



International Civil Aviation Organization

A large commercial airplane is shown from a low angle, flying over a vast expanse of white, fluffy clouds. The sky is a mix of soft pinks, oranges, and blues, suggesting a sunset or sunrise. The airplane is white with two engines mounted under the wings.

# WRC-23 – Agenda Items for Other Issues

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# 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
- 10 : Future agenda items
- \*4 : Review the Resolutions and Recommendations
- \*8 : Deletion of country footnotes

\* Supplemental slides



- ICAO WRC-23 position document
  - Approved 14 June 2021
    - [ICAO Position](#)
    - [ICAO Draft Position Flimsy](#)
- 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](#)
- Draft CPM text available
  - [DRAFT CPM REPORT](#)

# Agenda Item 1.1

*“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).”*

# Agenda Item 1.1 – CPM Updates

- Methods A and B – No change to RR
  - A retains resolves 5 of Resolution (exempted countries)
  - B removes resolves 5 of Resolution
- Methods C and D – Modify Protection Criteria
  - Many alternatives / different values and distances
  - C retains resolves 5 of Resolution (exempted countries)
  - D removes resolves 5 of Resolution
- Method E – Extend list of exempted countries
- Method F – Application of 9.21 only
- Method G – 9.21 and bi/multi lateral agreements
- Method H – 9.21 limited to national territory

# Agenda Item 1.1 - ICAO Position



*“To support any measures taken to enhance the protection of flight testing in international airspace that are consistent with the results of agreed studies.*

*To oppose any proposed measure that is not in line with the results of agreed studies and reduces the level of protection afforded to flight test operations in international airspace and above international waters.*

*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.”*

# Agenda Item 1.2



*“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)”*

# Agenda Item 1.2 – CPM Updates

- Band 1 (3 300-3 400 MHz in Region 1)
  - Method 1A – No change to RR
  - Method 1B – Amend Footnote – Primary allocation (IMT)
    - Applies to interested countries south of 30° parallel north
  - Method 1C – Amend Footnote – Primary allocation (IMT)
    - Applies to any interested country in Region 1
  - Method 1D – New Footnote – Primary allocation (IMT)
    - Applies to any interested country in Region 1
  - Method 1E – Amend Article 5 – Primary allocation (IMT)
    - Except Aeronautical mobile

# Agenda Item 1.2 – CPM Updates

- 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

# Agenda Item 1.2 – CPM Updates

- Band 3 (3 600-3 800 MHz in Region 2)
  - Method 3A – No change to RR
  - Method 3B – Amend Footnote (for full range)
    - Allow all countries in region to use allocation
    - Remove all coordination requirements
  - Method 3C – Amend Footnote (for full range)
    - Allow all countries in region to use allocation
    - Remove 9.21 coordination requirements
  - Method 3D – Amend Footnote (for full range)
    - Allow all countries in region to use allocation
    - Possibly change PFD threshold and lower % of time requirement
  - Method 3E – Amend Footnote (for 3 600 – 3 700)
    - Add countries to footnote
  - Method 3F – Amend Footnote (for 3 600 – 3 700)
    - Allow all countries in region to use allocation

# Agenda Item 1.2 – CPM Updates

- 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 expected use to beyond 2030

# Agenda Item 1.2 – CPM Updates

- 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 expected use to beyond 2030

# Agenda Item 1.2 – CPM Updates

- **Band 6 (10.0-10.5 GHz in Region 2)**
  - Method 6A – No change to RR
  - Method 6B – Amend 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 – Amend 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 oppose any proposal in the frequency band 6 425-7 025 MHz in Region 1 that would reduce the level of protection below an acceptable level and hence compromise flight test operations.*

*To oppose any proposal in the frequency bands 3 600-3 800 MHz and 6 425-7 025 MHz that could lead to harmful interference or could constrain the use of these bands by the FSS for the provision of aeronautical services or GSO MSS feeder links.”*

# Agenda Item 1.3



*“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)”*

# Agenda Item 1.3 – CPM Updates

- 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
  - Mobile, except aeronautical mobile, secondary to primary
  - No conditions
  - Identification of IMT

# Agenda Item 1.3 - ICAO Position



*“To oppose any changes to existing regulatory provisions of the ITU Radio Regulations for the frequency bands 3 600-3 800 MHz that adversely affect the aeronautical use of systems operating in the FSS in Region 1. ”*

# Agenda Item 1.4



*“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”*

# Agenda Item 1.4 – CPM Updates

- 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
    - Similar to method D2 with footnotes for each region

# Agenda Item 1.4 - ICAO Position

*“To ensure that high-altitude platform stations as IMT-base stations (HIBs) sharing and compatibility studies performed under Resolution **247 (WRC-19)** address the protection of aeronautical systems operating in the frequency bands 960-1 164 MHz and 2 700-2 900 MHz.*

*In particular, to oppose the use of HIBS within the frequency band 2 500-2 690 MHz or parts thereof where agreed studies have not demonstrated that the signal levels from the HIBS will be below the predicted levels from the ground based IMT studies.”*

# Agenda Item 1.11



*“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)”*

# Agenda Item 1.11 – CPM Updates

- Issue A: global maritime distress and safety system modernization
  - Method A: Suggested changes do not seem to apply to aviation bands. Bands of impact are:
    - 495-505 kHz      – 4 063-4 438 kHz      – 6 200-6 525 kHz
    - 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 and C3: 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.*

*To ensure that any regulatory provisions in response to this agenda item do not adversely affect compliance of aeronautical mobile-satellite (route) service systems with international standards and recommended practices and procedures established in accordance with the Convention on International Civil Aviation. ”*

# Agenda Item 1.13



*“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)”*

# Agenda Item 1.13 – CPM Updates

- Method A – No change to RR
- Method B – Amend Article 5 (SRS Secondary to Primary)
  - Method B1: Add footnote with reference to new resolution
  - Method B2: Article 21 pfd limits & Appendix 7 coordination distances
- Method C – Amend Article 5 (SRS Secondary to Primary)
  - Add footnote: shall not claim protection from aircraft stations
  - Add footnote: pfd limits for earth stations
- Method D – Amend Article 5 (SRS Secondary to Primary)
  - Add footnote: shall not cause harmful interference to, nor claim protection from, existing and future stations
- Method E – Amend Article 5 (SRS Secondary to Primary)
  - No consideration of Mobile Allocation
- Method F – Amend Article 5 (SRS Secondary to Primary)
  - Add footnote: shall not claim protection from stations in the fixed and mobile service
  - Add footnote: pfd limit for earth stations

# Agenda Item 1.13 - ICAO Position

*“To support studies called for by Resolution 661 (WRC 19) ensuring that they take account of systems operating in the aeronautical mobile service.*

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

# Agenda Item 1.15



*“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)”*

# Agenda Item 1.15 – CPM Updates

- 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, neither adversely affects the provision of aeronautical safety-of-life services nor sets an unwanted precedent. ”*

# Agenda Item 1.16



*“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)”*

# Agenda Item 1.16 – CPM Updates

- 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:*

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

# Agenda Item 1.17



*“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 inter-satellite links in specific frequency bands, or portions thereof, by adding an inter-satellite service allocation where appropriate”*

# Agenda Item 1.17 – CPM Updates

- Method A – No change to RR
- Methods B – Allow satellite-to-satellite operation
  - B1: Via FSS using “within the cone” concept
  - B2: Via inter-satellite service “Within the cone” concept
  - B3: Via FSS using “expanded-cone” concept
  - B4: Via inter-satellite service “expanded-cone” concept
  - B5: Duplication of B1-B4 with exclusion of the frequency band 11.7-12.7 GHz

# 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 provision of UAS CNPC under Resolution **155 (Rev. WRC-19)**,”*

# 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 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)”*

# 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 ITU-R studies under Resolution 774 (WRC-19) address whether potential mitigation measures will impact the protection of aeronautical radar systems operating under the existing aeronautical radionavigation or radiolocation service allocations.”*

# 10 – Future agenda items



- Preliminary agenda items 2.1 – 2.13
  - Topics range from:
    - Imaging systems in 200+ GHz range
    - Addition of EIRP limits in Article 21 for 70+ GHz bands
    - Additional allocation to mobile service in 1 300 – 1 350 MHz
    - Removal of aeronautical mobile limit in 694 – 960 MHz
    - Worldwide allocation to the mobile-satellite service
      - Specific ranges of 1.5 – 5 GHz

# Supplemental Slides



\*Agenda Items 4 and 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 4 - ICAO Position



<i>Resolution No.</i>	<i>Title</i>	<i>Action recommended</i>
<b>18</b> (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
<b>20</b> (Rev. WRC-03)	Technical cooperation with developing countries in the field of aeronautical telecommunications.	No change
<b>26</b> (Rev. WRC-19)	Footnotes to the Table of Frequency Allocations in Article 5 of the Radio Regulations.	No change
<b>27</b> (Rev. WRC-19)	Use of incorporation by reference in the Radio Regulations.	No change
<b>63</b> (Rev. WRC-12)	Protection of radiocommunication services against interference caused by radiation from industrial, scientific and medical (ISM) equipment.	No change
<b>76</b> (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
<b>95</b> (Rev. WRC19)	General review of the resolutions and recommendations of world administrative radio conferences and world radiocommunication conferences.	No change
<b>114</b> (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

# Agenda Item 4 - ICAO Position (Cont.)



<i>Resolution No.</i>	<i>Title</i>	<i>Action recommended</i>
<b>140</b> (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
<b>154</b> (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
<b>155</b> (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.
<b>156</b> (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 <b>155 (Rev. WRC-19)</b> .
<b>160</b> (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.
<b>165</b> (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

# Agenda Item 4 - ICAO Position (Cont.)



<i>Resolution No.</i>	<i>Title</i>	<i>Action recommended</i>
<b>166</b> (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
<b>167</b> (WRC-19)	Use of the frequency band 31-31.3 GHz by high-altitude platform stations in the fixed service	No change
<b>168</b> (WRC-19)	Use of the frequency band 38-39.5 GHz by high-altitude platform stations in the fixed service	No change
<b>169</b> (WRC-19)	Use of the frequency bands 17.7-19.7 GHz and 27.5-29.5 GHz by earth stations in motion communicating with geostationary space stations in the fixed-satellite service	Modify if necessary to ensure that the provisions for ESIMs do not limit the use of unmanned aircraft control and non payload communication covered in Resolution <b>155 (Rev. WRC-19)</b> .
<b>171</b> (WRC-19)	Review and possible revision of Resolution <b>155 (Rev.WRC-19)</b> and No. <b>5.484B</b> in the frequency bands to which they apply	Subject to WRC-23 Agenda Item 1.8.
<b>172</b> (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 (Earth-to- space)	Subject to WRC-23 Agenda Item 1.15.
<b>173</b> (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 Item 1.16.

# Agenda Item 4 - ICAO Position (Cont.)



<i>Resolution No.</i>	<i>Title</i>	<i>Action recommended</i>
<b>176</b> (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).
<b>205</b> (Rev. WRC-19)	Protection of the systems operating in the mobile satellite service in the band 406-406.1 MHz.	No change
<b>207</b> (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
<b>217</b> (WRC-97)	Implementation of wind profiler radars.	No change
<b>222</b> (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
<b>223</b> (Rev WRC-19)	Additional frequency bands identified for International Mobile Telecommunications	Modify or suppress <i>invites the ITU Radiocommunications Sector 1</i> to Resolution <b>223</b> , as appropriate, based on the results of the studies called for by that provision.
<b>225</b> (Rev. WRC-12)	Use of additional frequency bands for the satellite component of IMT.	No change
<b>229</b> (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

# Agenda Item 4 - ICAO Position (Cont.)



<i>Resolution No.</i>	<i>Title</i>	<i>Action recommended</i>
<b>240</b> (WRC-19)	Spectrum harmonization for railway radiocommunication systems between train and trackside within the existing mobile- service allocations.	Monitor studies and ensure protection of aeronautical systems.
<b>245</b> (WRC-19)	Studies on frequency-related matters for the terrestrial component of International Mobile Telecommunications identification in the frequency bands 3 300-3 400 MHz, 3 600-3 800 MHz, 6 425-7 025 MHz, 7 025-7 125 MHz and 10.0-10.5 GHz	Subject to WRC-23 Agenda Item 1.2.
<b>246</b> (WRC-19)	Studies to consider possible allocation of the frequency band 3 600-3 800 MHz to the mobile, except aeronautical mobile, service on a primary basis within Region 1	Subject to WRC-23 Agenda Item 1.3.
<b>247</b> (WRC-19)	Facilitating mobile connectivity in certain frequency bands below 2.7 GHz using high- altitude platform stations as International Mobile Telecommunications base stations	Subject to WRC-23 Agenda Item 1.4.
<b>249</b> (WRC-19)	Study of technical and operational issues 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 the 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	Modify or suppress as necessary based on the results of studies carried out for WRC-27 (preliminary WRC-27 Agenda Item 2.8)
<b>250</b> (WRC-19)	Studies on possible allocations to the land mobile service (excluding International Mobile Telecommunications) in the frequency band 1 300-1 350 MHz for use by administrations for the future development of terrestrial mobile-service applications	Modify or suppress as necessary based on the results of studies carried out for WRC-27 (preliminary WRC-27 Agenda Item 2.9)

# Agenda Item 4 - ICAO Position (Cont.)



<i>Resolution No.</i>	<i>Title</i>	<i>Action recommended</i>
<b>251</b> (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)
<b>339</b> (Rev. WRC-07)	Coordination of NAVTEX services.	No change
<b>354</b> (WRC-07)	Distress and safety radiotelephony procedures for 2 182 kHz.	No change
<b>356</b> (WRC-07)	ITU maritime service information registration.	No change
<b>361</b> (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.
<b>405</b> (Geneva 1979)	Relating to the use of frequencies of the aeronautical mobile (R) service.	Subject to WRC-23 agenda item 1.9.
<b>413</b> (Rev. WRC-12)	Use of the band 108-117.975 MHz by aeronautical service.	No change
<b>417</b> (Rev. WRC-12)	Use of the frequency band 960-1 164 MHz by the aeronautical mobile (R) service.	No change
<b>418</b> (Rev. WRC-15)	Use of the band 5 091-5 250 MHz by the aeronautical mobile service for telemetry applications.	No change
<b>422</b> (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.

# Agenda Item 4 - ICAO Position (Cont.)



<i>Resolution No.</i>	<i>Title</i>	<i>Action recommended</i>
<b>424</b> (WRC-15)	Use of wireless avionics intra-communications in the frequency band 4 200-4 400 MHz.	No change
<b>425</b> (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
<b>428</b> (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.
<b>429</b> (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.
<b>430</b> (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.
<b>608</b> (Rev. WRC-19)	Use of the frequency band 1 215-1 300 MHz by systems of the radionavigation satellite service.	No change
<b>609</b> (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
<b>610</b> (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

# Agenda Item 4 - ICAO Position (Cont.)



<i>Resolution No.</i>	<i>Title</i>	<i>Action recommended</i>
<b>612</b> (Rev. WRC-12)	Use of the radiolocation service between 3 and 50 MHz to support oceanographic radar operations.	No change
<b>660</b> (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
<b>661</b> (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.
<b>705</b> (Rev. WRC-15)	Mutual protection of radio services operating in the band 70-130 kHz.	No change
<b>729</b> (Rev. WRC-07)	Use of frequency adaptive systems in the MF and HF bands.	No change
<b>748</b> (Rev. WRC-19)	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
<b>762</b> (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
<b>772</b> (WRC-19)	Consideration of regulatory provisions to facilitate the introduction of sub-orbital vehicles.	Subject to WRC-23 agenda item 1.6.
<b>773</b> (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.

# Agenda Item 4 - ICAO Position (Cont.)



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