



African Telecommunications Union (ATU)

**SUMMARY OF AFRICAN COMMON POSITIONS (AFCPS)
TO WRC-19 AND RA-19**



Summary of African Common Positions (AfCPs) to WRC-19 and RA-19

PART A: WRC-19 AGENDA ITEMS

Chapter 1: Land mobile and fixed services

Agenda Item	APM19-4 Outcomes
AI 1.11 Railway radio communication Systems between Train and Trackside (RSTT).	APM19-4 agreed to: Adopt <u>Method C</u> , as the African Common Proposal, which entails adding 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 to (2) adopt the proposed amendments to the said draft new resolution as per Annex 4a (Annex to Agenda item 1.11) ; and (3) to adopt suppression of Resolution 236 (WRC-15) as consequential measure.
AI 1.12 Intelligent Transport Systems (ITS).	APM19-4 agreed to: Adopt <u>Method C</u> , as the African Common Proposal, which entails a new WRC Resolution to encourage administrations to use globally and/or regionally harmonized frequency bands for ITS applications by referring to the most recent version of Recommendation ITU-R M.[ITS_FRQ]; and suppression of Resolution 237 (WRC-15) as consequential measure.

<p>AI 1.14 High-Altitude Platform Stations (HAPS).</p>	<p>APM19-4 agreed to: Adopt, as African common position, <u>the methods</u> as indicated in the table below:</p> <table border="1" data-bbox="345 275 1497 686"> <thead> <tr> <th>Band (GHz)</th> <th>Method</th> <th>Options (if applicable)</th> </tr> </thead> <tbody> <tr> <td>6.44-6.52</td> <td>1B1</td> <td><u>Option1</u>: World-Wide Co-primary downlink</td> </tr> <tr> <td>27.9-28.2</td> <td>6B1</td> <td><u>Option1</u>: World-Wide Co-primary downlink</td> </tr> <tr> <td>31-31.3</td> <td>7B1</td> <td><u>Option1</u> 1a - World-Wide Co-primary downlink 1b - World-Wide Co-primary uplink</td> </tr> <tr> <td>38-39.5</td> <td>8B2</td> <td><u>Option1</u>: 1c - World-Wide Co-primary uplink with no Resolution</td> </tr> <tr> <td>47.2-47.5 and 47.9-48.2</td> <td>9B1</td> <td><u>Example 2</u> Proposed modifications to Resolution 122 to facilitate use of HAPS in case of rain.</td> </tr> </tbody> </table> <p><i>[Editor's note: for details of the methods, please refer to the CPM Report to WRC-19]</i></p>	Band (GHz)	Method	Options (if applicable)	6.44-6.52	1B1	<u>Option1</u> : World-Wide Co-primary downlink	27.9-28.2	6B1	<u>Option1</u> : World-Wide Co-primary downlink	31-31.3	7B1	<u>Option1</u> 1a - World-Wide Co-primary downlink 1b - World-Wide Co-primary uplink	38-39.5	8B2	<u>Option1</u> : 1c - World-Wide Co-primary uplink with no Resolution	47.2-47.5 and 47.9-48.2	9B1	<u>Example 2</u> Proposed modifications to Resolution 122 to facilitate use of HAPS in case of rain.
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47.2-47.5 and 47.9-48.2	9B1	<u>Example 2</u> Proposed modifications to Resolution 122 to facilitate use of HAPS in case of rain.																	
<p>AI 1.15 Land-mobile and fixed service applications in 275-450 GHz.</p>	<p>APM19-4 agreed to:</p> <ol style="list-style-type: none"> Adopt Method C, as the African Common Proposal, which entails adding a new footnote to identify the 275-450 GHz frequency range for use by Fixed Service and Land Mobile Service (FS/LMS) applications, while protecting EESS (passive) and RAS using the evolving guidance of ITU-R Recommendations and Reports, taking into account that there are no service allocations above 275 GHz. 																		

Chapter 2: Broadband applications in the mobile service

Agenda Item	APM19-4 Decisions
<p>AI 1.13 Studies on IMT matters for the frequency range 24.25 and 86 GHz.</p>	<p>A) For the band 24.25-27.5 GHz (Band A):</p> <p>Consensus was reached for this band and the African Common Position (AFCP) is as follows:</p> <ol style="list-style-type: none"> Method A2, Alternative 2 which entails (allocation of the band 24.25 – 25.25 GHz to the MS (except aeronautical mobile) on a primary basis in Regions 1 and 2 and identification of the band 24.25 – 27.5 GHz for IMT in all three Regions). Condition A2a in respect of Conditions for the protection of EESS (passive) in the 23.6-24 GHz frequency band. Option 1: to introduce the following unwanted emission level limits in Table 1-1 of Res. 750: BS: -32 dBW/200 MHz UE: -28 dBW/200 MHz “No additional conditions” are necessary for the rest of services considered for this band in respect of other service. <p>B) For the band 31.8-33.4 GHz (Band B):</p>

Consensus was reached for this band and the African Common Position (AFCP) is as follows:
Method B1 (No Change)

C) For the band 37-40.5 GHz (Band C):

Consensus was reached for this band and the African Common Position (AFCP) is as follows:

1. **Method C2, Alternative 2**; which entails identification of the band 37 – 40.5 GHz for IMT in all three Regions.
2. **“No additional conditions are necessary”** in respect of other services in the band, based on the results of ITU-R sharing studies.

D) For the band 40.5-42.5 GHz (Band D):

Consensus was reached for this band and the African Common Position (AFCP) is as follows:

1. **Method D2, Alternative 2**, which entails **upgrading** the mobile allocation to a primary service in the Table of Frequency allocations and **identifying** the frequency band for IMT by a new footnote in the frequency band 40.5-42.5 GHz.
2. **“No additional conditions are necessary”** in respect of other services for this band, based on the results of ITU-R sharing studies.

E) For the band 42.5- 43.5 GHz (Band E):

Consensus was reached for this band and the African Common Position (AFCP) is as follows:

- 5 **Method E2, Alternative 2**, which entails identifying the 42.5-43.5 GHz to terrestrial component of IMT.
- 6 **“No additional conditions are necessary”** in respect of other services for this band, based on the results of ITU-R sharing studies.

F) For the band 45.5- 47.0 GHz (Band F):

Agreement could not be reached on a common approach for this band. Accordingly, APM19-4 decided **not to have an AFCP for the band:**

G) For the band 47- 47.2 GHz (Band G):

Consensus was reached for this band and the African Common Position (AFCP) is as follows:
Method G1 (No Change)

H) For the band 47.2- 50.2 GHz (Band H):

	<p>Consensus was reached for this band and the African Common Position (AFCP) is as follows:</p> <ol style="list-style-type: none">1. Method H2, Alternative 2 which entails identification of the 47.2-50.2 GHz frequency band for the terrestrial component of IMT.2. Condition H2a for the protection of EESS (passive) in the 50.2-50.4 GHz frequency band.3. In respect of unwanted emission levels - Option 2; to introduce the following limits on (Table 1-1 of Res.750) taking into account 5.340.1: -32 dB(W/200 MHz) -28 dB(W/200 MHz)4. “No additional conditions are necessary” in respect of other services for this band, based on the results of ITU-R sharing studies. <p>I) For the band 50.4- 52.6 GHz (Band I):</p> <p>Consensus was reached for this band and the African Common Position (AFCP) is as follows:</p> <ol style="list-style-type: none">1. Method I2, Alternative 2 (identify the 50.4-52.6 GHz frequency band for the terrestrial component of IMT)2. Condition I2 for the protection of EESS(p) in the band (50.2-50.4 GHz and 52.6-54.25 GHz).3. In respect of unwanted emission levels - Option 2; to introduce the following limits in Table 1-1 of Resolution 750, taking into account RR No. 5.340.1: -32 dB(W/200 MHz) -28 dB(W/200 MHz)4. “No additional conditions are necessary” in respect of other services for this band, based on the results of ITU-R sharing studies. <p>J) For the band 66 - 71 GHz (Band J):</p> <p>Consensus was reached for this band and the African Common Position (AFCP) is as follows:</p> <ol style="list-style-type: none">1. Method J2, Alternative 2 (identify the 66-71 GHz frequency band for the terrestrial component of IMT globally and remove the frequency band from RR No. 5.553.)2. Condition J2a in respect of Measures for coexistence with MGWS and other WAS.3. Option 1 which entails reflecting in the WRC Resolution corresponding to the IMT identification the shared use of the band including coexistence techniques between IMT and MGWS/WAS and invite ITU-R to develop necessary reports/recommendations in this regard. <p>K) For the band 71- 76 GHz (Band K):</p> <p>Consensus was reached and the African Common Position (AFCP) is as follows: Method K1 (No Change)</p> <p>L) For the band 81- 86 GHz (Band L):</p> <p>Consensus was reached and the African Common Position (AFCP) is as follows: Method L1 (No Change)</p>
AI 1.16	A) For the band 5150- 5250 MHz (Band A)

<p>Wireless access systems, including radio local area networks (WAS/RLAN), in frequency bands between 5 150 MHz and 5 925 MHz.</p>	<p>Agreement could not be reached on a common approach for this band. Accordingly, APM19-4 decided <u>not to have an AFCP for the band.</u></p> <p>B) For the band 5250- 5350 MHz (Band B):</p> <p>Consensus was reached for this band and the African Common Position (AFCP) is as follows: <u>Method B</u> which entails <u>No Change</u> to the Radio Regulations</p> <p>C) For the band 5350- 5470 MHz (Band C):</p> <p>Consensus was reached for this band and the African Common Position (AFCP) is as follows: <u>Method C</u> which entails <u>No Change</u> to the Radio Regulations</p> <p>D) For the band 5725- 5850 MHz (Band D):</p> <p>Agreement was reached for this band and the African Common Position (AFCP) is as follows: Method D1: which entails No Change to the Radio Regulations.</p> <p>E) For the band 5850- 5925 MHz (Band E):</p> <p>Consensus was reached for this band and the African Common Position (AFCP) is as follows: Adopt Method E1, which entails No Change to the Radio Regulations.</p>
<p>AI 9.1-1 Implementation of IMT in 1885 - 2025 MHz and 2110 - 2200 MHz.</p>	<p>Agreement could not be reached on a common approach for this Issue. Accordingly, APM19-4 decided <u>not to have an AFCP for a.i.9.1.1</u></p>
<p>AI 9.1-5 Impacts of referencing Recommendation s ITU-R M.1638-1 and ITU R M.1849-1 in Nos. 5.447F and 5.450A of the Radio Regulations.</p>	<p>The African Common Position (AFCP) is as follows: Submit a proposal for the merger of CPM19-2 Approach A and Approach B, as provided below:</p> <p>5.447F In the frequency band 5 250-5 350 MHz, stations in the mobile service shall not claim protection from the radiolocation service, the Earth exploration-satellite service (active) and the space research service (active). These services shall not impose on the mobile service more stringent protection criteria, based on system characteristics and interference criteria, than those stated in Recommendations ITU R M.1638-0 and ITU R RS.1632-0.(WRC-15) while The radiolocation service, the Earth exploration-satellite service (active) and the space research service (active) shall not impose more stringent technical and operational limits upon the mobile service other than those in No. 5.446A than those imposed stipulated in Resolution 229 (Rev.WRC-12). <u>Resolution 229 (Rev.WRC-12) applies</u></p> <p>5.450A In the frequency band 5 470-5 725 MHz, stations in the mobile service shall not claim protection from radiodetermination services. Radiodetermination services shall not impose on the mobile service more stringent protection criteria, based on system characteristics and interference criteria, than those stated in Recommendation ITU R M.1638-0.(WRC-15) while the radiodetermination services shall not impose more stringent technical and operational limits upon the mobile service other than those in No. 5.446A than those imposed stipulated in Resolution 229 (Rev.WRC-12) <u>Resolution 229 (Rev.WRC-12) applies.</u></p>
<p>AI 9.1-8</p>	<p>The African Common Position (AFCP) is as follow: <u>No Change</u></p>

Implementation of narrowband and broadband machine-type communication infrastructures from the spectrum perspective.	
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Chapter 3: Satellite services

Agenda Item	APM19-4 Outcomes
AI 1.4 Review of Annex 7 to Appendix 30.	APM19-4 concluded as follows: Adopt an African common position supporting Method B of the CPM report.
AI 1.5 Earth stations in motion 17.7 19.7 GHz and 27.5-29.5 GHz.	APM19-4 concluded as follows: <ol style="list-style-type: none"> 1. Adopt as an African common position based on Method B of the CPM report that proposes to add a new footnote No. 5.A15 in Article 5 of the Radio Regulations and a reference to a draft new WRC Resolution [AI1.5] (WRC-19) providing the conditions for the operation of ESIM and protection of the services to which the bands are allocated, and consequential suppression of Resolution 158 (WRC-15). 2. Agreed to prepare a contribution to WRC-19 on the draft new RESOLUTION [A15] (WRC-19) and its annexes. 3. Task the chapter coordinator to coordinate the preparation of the contribution to WRC-19
AI 1.6 Non-GSO FSS satellite systems in 37.5-39.5 GHz and 39.5-42.5 GHz.	APM19-4 concluded as follows: Adopt Method A for Issue A and Option A for Issue 2 as the African common position for the development of a regulatory framework for non-GSO FSS satellite system in the frequency bands under consideration
AI 7¹ Improvements to the satellite regulations in order to facilitate rational, efficient and economical use of radio frequencies and any associated orbits, including the geostationary-satellite orbit;	
Issue A	APM19-4 concluded as follows:

<p>Studies relating to the BIU of frequency assignments to non-GSO satellite systems, and consideration of a milestone-based deployment approach for non-GSO FSS satellite systems in certain bands.</p>	<p>Sub-issue 1: Bringing into use of frequency assignments:</p> <ul style="list-style-type: none"> • Adopt Option A an African common position for this sub-issue. <p>Sub-issue 2: milestone-based approach for alignment of non-GSO system deployment with MIFR entries in specific frequency bands and services</p> <ul style="list-style-type: none"> • Administrations support the principle of milestone based approach <p>Sub-issue 3: Transition measures</p> <ul style="list-style-type: none"> • Note that it is important to have an implementation date before WRC-23. • Adopt 1st January 2021 as a tentative date for implementation
<p>Issue B Application of coordination arc in the Ka-band, to determine coordination requirements between the FSS and other satellite services.</p>	<p>APM19-4 concluded as follows: Adopt as the African common position the only proposed single method which seek to use of the coordination arc with a value of 8 degrees as coordination criteria, to determine if coordination is required between FSS and MSS systems and between MSS systems in the Ka band in all 3 Regions.</p>
<p>Issue C Issues for which consensus was readily achieved in the ITU-R.</p>	<p>APM19-4 concluded as follows: Adopt as African common position the methods proposed for each matter under this issue (i.e. Issue C) considering that the matters are non-contentious and consensus has already been achieved at the ITU-R WP4A on all matters on how best to resolve them.</p>
<p>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.</p>	<p>APM19-4 concluded as follows: Adopt Method D1 which entails to including the list of potentially affected networks in CR/C and in addition to give a room for potentially affected Administrations to include additional Satellite networks which might have been omitted in CR/C and publish them in CR/D.</p>
<p>Issue E Resolution related to Appendix 30B.</p>	<p>APM19-4 concluded as follows:</p> <ol style="list-style-type: none"> 1. Adopt the only proposed single method establish special measures to facilitate entry into Appendix 30B List of new entrants through a draft new Resolution[A7(E)-AP30B] (WRC 19). 2. Agree to prepare a contribution to WRC-19 proposing an extension of the Draft New Resolution [A7(E)-AP30B] (WRC 19) to include sub regional systems submitted under Article 6 of Appendix 30B. 3. Task the Chapter coordinator to coordinate the preparation of the contribution

<p>Issue F Measures to facilitate entering new assignments into the RR Appendix 30B List.</p>	<p><i>APM19-4 concluded as follows:</i> Adopt Method F1 as African common position on this issue.</p>
<p>Issue G Updating the reference situation for networks under RR Appendices 30 and 30A when provisional recording is used.</p>	<p><i>APM19-4 concluded as follows:</i> Adopt Method G1 as African common position on this issue.</p>
<p>Issue H Modifications to RR Appendix 4 data items to be provided for non-geostationary satellite systems.</p>	<p><i>APM19-4:</i> Adopt the only method proposed in the CPM report which provides additional items to include in RR Appendix 4.</p>
<p>Issue I Modified regulatory procedure for non-GSO satellite systems with short-duration missions.</p>	<p><i>APM19-4 concluded as follows:</i> Adopt method I2 as the African common position which proposing a new WRC resolution that will facilitate regulatory regime for Short Duration Mission satellites</p>
<p>Issue J – pfd limit in Section 1, Annex 1 of RR Appendix 30.</p>	<p><i>APM19-4 concluded as follows:</i> Adopt method J2– No change to the Radio Regulations, as the African common position.</p>
<p>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.</p>	<p><i>APM19-4 concluded as follows:</i> Adopt the only method proposed which intends to make satellite coordination easier and to allow satellites networks opportunity of additional examination that have received unfavourable finding</p>
<p>AI 9.1-2 Compatibility of IMT and BSS (sound) in the</p>	<p><i>APM19-4 concluded as follows:</i></p>

frequency band 1 452-1 492 MHz in Regions 1 and 3.	Adopt support regulatory Action 3, Alternative 2 as the African common position.
AI 9.1-3 New non-Geo-satellite orbit systems in 4/6GHz bands allocated FSS.	APM19-4 concluded as follows: Adopt the No Change method on this agenda as the African common position.
AI 9.1-9 Spectrum needs and possible allocation of the frequency band 51.4-52.4 GHz to the FSS (E-to-s).	APM19-4 concluded as follows: Adopt , as African common position, FSS (E-to-s) allocation in these band 51.4-52.4 GHz with option 2.

Chapter 4: Science services

Agenda Item	APM19-4 Outcomes
AI 1.2 In-band power limits for earth stations in 401-403 MHz and 399.9-400.05 MHz.	<p>APM19-4 agreed to:</p> <p><u>For the Band 399.9 – 400.05 MHz</u></p> <p>Adopt <u>Method A – No Change to RR</u> as the African common position (ACP) given that four the sub-regional groups are aligned on this band, as recommended by the WG19-3.</p> <p><u>For the Band 401 – 403 MHz</u></p> <ol style="list-style-type: none"> <u>Adopt Method G to (include in the RR the relevant e.i.r.p. limits, develop WRC-19 Resolution) was proposed as ACP,</u> The Chairperson of the WG <u>Senegal</u> is thus requested to develop draft a WRC-19 Resolution and share with interested parties.
AI 1.3 Meteorological-satellite and Earth exploration-satellite services in 460-470 MHz.	<p>APM19-4 agreed to:</p> <ol style="list-style-type: none"> <u>A new method in line with Method C</u> and amendment of the draft new resolutions for WRC-19. The Vice Chairperson of the WG <u>South Africa</u> is thus requested to develop draft a WRC-19 Resolution and share with interested parties See attachment Annex 4b (Proposed Draft New Resolution for WRC-19 AI 1.3) <p style="text-align: center;"><u>Proposed modification to the draft new resolution for WRC-19</u></p>

	<ul style="list-style-type: none"> • Concerns were raised that higher pfd protection limits are required to take into account protection of Fixed and Mobile systems that are critical and require higher protection that are used across Africa (ie. PPDR, Railway, etc). • Systems deployed in rural Africa to provide rural connectivity or SCADA applications are coverage limited and any degradation to the noise level impacts the coverage and reliability of these systems as well as their ability to ensure critical communication. • An I/N of -10 for such systems is required (vs, I/N of -6) which would result in higher pfd limits. An additional protection to accommodate for scenarios of interference resulting from cumulative effect of multiple satellites (GSO & Non-GSO) interfering on stations in the fixed and mobile services have not been included in the studies done resulting in an additional potential interference. The adjusted pfd limits for both GSO and Non-GSO are adjusted in this proposal to ensure the above concerns are addressed. • Moreover, a deadline is proposed allowing satellite systems registered prior to WRC-19 but do not meet pfd limits to continue to operate on secondary basis to the fixed and mobile for another 5 years (1st Jan 2025) to enable sat systems in service a transitional period to meet the new pfd limits and operate on co-primary basis thereafter.
<p>AI 1.7 Telemetry, tracking and command in the space operation service for non-GSO satellites with short duration missions.</p>	<p>APM19-4 agreed to:</p> <ol style="list-style-type: none"> 1. Proposal for APM19-4 to <u>adopt Method C as ACP</u> subject to studies being conducted after WRC-19 to determine where sharing is feasibility and protection of existing services. <ul style="list-style-type: none"> • The <u>application of RR No. 9.21 is removed</u> in the frequency band 148-149.9 MHz in the Earth-to-space direction, and • That the impact of removing RR No. 9.21 be investigated and should <u>consider any requisite regulatory and technical provisions</u> in this regard after WRC-19, • The existing 137-138 MHz SOS (space-to-Earth) allocation could accommodate the spectrum needs of short-duration missions, however some administrations are of the view that consideration of this band <u>needs further regulatory and technical studies.</u> 2. The Chairperson of the WG <u>Senegal, assist by Nigeria and Egypt were</u> requested to develop draft a WRC-19 Resolution and share with interested parties. 3. The above points need to be incorporated in the new draft Resolution for WRC-19.

Chapter 5: Maritime, Aeronautical and Amateur services

Agenda Item	APM19-4 Outcomes
<p>AI 1.1 Amateur service in 50-54 MHz in Region 1.</p>	<p>APM19-4 agreed to:</p> <p>Adopt <u>Method A</u> as the African common position, which entails an allocation to the amateur service on a primary basis in all the band 50-54 MHz in Region 1, with appropriate footnotes to provide protection to services which already have an allocation in the band;</p> <p>Regarding the coexistence between the amateur service and Wind Profiler Radars (WPR) in the frequency band 50-54 MHz, the primary consideration as a protection measures for the Wind profiler radars (WPR) should be as follows:</p> <ol style="list-style-type: none"> a. both Amateur Service and Wind profiler radars must maintain their operational frequency ; b. distance separation sufficient to avoid mutual interference ; c. coordination zones must be established around WPR sites on affected geographical area where the spectrum used by these WPRs would be subject to appropriate limits ; d. global weak signal segment of the amateur service which are located in the 50 - 50.5 MHz frequency band should be avoided by Wind profiler radars (WPRs).
<p>AI 1.8 Global Maritime Distress Safety Systems (GMDSS).</p>	<p>APM19-4 agreed to:</p> <p><u>On Issue A: modernization of GMDSS</u></p> <p>Adopt <u>Method A2</u> as an African common position, which entails modifications to the provisions of RR to include regulatory provisions for the frequencies to be used for medium frequency (MF) and high frequency (HF) Navigational Data (NAVDAT) systems, in support of GMDSS modernization process currently undergoing in the IMO, to satisfy Issue A.</p> <p><u>On Issue B: introduction of additional GMDSS satellite system</u></p> <p>Adopt <u>Method B1</u> as an African common position, which entails not to change the current secondary allocation to the MSS (space-to-Earth) in the band 1 616-1 626.5 MHz but instead modification of existing provisions regarding the MSS allocation and safety services to identify their use in the GMDSS, in order</p>

	<p>to support the introduction of additional satellite operator in the GMDSS, as approved by International Maritime Organization (IMO), that will contribute to achieve, redundancy and global coverage in maritime safety services.</p> <p>Furthermore, it is proposed to supplement method B1, with additional text in the new footnote 5.GMDSS-B1 that would indicate that additional GMDSS provider does not cause undue constraints to existing operators as follows: <i>“such use shall not impose undue constraints with respect to systems operating in the MSS (earth-to-space) in the band 1626.5 - 1660.5 MHz for the provision of distress, urgency, and safety communications of the Global Maritime Distress and Safety System (GMDSS)”</i>.</p>
<p>AI 1.9-1 Autonomous maritime radio devices operating in the frequency band 156-162.05 MHz.</p>	<p><i>APM19-4 agreed to:</i></p> <p><u>Issue A - Autonomous maritime radio devices Group A</u></p> <p>1. <u>Adopt Method A as an African common position</u>, which proposes that <i>footnote f</i>) of RR Appendix 18 be amended to allow AMRD Group A to operate on frequency channels 156.525 MHz (channel 70), 161.975 MHz (AIS 1) and 162.025 MHz (AIS 2). Such use should be in accordance with the most recent version of Recommendation ITU-R M.1371 or Recommendation ITU-R M.493.</p> <p><u>Issue B - Autonomous maritime radio devices Group B</u></p> <p>1. Support the development of regulatory measures in order to accommodate the variety of AMRD Group B technologies taking into account the operation of AMRD using AIS-technology and AMRD using other technologies than AIS technology;</p> <p>2. Support that ARMD Group B² devices should not be permitted to use the frequencies which cause any constraints on the existing mobile services.</p> <p>3. Adopt <u>Method B3</u>, as an African common position, which entails that AMRD group B using AIS technology should be operated on the frequency 160.900 MHz (Ch. 2006). In addition, AMRD Group B using other technologies than AIS technology may be operated on the frequencies 161.525 MHz (Channel 2078), 161.550 MHz (Channel 2019) and 161.575MHz (Channel</p>

² AMRD that do not enhance the safety of navigation but do operate in the maritime environment.

	<p>2079). The e.i.r.p. of AMRD Group B shall be limited to 100 mW. Such use should be in accordance with the latest version of Recommendation ITU-R M.[AMRD] to be adopted after the WRC-19.</p>
<p>AI 1.9-2 Consideration of regulatory provisions and spectrum allocations to the maritime mobile-satellite service to enable the satellite component of the VHF Data Exchange System and enhanced maritime radiocommunication.</p>	<p>APM19-4 agreed to:</p> <ol style="list-style-type: none"> Support new spectrum allocations to the maritime mobile-satellite service (MMSS) (Earth-to-space and space to Earth), preferably within the frequency bands 156.0125 - 157.4375 MHz and 160.6125 162.0375 MHz of RR Appendix 18, to enable a new VDES satellite component, while ensuring that this component will not degrade the current terrestrial VDES components, ASM and AIS operations and not impose any additional constraints on existing services in these and adjacent frequency bands; Adopt <u>Method B</u>, as an African common position, which entails primary allocations to the MMSS (Earth-to-space) in the frequency bands 157.1875-157.3375 MHz and 161.7875-161.9375 MHz which correspond to channels 24, 84, 25, 85, 26 and 86 of RR Appendix 18. The channels 26 and 86 are identified for ship-to-satellite (VDE-SAT uplink) communications. The channels 24, 84, 25 and 85 are identified for VDE-TER, but ship-to-satellite (VDE-SAT uplink) communications may be possible without imposing constraints on ship-to-shore communications. The method also proposes a new primary allocation for the MMSS (space-to-Earth) in the frequency band 160.9625-161.4875 MHz, which is identified for satellite-to-ship (VDE-SAT downlink). <p>For the coordination of MMSS (space-to-Earth) assignments in the frequency band 160.9625-161.4875 MHz with respect to terrestrial services, the coordination threshold mask under RR No. 9.14 to be used is defined in Recommendation ITU-R M.2092-0 and in line with studies provided in Report ITU-R M.2435.</p>
<p>AI 1.10 Global Aeronautical Distress and Safety System (GADSS).</p>	<p>APM19-4 agreed to:</p> <ol style="list-style-type: none"> Support studies conducted by ITU-R & ICAO, considering information and requirements for both the terrestrial and satellite components including quantification and characterization of radio-communication requirements related to GADSS such as data traffic requirements for different systems, information on the radio equipment requirement, performance criteria for terrestrial and satellite systems, analysis of the existing allocations to the relevant aeronautical services, studies on sharing and compatibility with existing services;

	<p>2. Adopt <u>Method B</u>, as the African position, which entails no change to Article 5 of Radio Regulations but rather modification of RR Chapter VII - <i>distress and safety communication</i> – (Article 30, and Article 34A) to include GADSS as a distress and safety communication system, in accordance with ICAO’s requirements, while protecting incumbent services, in order to facilitate the implementation of the GADSS. In addition, the frequency bands used for GADSS, its systems, their technical characteristics and protection criteria shall be reflected in the relevant ITU-R Recommendations and also systems composing the GADSS shall only operate in primary allocations when used for safety purpose.</p>
<p>AI 9.1-4 Stations on board sub-orbital vehicles.</p>	<p>APM19-4 agreed to:</p> <ol style="list-style-type: none"> 1. Support the ongoing studies and encourage active participation in order to positively influence the outcomes of the studies; 2. <u>Adopt a No Change to the Radio Regulations at WRC-19, as the African common position</u>, and consider this matter as a possible agenda item for WRC-23.

Chapter 6: General Issues

Agenda Item	APM19-4 Outcomes
<p>AI 2 Updating of ITU-R Recommendations incorporated by reference in the Radio Regulations.</p>	<p>APM19-4 agreed to:</p> <ol style="list-style-type: none"> 1. Support the merger of the two Resolutions, if a single Resolution could be developed without losing the necessary elements in the current two Resolutions. 2. Encourage Administrations to examine the proposed modification of Resolution 27 during preparation for WRC-19.
<p>AI 4 Review of resolutions and recommendations of previous WRCs.</p>	<p>APM19-4 agreed to:</p> <ol style="list-style-type: none"> 1. Encourage Administrations to examine the proposed modification of Resolution 95 with a view of providing input at APM19-4/WRC-19. 2. Invite Administrations to consider Resolutions and Recommendations of previous WRCs with a view to provide views and proposals to WRC-19.
<p>AI 8 Deletion of country footnotes or country names from footnotes.</p>	<p>APM19-4 agreed to:</p> <ol style="list-style-type: none"> 1. Encourage administrations who wish to bring issues under AI 8 to use the ATU preparatory platforms (notably the WGs and APMs) to bring to the attention of other administrations of such issues with a

	<p>view to identifying and resolving any potential issues that may arise, at an early stage.</p> <p>2. Note the ICAO invitation that countries named regarding AI 8 in Annex 3H to kindly review their respective footnotes which ICAO said could have a negative impact on radio navigation services.</p>												
<p>AI 9.1-6 Wireless Power Transmission (WPT) for electric vehicles.</p>	<p>APM19-4 agreed to:</p> <p>1. Support No Change to RR as an African Common Position but continuation of studies in ITU-R to ensure that appropriate frequency ranges and technical limits are incorporated into standards to protect radiocommunication services.</p>												
<p>AI 9.1-7 1. Uplink transmissions of terminals of No. 18.1, and 2. Unauthorized operation of earth station terminals.</p>	<p>APM19-4 agreed to:</p> <p>1. Adopt as an African Common Position a new WRC Resolution to assist administrations with the application of RR No. 18.1 on the need for additional measures in order to limit uplink transmissions of terminals to those authorized terminals (<i>Issue 2a, Option 2</i>), as well as ITU-R studies on best practices in training to provide necessary guidelines on satellite monitoring capabilities, along with possible revision and/or further development of ITU-R Reports or Handbooks to assist administrations with managing unauthorized operation of earth stations deployed within their territory, as a tool to guide their national spectrum management (<i>Issue 2b</i>).</p> <p>2. Urge Administrations to participate in the continuation of activities at ITU-R WP1B/C to explore a possibility of additional measures in order to limit uplink transmissions of terminals to those authorized terminals as well as monitoring tool for developing countries as part of the studies.</p>												
<p>9.1 RR No. 5.441B</p>	<p>APM19-4 agreed to: Encourage ATU Administrations to consider the matter, if they deem appropriate, when preparing for WRC-19.</p>												
<p>AI 10 Proposed WRC-23 Agenda.</p>	<p>The following table summarises the African common proposals to be made under this agenda item:</p> <table border="1" data-bbox="493 1503 1435 1959"> <thead> <tr> <th data-bbox="493 1503 1000 1539">Issue</th> <th data-bbox="1000 1503 1227 1539">Bands concerned</th> <th data-bbox="1227 1503 1435 1539">Notes</th> </tr> </thead> <tbody> <tr> <td colspan="3" data-bbox="493 1539 1435 1570" style="background-color: #008000; color: white; text-align: center;">EARTH STATIONS IN MOTION</td> </tr> <tr> <td data-bbox="493 1570 1000 1864">to consider, based on the results of studies, technical, operational and regulatory measures, as appropriate, to facilitate the use of the bands 17.7-18.6 (space-to-Earth), 18.8-20.2 GHz (space-to-Earth), 27.5-30.0 GHz (Earth-to-space) by fixed satellite service non geostationary earth stations in motion (FSS NGSO ESIM), while ensuring due protection of existing services in those bands</td> <td data-bbox="1000 1570 1227 1864">17.7-18.6 GHz 18.8-20.2 GHz 27.5-30.0 GHz</td> <td data-bbox="1227 1570 1435 1864"></td> </tr> <tr> <td data-bbox="493 1864 1000 1959">Harmonization of the use of the frequency band 12.75 - 13.25 GHz (Earth-to-space) by earth stations on aircraft communicating</td> <td data-bbox="1000 1864 1227 1959">12.75-13.25 GHz</td> <td data-bbox="1227 1864 1435 1959">Consideration should be given on the fact that</td> </tr> </tbody> </table>	Issue	Bands concerned	Notes	EARTH STATIONS IN MOTION			to consider, based on the results of studies, technical, operational and regulatory measures, as appropriate, to facilitate the use of the bands 17.7-18.6 (space-to-Earth), 18.8-20.2 GHz (space-to-Earth), 27.5-30.0 GHz (Earth-to-space) by fixed satellite service non geostationary earth stations in motion (FSS NGSO ESIM), while ensuring due protection of existing services in those bands	17.7-18.6 GHz 18.8-20.2 GHz 27.5-30.0 GHz		Harmonization of the use of the frequency band 12.75 - 13.25 GHz (Earth-to-space) by earth stations on aircraft communicating	12.75-13.25 GHz	Consideration should be given on the fact that
Issue	Bands concerned	Notes											
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Harmonization of the use of the frequency band 12.75 - 13.25 GHz (Earth-to-space) by earth stations on aircraft communicating	12.75-13.25 GHz	Consideration should be given on the fact that											

	with geostationary space stations in the fixed-satellite service globally;		use of part of this band by FSS is subject to AP 30B
SATELLITE SERVICES			
	To consider an allocation of the frequency bands 1 518-1 559 MHz, 1 626.6-1 660.5 MHz and 1 668-1 675 MHz to the mobile-satellite service (space-to-space);	1518-1559 MHz 1626.6-1660.5 MHz 1668-1675 MHz	
	to consider, based on the result of studies, a possible technical, operational issues and regulatory provisions for non-geostationary fixed-satellite services satellite systems in the frequency bands 71-76 GHz (space-to-Earth) and 81-86 GHz (Earth-to-space), and proposed new allocation to FSS in the 71-76 GHz (Earth-to-space)	71-76 GHz 81-86 GHz	
	to identify the cases and conditions under which transmissions in the Earth-to-space direction in the 27.5 – 30 GHz and space-to-Earth in frequency bands 17.7-20.2 GHz from non-geostationary orbit space stations to geostationary-orbit or non-geostationary orbit space stations may be accommodated on a basis other than under No. 4.4 of the Radio Regulations, taking into account the necessary protection of existing services	27.5– 30 GHz (↑) 17.7-20.2 GHz (↓)	
	Review of the technical and regulatory conditions pertaining to the 18.6-18.8 GHz to address possible new Fixed-Satellite Service usage and the protection of EESS (passive), in accordance with Resolution [EESS FSS NGSO 18GHZ] (WRC-19)	18.6-18.8 GHz	
INTERNATIONAL MOBILE TELECOMMUNICATIONS (IMT)			
	Studies on frequency-related matters for International Mobile Telecommunications (IMT), identification including possible additional allocations to the mobile service on a primary basis [in portion(s) of the frequency range between 6 and 24 GHz] for the future development of International Mobile Telecommunications for 2020 and beyond	4800–4990 MHz	
		5925-6425 MHz	Consideration should be given on the fact that use of part of this band by FSS is subject to AP 30B
		6425-7125 MHz	
		7 125–8500 MHz	
		8.5–10.0 GHz	
		10.0-10.5 GHz	
		14.3/14,8–15.35 GHz	

		15.35–15.63 GHz	
		15.63-17.3 GHz	
	To consider, on the basis of ITU-R studies in accordance with Resolution [High Altitude IMT Base Stations - HIBS] (WRC-19), appropriate technical conditions and regulatory actions for High Altitude IMT Base Stations (HIBS) to use existing International Mobile Telecommunications (IMT) identifications in bands below 3 GHz	Below 3 GHz	EACO ECCAS SADC ECOWAS
AERONAUTICAL AND MARITIME SERVICES			
	to consider possible spectrum related matters and regulatory actions in relation to stations on board sub-orbital vehicles.		Included as per the outcome of AI 9.1.4 where it was agreed to consider the matter as a possible agenda item for WRC-23
<p><u>On the special case of the ECCAS proposal for an agenda item on 47 – 68 MHz for FM sound broadcasting:</u></p> <p>The ECCAS region input contribution contained a proposal to consider, based on the result of studies, of a possible allocation of the VHF frequency band I (47 – 68 MHz) for FM Radio Broadcasting. Considering the comments from the meeting and the advice from ITU-BR that the issue is best addressed via other means (e.g. a regional conference) and not the WRC, it was agreed as way forward that, the ATU Secretariat should liaise closely with ECCAS, SADC and the ITU BR on appropriate solutions and report to the ATU caucus during WRC-19, as appropriate.</p>			

PART B: RA-19

During the APM19-3, the Director General of International Telecommunications Satellite Organization (ITSO) presented a contribution “APM19-3 Input 07 - ITSO - Draft ATU Proposal for RA-19 on Resolution ITU-R 69” which contained the ITSO’s proposal that “Resolution ITU-R 69 be maintained through the next study cycle of ITU-R, with appropriate editorial amendments being made as a result of the outcomes of WTDC-17 and ITU-PP 18”.

APM19-3 agreed to:

1. support the proposal in principle subject to consideration of the actual text of the amendment proposals to the resolution;
2. request ITSO to provide to ATU administrations via the ATU Secretariat, an outline of the benefits of retaining the resolution, as well as, modalities for its implementation; and,
3. request ITSO to clarify its role and to consider being a party to the resolution.

Considering that through APM19-4 input document 2, ITSO provided the requested information, APM19-4 agreed to support the proposal, and tasked ATU Secretariat to closely work with ITSO on the actual text of the proposal and submit to RA-19.

PART C: STATISTICAL ANALYSIS OF AFRICAN PRELIMINARY POSITIONS

Category	Total elements ³	Elements <u>with</u> common positions	Elements <u>without</u> common positions
Chapter 1: Land mobile and fixed services	8	8	0
Chapter 2: Broadband applications in the mobile service	23	20	3
Chapter 3: Satellite services	19	19	0
Chapter 4: Science services	4	4	0
Chapter 5: Maritime, Aeronautical & Amateur services	8	8	0
Chapter 6: General issues	7	7	0
RA-19	1	1	0
	70	67	3
	100%	96%	4%

³ NB: Each sub-issues or band under an AI counts, e.g. AI 1.13 has 12 elements because it has 12 bands under consideration.