite service	Modify if necessary to ensure clear delineation between ESIMs and unmanned aircraft control and non payload communication covered in Resolution 155 (Rev. WRC-19).
160 (WRC-15)	Facilitating access to broadband applications delivered by high-altitude platform stations.	Suppress based on the results of studies carried out under WRC-19 Agenda Item 1.14.
165 (WRC-19)	Use of the frequency band 21.4-22 GHz by high-altitude platform stations in the fixed service in Region 2	No change



Resolution No.	Title	Action recommended
166 (WRC-19)	Use of the frequency band 24.25-27.5 GHz by high-altitude platform stations in the fixed service in Region 2	No change
167 (WRC-19)	Use of the frequency band 31-31.3 GHz by high-altitude platform stations in the fixed service	No change
168 (WRC-19)	Use of the frequency band 38-39.5 GHz by high-altitude platform stations in the fixed service	No change
171 (WRC-19)	Review and possible revision of Resolution 155 (Rev.WRC-19) and No. 5.484B in the frequency bands to which they apply	Subject to WRC-23 Agenda Item 1.8.
172 (WRC-19)	Operation of earth stations on aircraft and vessels communicating with geostationary space stations in the fixed-satellite service in the frequency band 12.75-13.25 GHz (Earthto-space)	Subject to WRC-23 Agenda Item 1.15.
173 (WRC-19)	Use of the frequency bands 17.7-18.6 GHz, 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 earth stations in motion communicating with non-geostationary space stations in the fixed-satellite service	Subject to WRC-23 Agenda Item1.16.



Resolution No.	Title	Action recommended
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	Modify or suppress as necessary based on the results of studies carried out (preliminary WRC-27 Agenda Item 2.2).
205 (Rev. WRC-19)	Protection of the systems operating in the mobile satellite service in the band 406-406.1 MHz.	No change
207 (Rev. WRC-15)	Measures to address unauthorized use of and interference to frequencies in the bands allocated to the maritime mobile service and to the aeronautical mobile (R) service.	No change
217 (WRC-97)	Implementation of wind profiler radars.	No change
222 (Rev. WRC-12)	Use of the frequency bands 1 525-1 559 MHz and 1 626.5-1 660.5 MHz by the mobile-satellite service, and procedures to ensure long-term spectrum access for the aeronautical mobile-satellite (R) service.	No change
223 (Rev WRC-19)	Additional frequency bands identified for International Mobile Telecommunications	Modify or suppress <i>invites the ITU Radiocommunications</i> Sector 1 to Resolution 223 , as appropriate, based on the results of the studies called for by that provision.
225 (Rev. WRC-12)	Use of additional frequency bands for the satellite component of IMT.	No change
229 (Rev. WRC-19)	Use of the frequency bands 5 150-5 250 MHz, 5 250-5 350 MHz and 5 470-5 725 MHz by the mobile service for the implementation of wireless access systems including radio local area networks	No change



Resolution No.	Title	Action recommended
240 (WRC-19)	Spectrum harmonization for railway radiocommunication	Monitor studies and ensure
	systems between train and trackside within the existing	protection of aeronautical
	mobile- service allocations.	systems.
245 (WRC-19)	Studies on frequency-related matters for the terrestrial component	Subject to WRC-23 Agenda
	of International Mobile Telecommunications identification in the	Item 1.2.
	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	
246 (WRC-19)	Studies to consider possible allocation of the frequency band 3	Subject to WRC-23 Agenda
	600-3 800 MHz to the mobile, except aeronautical mobile,	Item 1.3.
	service on a primary basis within Region 1	
247 (WRC-19)	Facilitating mobile connectivity in certain frequency bands	Subject to WRC-23 Agenda
,	below 2.7 GHz using high- altitude platform stations as	Item 1.4.
	International Mobile Telecommunications base stations	
249 (WRC-19)	Study of technical and operational issues and regulatory	Modify or suppress as
	provisions for space-to-space transmissions in the Earth-to-	necessary based on the results
	space direction in the frequency bands [1 610-1 645.5 and	of studies carried out for
	1 646.5-1 660.5 MHz] and the space-to-Earth	WRC-27 (preliminary WRC-
	direction in the frequency bands [1 525-1 544	27 Agenda Item 2.8)
	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	
250 (WRC-19)	Studies on possible allocations to the land mobile service	Modify or suppress as
	(excluding International Mobile Telecommunications) in the	necessary based on the results
	frequency band 1 300-1 350 MHz for use by administrations	of studies carried out for
	for the future development of terrestrial mobile-service	WRC-27 (preliminary WRC-
	applications	27 Agenda Item 2.9)



Resolution No.	Title	Action recommended
251 (WRC-19)	Removal of the limitation regarding aeronautical mobile in the frequency range 694-960 MHz for the use of International Mobile Telecommunications user equipment by non-safety applications	Modify or suppress as necessary based on the results of studies carried out for WRC-27 (preliminary WRC- 27 Agenda Item 2.12)
339 (Rev. WRC-07)	Coordination of NAVTEX services.	No change
354 (WRC-07)	Distress and safety radiotelephony procedures for 2 182 kHz.	No change
356 (WRC-07)	ITU maritime service information registration.	No change
361 (Rev. WRC-19)	Consideration of regulatory provisions for modernization of the global maritime distress and safety system and related to the implementation of e-navigation.	Subject to WRC-23 Agenda Item 1.11.
405 (Geneva 1979)	Relating to the use of frequencies of the aeronautical mobile (R) service.	Subject to WRC-23 agenda item 1.9.
413 (Rev. WRC-12)	Use of the band 108-117.975 MHz by aeronautical service.	No change
417 (Rev. WRC-12)	Use of the frequency band 960-1 164 MHz by the aeronautical mobile (R) service.	No change
418 (<i>Rev. WRC-15</i>)	Use of the band 5 091-5 250 MHz by the aeronautical mobile service for telemetry applications.	No change
422 (WRC-12)	Development of methodology to calculate aeronautical mobile-satellite (R) service spectrum requirements within the frequency bands 1 545-1 555 MHz (space-to-Earth) and 1 646.5-1 656.5 MHz (Earth-to-space).	Suppress as a result of the approval of Recommendation ITU-R M.2091.



Resolution No.	Title	Action recommended
424 (WRC-15)	Use of wireless avionics intra-communications in the frequency band 4 200-4 400 MHz.	No change
425 (Rev. WRC-19)	Use of the frequency band 1 087.7-1 092.3 MHz by the aeronautical mobile-satellite (R) service (Earth- to-space) to facilitate global flight tracking for civil aviation.	No change
428 (WRC-19)	Studies on a possible new allocation to the aeronautical mobile-satellite (R) service within the frequency band 117.975-137 MHz in order to support aeronautical VHF communications in the Earth-to-space and space-to-Earth directions	Subject to WRC-23 Agenda Item 1.7.
429 (WRC-19)	Consideration of regulatory provisions for updating Appendix 27 of the Radio Regulations in support of aeronautical HF modernization	Subject to WRC-23 Agenda Item 1.9.
430 (WRC-19)	Studies on frequency-related matters, including possible additional allocations, for the possible introduction of new non-safety aeronautical mobile applications	Subject to WRC-23 Agenda Item 1.10.
608 (Rev. WRC-19)	Use of the frequency band 1 215-1 300 MHz by systems of the radionavigation satellite service.	No change
609 (Rev. WRC-07)	Protection of aeronautical radionavigation systems from the equivalent power flux-density produced by radionavigation satellite service networks and systems in the 1 164-1 215 MHz band.	No change
610 (Rev. WRC-19)	Coordination and bilateral resolution of technical compatibility issues for radionavigation satellite networks and systems in the band 1 164-1 300 MHz, 1 559-1 610 MHz and 5 010-5 030 MHz.	No change



Resolution No.	Title	Action recommended
612 (Rev. WRC-12)	Use of the radiolocation service between 3 and 50 MHz to support oceanographic radar operations.	No change
660 (WRC-19)	Use of the frequency band 137-138 MHz by non- geostationary satellites with short-duration missions in the space operation service.	No change
661 (WRC-19)	Examination of a possible upgrade to primary status of the secondary allocation to the space research service in the frequency band 14.8-15.35 GHz	Subject to WRC-23 Agenda Item 1.13.
705 (Rev. WRC-15)	Mutual protection of radio services operating in the band 70-130 kHz.	No change
729 (Rev. WRC-07)	Use of frequency adaptive systems in the MF and HF bands.	No change
748 (<i>Rev. WRC-19</i>)	Compatibility between the aeronautical mobile (R) service and the fixed satellite service (Earth-to-space) in the band 5 091-5 150 MHz.	No change
762 (WRC-15)	Application of power flux density criteria to assess the potential for harmful interference under 11.32A for fixed-satellite and broadcasting-satellite service networks in the 6 GHz and 10/11/12/14 GHz bands not subject to a plan.	No change
772 (WRC-19)	Consideration of regulatory provisions to facilitate the introduction of sub-orbital vehicles.	Subject to WRC-23 agenda item 1.6.
773 (WRC-19)	Study of technical and operational issues and regulatory provisions for satellite-to-satellite links in the frequency bands 11.7-12.7 GHz, 18.1-18.6 GHz, 18.8 20.2 GHz and 27.5-30 GHz	Subject to WRC-23 agenda item 1.17.



Resolution No.	Title	Action recommended
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).	Subject to WRC-23 Agenda Item 9.1 topic b.
7 (Rev. WRC-97)	Adoption of standard forms for ship station and ship earth station licences and aircraft station and aircraft earth station licences.	No change
9	Relating to the measures to be taken to prevent the operation of broadcasting stations on board ships or aircraft outside national territories.	No change
71	Relating to the standardization of the technical and operational characteristics of radio equipment.	No change
75 (<i>Rev. WRC-15</i>)	Study on the boundary between the out-of-band and spurious domains of primary radars using magnetrons.	No change
401	Relating to the efficient use of aeronautical mobile (R) worldwide frequencies.	No change
608 (Rev. WRC-07)	Guidelines for consultation meetings established in Resolution 609 (WRC-07).	No change

Agenda Item 4 – CPM Updates



 Director of the Radiocommunication Bureau is preparing a Report to the second session of CPM-23

Agenda Item 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)"

Agenda Item 8 – ICAO Position



"To encourage administrations listed in the footnotes to review Nos. **5.181**, **5.197** and **5.259**, as access to the frequency bands 74.8-75.2, 108-112 and 328.6-335.4 MHz by the mobile service is difficult and could create the potential for harmful interference to important radionavigation systems used by aircraft at final approach and landing as well as systems operating in the aeronautical mobile service in the frequency band 108-112 MHz.

To encourage administrations listed in the footnotes to review Nos. **5.201** and **5.202**, as use by the AM(OR)S of the frequency bands 132-136 MHz and 136-137 MHz in some States may cause harmful interference to current and future aeronautical safety communications.

To encourage administrations listed in the footnote to review No. **5.330** as access to the frequency band 1 215-1 300 MHz by the fixed and mobile services could potentially cause harmful interference to services used to support aircraft operations.

To encourage administrations listed the footnote to review No. **5.352A** as access to the frequency bands 1 525-1 530 MHz by the fixed services could potentially constrain aeronautical use of this frequency band.

To encourage administrations listed in the footnote to review No. **5.355** as access to the frequency bands 1 540-1 559, 1 610.6-1 613.8 and 1 613.8-1 626.5 MHz by the fixed services could potentially constrain aeronautical use of these frequency bands.

To encourage administrations listed in the footnote to review No. **5.359** as access to the frequency bands 1 550-1 559 MHz, 1 610-1 645.5 MHz and 1 646.5-1 660 MHz by the fixed services could potentially jeopardize aeronautical use of those frequency bands.

To encourage administrations listed in the footnote to review No. **5.439** to ensure the protection of the safety critical operation of radio altimeters and WAIC systems in the frequency band 4 200-4 400 MHz.

ICAO would encourage administrations to take appropriate actions under this agenda item to remove their country's name from these footnotes if no longer required."

Agenda Item 8 – CPM Updates



Not in scope of CPM