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African Telecommunications Union

ATU ORGANIZATION OF WORK FOR RA/WRC-23 PREPARATIONS AND PRELIMINARY POSITIONS

The ATU wishes to provide the 2nd ITU Inter-regional Workshop on WRC-23 Preparation the current ATU preliminary positions as adopted by the 3rd ATU preparatory meeting for WRC-23 (APM23-3) held in Lusaka (Zambia) from 29 August to 2 September 2022. The ATU Preparatory Work Plan for WRC-23 and Leaderships for various working groups which shows the organization of its work for RA/WRC-23 preparations can be found [here](#).

1.1 Chapter 1: Fixed, Mobile and Broadcasting issues (Agenda items 1.1, 1.2, 1.3, 1.4, 1.5)

The Table below summaries the APM23-3 outcomes for AIs under this chapter:

Agenda Item (AI)	APM23-3 Outcomes
AI 1.1 <i>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 p.f.d. criteria in footnote No. 5.441B in accordance with Resolution 223 (Rev.WRC-19).</i>	The APM23-3 agreed to: <u>Part 1: Common position:</u> <ol style="list-style-type: none">1. Support, based on the results of the studies, global/regional harmonization of the frequency band 4800-4990 MHz for the implementation of IMT, taking into account the protection of incumbent services;2. Encourage ATU Administrations to consider including their names in footnote 5.441B for those Administrations not in the footnote, in order to achieve global/regional harmonization of the frequency band 4800-4990 MHz for the implementation of IMT;3. Decide that, in the case of protection of Radio Astronomy, within 4800-4990 MHz (secondary) and the adjacent band 4990-5000 MHz, it should be addressed as a national matter (where applicable);4. Support, based on the current status of the results of the studies, that no additional measures for protection of AMS/MMS in international airspace and waters is required and bi- or multilateral agreements between the concerned administrations can provide an efficient mechanism of AMS/MMS protection in

	<p>international airspace and waters in the frequency band 4800-4990 MHz in geographical areas where it is necessary</p> <p><u>Part 2: Way forward</u></p> <p>Request ATU administrations to:</p> <ol style="list-style-type: none"> 1. Take advantage of having the choice to harmonize the use of the following bands for mobile broadband / IMT-2020 through the regulatory actions at WRC-23, by supporting technical conditions which allow the use of IMT systems in the frequency band, as well as Administrations being included into Footnote 5.441B at WRC-23 if not already a signatory. 2. Support other Administrations that are signatory to footnote 5.441B to advance the position in respect of the use of this band for IMT. The objective should be to seek to ensure the realization of the desired large-scale supporting technology ecosystem for the 4800-4990 MHz which will require: <ol style="list-style-type: none"> 1. The removal or mitigation of existing pfd limits applicable to IMT, 2. Mitigation of any new restrictions that may potentially become applicable through the study process, 3. Inviting other Administrations to consider also identifying this band for IMT by way of considering adding their country names to footnote 5.441B. 3. Address Radio Astronomy protection requirements as a national matter (where applicable). 4. Actively participate in ITU-R WP 5D and WP 5B meetings in the interest of advancing the positions and actions in Part F above.
<p>AI 1.2</p> <p><i>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 (WRC19);</i></p>	<p>APM23-3 agreed to:</p> <p><u>Part 1: Common position:</u></p> <ol style="list-style-type: none"> 1. For the frequency band 3 300 – 3 400 MHz: <ol style="list-style-type: none"> a) Support removal of stringent conditions through amendment of footnotes 5.429A and 5.429B, or adopting a new footnote, as appropriate. b) Encourage African countries not yet listed in footnote 5.429B to consider adding their names to the footnote at WRC-23, in order to achieve harmonization; c) not support any method that will result in maintaining the current regulatory situation. 2. For the frequency band 6 425-7 125 MHz: <ol style="list-style-type: none"> a) Preliminarily support identification of the frequency band 6 425-7 125 MHz for IMT; b) Support consideration of appropriate measures to ensure the protection of the existing services, taking into account the result of the coexistence studies in ITU-R;

	<p><u><i>Part 2: Way forward</i></u></p> <ol style="list-style-type: none"> 1. Support and contribute to ongoing sharing and compatibility studies in ITU-R WP 5D; 2. Review and analyse the results of the sharing and compatibility studies as well as conducting and submitting coexistence studies, as appropriate, to facilitate the decision-making process and balance the views from the industry; 3. Actively participate in the studies and work being conducted in ITU-R WP5D, in particular on finalizing the draft CPM text on this agenda item; <p><i>APM23-3 agreed to:</i></p> <ol style="list-style-type: none"> 1. Task the Working Group 1A to coordinate and organize the development and follow up of common contributions to the work of ITU-R WP 5D and the CPM23-2, liaise appropriately with the different stakeholders to promote and advance the views of the ATU members; 2. Request the ATU Secretary General to convene an additional meeting of Working Group 1A in the first quarter of 2023, before the CPM23-2 meeting, in addition to the normally scheduled meeting prior to the APM23-4. <p><i>APM23-3 agreed to further invites Member States and Regional Organizations to:</i></p> <ol style="list-style-type: none"> 1. Consider the Annex attached to this Recommendation and provide their views in the summary table available under section A.11 for discussion at the next meeting of WG1A.
<p><i>AI 1.4</i></p> <p>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.</p>	<p><i>APM23-3 agreed to:</i></p> <p><u><i>Part 1: Common position:</i></u></p> <ol style="list-style-type: none"> 1. Support studies to enable the use of HIBS in bands below 2 700 MHz, already identified for IMT; 2. Support the ITU-R sharing and compatibility studies for HIBS usage and protection of existing co-primary and primary services in adjacent bands without adversely affecting these services; 3. Support, based on the result of studies, the global/regional harmonization on the use of the frequency bands for HIBS, which may include addition of African countries names in the existing footnotes in the RR. 4. Support the identification of the candidate bands for the use of high altitude platform stations as base stations for International Mobile Communications (HIBS), taking into account that no additional regulatory or technical restrictions should be imposed on the existing IMT terrestrial systems and applications operating in the same bands or in adjacent bands and also to identify the necessary measures required for coordination with neighbouring countries regarding exceeded coverage.

	<p><u>Part 2: Way forward</u></p> <ol style="list-style-type: none"> 1. Follow-up the progress of work in ITU-R WP5D studies on Agenda Item 1.4, with particular regard to the fact that HIBS have very large coverage area and therefore implementation of frequency coordination between neighbouring countries will be needed; 2. Contribute to the ITU-R WP5D work, in order to ensure the protection of existing services to which the frequency band is allocated on a primary basis and services operating in adjacent bands as appropriate, in addition to the measures required for coordination with neighbouring countries regarding exceeded coverage; 3. Develop appropriate frequency coordination procedures between concerned administrations, based on the result of ITU-R studies. 4. Support the inclusion of the studies on 2nd harmonics of HIBS and RAS under WRC-23 agenda item 1.4; 5. Consider to propose that future invitations to ITU-R on conducting studies are not only limited to primary services in-band and adjacent to new identification, but also should be extend to any other possibly affected services, especially when new technologies are being introduced; <p>APM23-3 agreed to:</p> <ol style="list-style-type: none"> 6. Task the Working Group 1A to coordinate and organize the development and follow up of common contributions to the work of ITU-R WP 5D and CMP23-2, liaise appropriately with the different stakeholders to promote and advance the views of the ATU members. 7. Task the Working Group 1A to examine the measures for protection of existing systems and the future development of services to which bands are allocated on a primary basis and services operating in adjacent frequency bands, as necessary.
<p>AI 1.5</p> <p>recommended to Council to include in the Agenda of WRC-23 (agenda item 1.5) “to review the spectrum use and spectrum needs of existing services in the frequency band 470-960 MHz in Region 1 and consider possible regulatory actions in the frequency band 470-694 MHz in Region 1 on the basis of the review in accordance with Resolution 235 (WRC-15)”,</p>	<p>APM23-3 agreed to:</p> <p><u>Part 1: Common position:</u></p> <ol style="list-style-type: none"> 1. Decide that a position on this agenda item will be developed once drafting of the CPM text and agreement on proposed methods have sufficiently progressed in accordance with Resolution 235 (WRC-15). 2. Note the following views expressed to WG1B meeting of 15 to 19 August 2022 by some Administrations and some Sub-regions: <ul style="list-style-type: none"> i). Algeria: <p>The frequency band 470-694 MHz is a vital band for Digital Terrestrial Television Broadcasting in Region 1, to continue providing free to air television programs to wide coverage areas, including rural and remote areas, with low-cost</p>

	<p>accessibility. In many countries, terrestrial broadcasting serves an important social function, and is considered as a matter of public policy.</p> <p>In fact, this band is the only remaining frequency band, in the UHF range, that is available for DTT and successfully coordinated within the African continent under to GE-06 agreement, especially after the re-farming process carried out in Africa, where the number of channels offered for DTTB have been reduced to the lower band (470-694 MHz).</p> <p>As informed by the results of the survey carried out by WP6A and published in the ITU-R REP-BT.2302-1, the frequency band 470–694 MHz, (i.e. 224 MHz bandwidth), corresponds exactly to the amount of spectrum required in 42 African countries to satisfy the needs of Digital Terrestrial Television, whereas only one administration indicated that they require less spectrum and only two administrations require more.</p> <p>Moreover, Algeria considers that AI 1.5 is intended to review the spectrum use and spectrum needs of existing services in the frequency band 470-960 MHz, and does not explicitly address new allocation to the mobile service at WRC-23. Therefore, Algeria does not support methods proposing allocation to mobile service in the frequency band 470-694 MHz.</p> <p><i>ii). Egypt:</i></p> <p><i>APM23-2 agreed to:</i></p> <p>Develop a position on this agenda item once studies have sufficiently progressed in accordance with Resolution 235 (WRC-15).</p> <p><i>APM23-2 to request ATU administrations to:</i></p> <p>Consider the inclusion of the information on spectrum utilization and needs submitted by Member States in the contribution to be submitted to TG 6/1.</p> <p>Contribute to and actively participate in sharing and compatibility studies once the ITU legal advisor has provided feedback on the questions submitted by TG 6/1.</p> <p>Egypt support the method (s) which support the allocation of the 470-694 MHz band to the mobile service to provide future flexibility for operators to use this space with the identification of the 614-694 MHz space for IMT provided that appropriate protection is provided for the systems of other existing services, especially the broadcasting service, with consideration of the date of enforcement of the new allocation and identification at a conference 2023. Nigeria echoed same</p>
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view during the working group discussions based on AUC report commissioned 2017.

iii). **South Africa**

While taking into considerations Resolution 235 (WRC-15) and the meeting of TG6/1 scheduled for 5 to 16 September 2022, the following options are proposed:

Re-evaluate and determine before the next TG6/1 meeting, the spectrum needs to support DTT Broadcasting Services vs. need for Mobile Services. Consider support for broadcasting spectrum needs in the frequency band 470-694 MHz in Region 1 based on current use and trends, and future broadcasting requirements, also taking into account the current and future use of new content delivery mechanisms, such as online streaming and satellite services.

ATU Member States are invited to take note of the Options in Part E above:

Option 5: The matter of allocation must be taken to WRC-23 for clarification.

OR

African Member States could consider adopting Method A Sub-Method A2 as contained in Annex 5 to Document 6-1/106 i.e. No change at WRC-23 and Review of the situation at future WRCs. This could be done at WRC-27

OR

Member States could consider the options outlined in part E above and following TG6/1 determine a preliminary position for Africa.

It is recommended that ATU WG1B recommend to APM23-3 that Option 5 in Part E above, i.e. the matter of new allocations in the frequency band 470 to 694 MHz must be taken to WRC-23 for clarification.

ATU WG1B prepares a contribution for submission to the fifth meeting of ITU-R Task Group 6/1 meeting of 5-16 September 2022.

NB: Deadline for Contribution to TG6/1 - Monday, 29 August 2022

NB: Agenda 1.5 does not address allocation or identification of spectrum, but determination of spectrum needs. What is actual required from this agenda was to show spectrum needs on Broadcasting and Mobile, except aeronautical mobile service

	<p><i>iv).</i> ECOWAS</p> <p>Requests ATU administrations to consider the African preliminary position on this agenda item after the September 2022 meeting of the TG 6/1 in accordance with Resolution 235 (WRC-15) and the results of studies</p> <p><i>v).</i> SADC</p> <p>Consider taking a position once studies under this agenda item are completed.</p> <p><i>vi).</i> GSA</p> <ol style="list-style-type: none">1. A co-primary mobile allocation provides the possibility for administrations to enable mobile technology within a country/sub-region subject to coordination arrangements with neighbours, as well as the flexibility to decide what to do with the UHF spectrum taking into account the latest market/technology developments in both broadcast and mobile.2. GSA believes that Broadcast and Mobile industries / technology will continue to evolve and are likely to integrate &/or work more closely in the future. A number of duplex arrangements exist already -- FDD, TDD, SDL/DL, etc. GSA suggests that these may be studied after WRC23, if a coprimary mobile allocation / IMT footnote is agreed at WRC23.3. An IMT footnote is also important to help market development and ecosystem scale for administrations that decide to make spectrum available for IMT. <p><i>vii).</i> GSMA</p> <p>Supports a primary mobile allocation in the band 470-694 MHz. This will allow those countries that wish to do so to identify the band, or parts thereof, for IMT.</p> <p><u><i>Part 2: Way forward</i></u></p> <ol style="list-style-type: none">1. Contribute to and actively participate in the finalization of the CPM text during the final meeting of TG 6/1 to be held from 5-16 September 2022 in Geneva, Switzerland.2. Consider the differences between Member States in respect of spectrum needs and utilization of the spectrum bands 470-960 MHz.3. Consider the various preliminary methods and options proposed for discussion at the upcoming TG 6/1 meeting.
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<p>AI 1.3</p> <p><i>Possible primary allocation of the frequency band 3 600-3 800 MHz to the mobile service in Region 1 and take appropriate regulatory actions, in accordance with Resolution 246 (WRC-19)</i></p>	<p>APM23-3 agreed to:</p> <p><u>Part 1: Common position:</u></p> <ol style="list-style-type: none"> 1. Support the upgrade of mobile service, except aeronautical mobile, to primary allocation, 2. Support the protection of existing services 3. Support the identification for IMT <p>Decide on the appropriate method at the APM23-4</p> <p><u>Part 2: Way forward</u></p> <p>Contextualize the results of the studies, most importantly on the parameters and assumptions before proposing harmonized preliminary position.</p>
<p>AI 9.1.c</p> <p><i>Study the use of International Mobile Telecommunication system for fixed wireless broadband in the frequency bands allocated to the fixed services on primary basis, in accordance with Resolution 175 (WRC19).</i></p>	<p>APM23-3 agreed to:</p> <p><u>Part 1: Common position:</u></p> <ol style="list-style-type: none"> 1. Decide that, as a matter of principle, there is no need to change the Radio Regulations to use the frequency bands allocated to the fixed services on primary basis for use of International Mobile Telecommunication systems for fixed wireless broadband applications. Also, the protection of incumbent services operating in the same or in adjacent frequency bands need to be ensured. 2. Decide that, the development of any new ITU-R Recommendations should not be undertaken, unless modifying existing ITU-R Recommendations does not address the matter. <p><u>Part 2: Way forward</u></p> <ol style="list-style-type: none"> 1. Ensure that, the Report to the BR Director is fully in line with the Resolution 175 of WRC-19. 2. Consider that, the ITU-R may continue studies, taking into account existing and new Study Questions, or revising existing publications, or considering new ITU-R documents, to support the future development of fixed wireless applications including those that use IMT technology in the frequency bands allocated to the fixed service. This activity is already in progress in WP 5A and WP 5C and can continue through the course of work. 3. Actively participate to pursue this issue in case of any futures studies would be triggered among WPs 5A/5C activities as the draft CPM study has been concluded.
<p>Agenda Item 9 (RR 21.5)</p> <p>How RR 21.5 should be applied to IMT stations that use Advanced Antenna Systems (AAS).</p>	<p>APM23-3 agreed to:</p> <p><u>Part 1: Common position:</u></p> <p>Support the on-going ITU-R studies on the applicability of the limits specified in RR No. 21.5 to IMT stations using active antenna systems (AAS) and the verification of RR No. 21.5 regarding the notification of these IMT stations, in accordance with the scope mentioned in Document 550 of WRC-19 and CA/251.</p>

	<p><u>Part 2: Way forward</u></p> <ol style="list-style-type: none"> 1. Note that this topic will be addressed in the Report of the Director of the Radiocommunication Bureau and not as part of a dedicated WRC-23 agenda item; 2. Consider the analysis in this document when further discussing and considering a position to ensure the protection of satellite receivers with regards to: <ol style="list-style-type: none"> a. the applicability of the limit specified in RR No. 21.5 to IMT stations using Advanced Antenna Systems (AAS); b. any update to RR Table 21.2 related to terrestrial and space services sharing frequency bands; c. verification of No. 21.5 regarding the notification, under the provision of RR 2020 Edition, of IMT stations that use AAS in the 26 GHz band; 3. Actively participate and contribute meaningfully to the studies during the next meetings of WP5D in order to develop an appropriate balance note to the Director of the Radiocommunications Bureau, in time for WRC-23.
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1.2 Chapter 2: Aeronautical and maritime issues

The Table below summaries the APM23-3 outcomes for AIs under this chapter:

<i>Agenda Item (AI)</i>	<i>APM23-3 Outcomes</i>
<p>AI 1.6</p> <p>Possible Regulatory provisions to facilitate radiocommunications for sub-orbital vehicles, in accordance with Resolution 772 (WRC-19)</p>	<p><i>The APM23-3 agreed to:</i></p> <p><u>Part 1: Common position:</u></p> <ol style="list-style-type: none"> 1. Support the ongoing ITU-R studies to develop regulatory provisions to facilitate the operation of sub-orbital vehicles, while ensuring the protection of current civil aviation, space launch systems and radio astronomy, and without imposing any new constraints on existing primary radiocommunication services and applications. 2. Support No Change to Article 5 (of the Radio Regulations). 3. Consider that a formal definition for suborbital vehicles should be defined, as well as specifying their routes from launching till landing to the ground. <p><u>Part 2: Way forward</u></p> <p><i>Request ATU administrations to:</i></p> <p>Actively participate in ongoing studies on the development of a new resolution that include the regulatory provisions to facilitate the operation of suborbital vehicles, while ensuring that the civil aviation systems/traffic and current space launch systems are not affected, and without imposing any new constraints on existing primary radiocommunication services and applications.</p>

<p>AI 1.7</p> <p>Possible new aeronautical mobile-satellite (R) service (AMS(R)S) allocation for both the Earth-to-space and space-to-Earth directions of aeronautical VHF communications in all or part of the frequency band 117.975-137 MHz, in accordance with Resolution 428 (WRC19)</p>	<p><i>The APM23-3 agreed to:</i></p> <p><u><i>Part 1: Common position:</i></u></p> <p>Support new allocation to AMS(R)S in all or part of the frequency band 117.975-137 MHz in accordance to the study results, in order to enhance the aeronautical systems operating in the VHF frequency band, under condition of ensuring the protection of existing and adjacent band allocated radiocommunication services, and without imposing any operational constraints on existing VHF aeronautical systems or other primary services operating at the adjacent frequency bands.</p> <p><u><i>Part 2: Way forward</i></u></p> <p>Request ATU administrations to:</p> <p>Actively participate in WP5B meetings.</p>
<p>AI 1.8</p> <p>Possible revising Resolution 155 (Rev.WRC19) and No. 5.484B to accommodate the use of fixed-satellite service (FSS) networks by control and non-payload communications of unmanned aircraft systems, in accordance with Resolution 171 (WRC19)</p>	<p><i>The APM23-3 agreed to:</i></p> <p><u><i>Part 1: Common position:</i></u></p> <p>Support the review and possible revision of Resolution 155 (Rev. WRC 19) and No. 5.484B in the frequency bands to which they apply. Specifically, UAS CNPC links Shall operate in accordance with ICAO SARPs provided:</p> <ol style="list-style-type: none"> 1. Not operating the UAS CNPC links if the conditions for the safety of operation issued by ICAO cannot be met 2. Not applying provision No. 4.10 to the use of UAS CNPC links through FSS networks 3. Not imposing any additional constrains on the terrestrial systems 4. Not have any impact on the relevant existing agreements reached during FSS satellite coordination process or on the future coordination of FSS networks during the application of RR provisions. <p>Decide that UAS CNPC links should ensure the protection of the current systems operating in terrestrial and space services without imposing any undue constraints on them.</p> <p>Note that the safety of life standards for UAS CNPC links should comply with ICAO Standards and Recommended Practices (SARPs), and do not relate in any way to ITU safety of life services.</p> <p><u><i>Part 2: Way forward</i></u></p> <p>Request ATU administrations to:</p> <p>Actively participate in WP 5B meetings and in the correspondence group as outlined above.</p>

<p>AI 1.9</p> <p>Possible review Appendix 27 in order to accommodate digital technologies for commercial aviation safety-of-life applications in existing HF bands allocated to the aeronautical mobile (route) service and ensure coexistence of current HF systems alongside modernized HF systems, in accordance with Resolution 429 (WRC19)</p>	<p><i>The APM23-3 agreed to:</i></p> <p><i>Part 1: Common position:</i></p> <p>Support the optimal use of the radio spectrum resources through the inclusion of the relevant part of Rules of Procedure relating Appendix 27 in the Radio Regulation, while ensuring that:</p> <ol style="list-style-type: none"> 1. The new proposed HF systems should coexist with the existing analogue voice and data communication systems and operate in accordance with the ICAO international Standards and Recommended Practices and procedures. 2. Protection of in band and adjacent band services shall be ensured. <p><i>Part 2: Way forward</i></p> <p><i>Request ATU administrations to:</i></p> <ol style="list-style-type: none"> 1. Continue follow up and participation in the development of ITU-R Report [Aero-Wideband-HF-Studies] and assist in the sharing and compatibility studies that will be conducted, as well as regulatory considerations. 2. Update the position of African Common Proposal based on the developments of this Agenda Item.
<p>AI 1.10</p> <p>possible new allocations for the aeronautical mobile service for the use of non-safety aeronautical mobile applications, in accordance with Resolution 430 (WRC19)</p>	<p><i>The APM23-3 agreed to:</i></p> <p><i>Part 1: Common position:</i></p> <ol style="list-style-type: none"> 1. determine the sharing and compatibility of the identified frequency bands and update the position of ATU on the developments of this Agenda Item 1.10 2. consider that, when identifying technical and regulatory conditions for frequency allocation in the frequency bands 15.4-15.7 GHz and 22-22.21 GHz, protection of Radio Astronomy (RA) services in the adjacent bands shall be ensured. 3. ensure the protection of incumbent services as well as the adjacent services, such as <u>defining unwanted emission limits and appropriate protection measures</u> for station of aeronautical mobile service in the frequency bands 15.35-15.4 GHz and 22.21-22.5 GHz to protect EESS (passive) <p><i>Part 2: Way forward</i></p> <p><i>Request ATU administrations to:</i></p> <p>participate in WP 5B meetings in order to among other things to determine the sharing and compatibility of the identified frequency bands.</p>

<p>AI 1.11</p> <p>possible regulatory actions to support the modernization of the Global Maritime Distress and Safety System and the implementation of e-navigation, in accordance with Resolution 361 (Rev.WRC19)</p>	<p><i>The APM23-3 agreed to:</i></p> <p><i>Part 1: Common position:</i></p> <p>Issue A: GMDSS Modernization</p> <p>Support the only method “A” mentioned in the draft CPM</p> <p>Issue B: Electronic Navigation</p> <p>Support the only method “B” mentioned in the draft CPM (that is no need for changes to the RR);</p> <p>Issue C: Introduction of additional satellite systems into the GMDSS</p> <p>Support the ongoing studies within the ITU and subject to IMO recognition, provided that ensuring the protection of incumbent services and systems, as well as, the current GMDSS.</p> <p><i>Part 2: Way forward</i></p> <p><i>Request ATU administrations to:</i></p> <ol style="list-style-type: none"> 1. continue making follow-up on the process of revising the recommendations and drafting the new reports to support the <i>modernization of the Global Maritime Distress and Safety System and the implementation of e-navigation</i> while ensuring the protection of radio astronomy and other services in place as well as current GMDSS systems and setting a sufficient timeframe for the administrations to implement and operate under the best conditions. 2. actively participate in WP 5B and WP 4C meetings.
<p>AI 9.1 (Topic B)</p> <p>Review of the amateur service and the amateur-satellite service allocations in the frequency band 1 2401 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 (WRC19)</p>	<p><i>The APM23-3 agreed to:</i></p> <p><i>Part 1: Common position:</i></p> <p>Support the development of possible technical and operational measures to ensure the protection of RNSS (space-to-Earth) receivers from the amateur and amateur-satellite services in the frequency band 1240-1300 MHz.</p> <p><i>Part 2: Way forward</i></p> <p><i>Request ATU administrations to:</i></p> <ol style="list-style-type: none"> 1. continue making follow-up on the following: <ol style="list-style-type: none"> a) The possible technical and operational measures to ensure the protection of RNSS (space-to-Earth) receivers from the amateur and amateur-satellite services in the frequency band 1240-1300 MHz

	<p>b) The detailed review of the different systems and applications used in the amateur service and amateur-satellite service allocations in the frequency band 1240-1300 MHz</p> <p>2. participate and contribute actively in WP 5A and WP 4C meetings.</p>
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1.3 Chapter 3: Science Issues

The Table below summaries the APM23-3 outcomes for AIs under this chapter:

<i>Agenda Item (AI)</i>	<i>APM23-3 Outcomes</i>
<p>AI 1.12</p> <p>Possible new secondary allocation to the Earth exploration-satellite (active) service for spaceborne radar sounders within the range of frequencies around 45 MHz, in accordance with Resolution 656 (Rev.WRC-19)</p>	<p><i>The APM23-3 agreed to:</i></p> <p><u>Part 1: Common position:</u></p> <p>Support Method B, because:</p> <ol style="list-style-type: none"> 1. it addresses the invite of Resolution 656, and it provides for the protection of radiolocation through a footnote. 2. limits allocation's emissions to only those from spaceborne radar sounder systems. <p><u>Part 2: Way forward</u></p> <p>Request ATU administrations to:</p> <ol style="list-style-type: none"> 3. Actively participate in WP7C meetings related to the agenda item and various correspondence groups to, advocate for protection of all incumbent services and those adjacent to the band, ensure no additional constraints are imposed on existing services, support development of proposed footnote emanating from method B. 4. Participate in any other discussions relating to the agenda item. 5. Propose updates to the African Common Proposal based on consensus and the developments of this Agenda Item.
<p>AI 1.13</p> <p>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)</p>	<p><i>The APM23-3 agreed to:</i></p> <p><u>Part 1: Common position:</u></p> <p>Consider no change to the radio regulations until the completion of the sharing studies for all the current radio services in the frequency band 14.8 - 15.35 GHz and the adjacent frequency bands.</p> <p>Continue to review the results of compatibility and sharing studies to ensure the protection of all existing services in this frequency band and adjacent frequency bands as well. The upgrade of the SRS allocation should not impose constraints</p>

	<p>on the fixed and mobile systems currently allocated in the frequency band under consideration.</p> <p><u>Part 2: Way forward</u> Request ATU administrations to:</p> <ol style="list-style-type: none"> 1. Continue participating in the studies under this agenda item to examine the possible upgrade of SRS services in the 14.8 – 15.35 GHz band. 2. Ensure that in terms of No. 5.340, all emissions are prohibited in the 15.35 – 15.4 GHz to ensure the protection of Radio Astronomy Services, Earth Exploration and SRS passive.
<p>AI 1.14</p> <p>possible adjustments of the existing or possible new primary frequency allocations to EESS (passive) in the frequency range 231.5-252 GHz, to ensure alignment with more up-to-date remote-sensing observation requirements, in accordance with Resolution 662 (WRC-19)</p>	<p>The APM23-3 agreed to:</p> <p><u>Part 1: Common position:</u></p> <p>Preliminarily Support Method A, because it addresses the invite of Resolution 662, and provides for the protection of radiolocation through a footnote.</p> <p><u>Part 2: Way forward</u> Request ATU administrations to:</p> <ol style="list-style-type: none"> i. Continue active participation in the ongoing studies with the intent of positively influencing the outcome of the studies. ii. Contribute towards the studies between EESS and existing services in the frequency band 231.5-252 GHz
<p>AI 9.1 Topic A</p> <p>Review the results of studies relating to the technical and operational characteristics, spectrum requirements and appropriate radio service designations for space weather sensors, in accordance with Resolution 657 (Rev.WRC-19)</p>	<p>The APM23-3 agreed to:</p> <p><u>Part 1: Common position:</u></p> <ol style="list-style-type: none"> 1. Support the recognition and protection of space weather sensors through possible modification of Article 1 and Article 4 of the RR as highlighted in 1.XXX and 4. XXX above. 2. Support the suppression of Resolution 657 (Rev.WRC-19) at WRC-23 <p><u>Part 2: Way forward</u> Request ATU administrations to:</p> <p>Continue following and contributing to the studies to ensure the outcomes satisfy the needs of Africa.</p>
<p>AI 9.1 Topic D</p> <p>Protection of EESS (passive) in the frequency band 36-37 GHz from non-GSO FSS space stations;</p>	<p>The APM23-3 agreed to:</p> <p><u>Part 1: Common position:</u></p> <p>Support and contribute to studies related to the protection of EESS (passive) sensors operating in the band 36-37 GHz from non-GSO FSS systems in the band 37.5-38 GHz, with</p>

	<p>due consideration of operational aspects of non-GSO FSS systems, leading to Recommendations and/or Reports as appropriate.</p> <p><u>Part 2: Way forward</u></p> <p>Request ATU administrations to:</p> <p>Participate in the ITU-R studies, and to submit their views to the next meetings.</p>
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1.4 Chapter 4: Satellite Issues

The Table below summaries the APM23-3 outcomes for AIs under this chapter:

<i>Agenda Item (AI)</i>	<i>APM23-3 Outcomes</i>
<p>AI 1.15</p> <p><i>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)</i></p>	<p>The APM23-3 agreed:</p> <p><u>Part 1: Common position:</u></p> <ol style="list-style-type: none"> Support the studies on the regulatory and technical aspects for ESIMs on aircraft and vessels communicating with GSO space stations in the FSS operating in the frequency band 12.75-13.25 GHz (Earth-to-space), while ensuring protection to the existing services and those in the adjacent bands within the frequency band 13.25–13.75 GHz, taking into account the need to protect Appendix 30B. Support that Aeronautical or maritime earth stations in the 12.75 - 13.25 GHz band need to have the capability to restrict operations in territories of those administrations where agreement under No. 6.6 has been obtained and authorization for such operations has been granted. Support that the administrations responsible for notice to use an Appendix 30B assignment in the List in support of the operation of earth stations on aircraft and vessels in the frequency band 12.75-13.25 GHz, to seek the explicit agreement of all the affected administrations from such use. Support that, there is need to establish regulatory, technical and recording procedures for the usage of these type of Earth Stations in Motion (ESIMs) that may differ than the current FSS Appendix 30B Plan and list recording procedures. Any cost arising from potential implementation of Resolution 172 as well as its updates at WRC-23 need to be carefully examined and decided upon.

	<ol style="list-style-type: none">5. Support that the role of the Network Control and Monitoring Centre (NCCMC) Need to be defined, while emphasizing that the notifying administration of the satellite network holds the responsibility for operating the mobile earth stations on board aircraft and vessel to resolve any interference incident. In that regard, the administrations issue operating licenses for these stations to provide services in their territories should not be responsible for resolving interference incidents.6. Support the proposal that only the notifying administrations of the GSO network are eligible to notify the ESIMs that will communicate with that network.7. Support that there is a need of having a methodology for the BR to examine the conformity of earth stations on aircraft and vessels in case of usage of an appropriate pfd to protect terrestrial services from ESIM with such methodology needs to be established and agreed upon.8. Decide that studies under this agenda item need to equally consider the effect of aggregated interference from ESIMs to ensure long term protection of Fixed and Mobile Service.9. Agree that the operation of such earth stations on aircraft and vessels should not impact the usability of the allotments in the Plan and assignments in the List under Appendix 30B of the Radio Regulations and not limit the access of other administrations to their national resources in Appendix 30B as well as implementation of Resolution 170 (WRC 19).10. Agree that the operation of earth stations on board aircraft and vessels in the frequency band 12.75-13.25 GHz within territorial waters and/or airspace under the jurisdiction of an administration shall be carried out only if authorized by that administration.11. Agree that the earth stations on aircraft and vessels receiving in the frequency bands 10.7-10.95 GHz and 11.2-11.45 GHz of ESIMs shall operate in a manner as not to adversely affecting the allotments in the Plan nor the assignments in the List.12. Seek to ensure that the use of ESIMs with satellite networks that have a global coverage in Appendix 30B do not create an obstacle for deployment of national or sub-regional satellite networks of other countries in RR APP 30B in accordance with Topic F under AI 7 which are initiated from Multi-African administration proposal.
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	<p>13. Emphasise that the receiving part of these earth stations in the associated frequency bands shall not claim protection from other applications of the FSS as well as other radiocommunication services to which the frequency band is allocated;</p> <p><i>Part 2: Way forward</i> Request ATU administrations to:</p> <ol style="list-style-type: none"> 1. Support and actively participate in the studies between earth stations on aircraft and vessels communicating with GSO space stations in the FSS and current and planned stations of existing as well as services in adjacent frequency bands, to ensure protection of, and in no way adversely affect these services and their future development, considering the provisions of Appendix 30B in accordance with Resolution 172 (WRC-19). 2. Contribute to the regulatory and technical aspects of operations of earth stations on aircraft and vessels communicating with GSO space stations in service area under the jurisdiction of any country Member State of the ITU. 3. Submit Via WG4A to the next WP4A a contribution with a proposed CPM text reflecting the above interests of the African region. 4. Note that the elements mentioned in part F are aligned with Method B of Draft CPM text for AI 1.15 Included in Annex 28 to Working Party 4A Chairman's Report (https://www.itu.int/dms_ties/itu-r/md/19/wp4a/c/R19-WP4A-C-0691!N28!MSW-E.docx)
<p>AI 1.16</p> <p>study and develop technical, operational and regulatory measures, as appropriate, to facilitate the use of the frequency bands 17.7-18.6 GHz and 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-GSO FSS earth stations in</p>	<p>The APM23-3 agreed to:</p> <p><i>Part I: Common position:</i></p> <ol style="list-style-type: none"> 1. Support studies towards the development of a regulatory framework for the use of the frequency bands 17.7-18.6 GHz and 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-GSO FSS earth stations in motion; 2. Support the fulfilment of the following conditions: <ol style="list-style-type: none"> i. The protection of the incumbent services in the concerned frequency bands and in adjacent bands. ii. No additional restrictions are imposed on earth stations of GSO FSS operating in the same band and in adjacent bands and other services, including terrestrial services, in those frequency bands and in adjacent bands, including passive services.

<p>motion, while ensuring due protection of existing services in those frequency bands, in accordance with Resolution 173 (WRC-19)</p>	<ul style="list-style-type: none"> iii. Non-GSO ESIM operating in the frequency bands 17.7-18.6 GHz, 18.8-19.3 GHz and 19.7-20.2 GHz (see No 5.524) shall not claim protection from terrestrial services to which the frequency band is allocated and operating in accordance with the Radio Regulations. iv. For the protection of secondary allocation to terrestrial services (No. 5.542) in the 29.5-30 GHz the conditions defined in the 27.5-29.1 GHz frequency range should be applied for the concerned administrations. v. For the protection of space services, non-GSO ESIM characteristics shall remain within the envelope characteristics of typical earth stations associated with the non-GSO satellite system with which these ESIM communicate. vi. For the protection of GSO FSS networks operating in the 17.8-18.6 GHz, 19.7-20.2 GHz, 27.5-28.6 GHz and 29.5-30.0 GHz, the relevant EPFD limits in Nos. 22.5C, 22.5D and 22.5F shall apply. vii. For the protection of GSO systems in FSS and BSS, operating in the frequency bands 17.7–18.6 GHz, from non-GSO FSS systems using ESIMs, the RR No. 22.2 is applied. viii. For the protection of terrestrial services operating in the 27.5-29.1 GHz from non-GSO ESIM, technical conditions similar to Res.169 could be developed based on sharing studies that have been conducted by WP4A (PFD limits for A-ESIM; min distance from the coast and max EIRP spectral density towards the horizon for M-ESIM). ix. Support the development of a methodology regarding examination by the Bureau of compliance with pfd limits by NGSO aeronautical ESIM. x. Supporting the review of a methodology (ITU-R Recommendation S.1503) on protection of GSO FSS space stations from ESIM communicating with NGSO FSS systems. xi. The capability of ESIMs to restrict operations to territories of those administrations where authorization for such operations has been granted. xii. Support that the only administration that could notify the ESIM is the same administration that notified NGSO satellite network with which the ESIM will communicate. xiii. The role of the Network Control and Monitoring Centre (NMC) to be defined, while emphasizing that the only administration that holds the responsibility for operating the mobile earth stations on board aircraft and vessel and for resolving any interference incident is the notifying administration of the satellite system.
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	<p><u>Part 2: Way forward</u> Request ATU administrations to:</p> <ol style="list-style-type: none"> 1. Continue to participate actively at WP4A and Prepare via WG4A, a common contribution proposing CPM text of the AI to the next Working Party 4A to ensure the protection of incumbent services in the frequency bands and adjacent band services and all the pertinent aspects that are critical for the continent are taken into consideration when making the final decision on the agenda item. 2. Advocate that appropriate examination methods and measures to be undertaken by the Bureau on non-GSO ESIM to comply with resolutions dealing with this Agenda Item should be established in order to ensure the protection of terrestrial services and space services once the result of ITU-R studies is available. 3. Analyse keenly the discussions around the responsibilities for administrations in this agenda item together with agenda items 1.15 4. Note that the elements mentioned in No. 2 of part F are aligned with Method B of Draft CPM text for AI 1.16 Included in Annex 29 to Working Party 4A Chairman's Report (https://www.itu.int/dms_ties/itu-r/md/19/wp4a/c/R19-WP4A-C-0691!N29!MSW-E.docx)
<p>AI 1.17 determine and carry out, on the basis of the 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.</p>	<p>APM23-3 Agreed: <u>Part 1: Common position:</u></p> <ol style="list-style-type: none"> 1. Agree that a regulatory framework should be developed to ensure the protection of the in-band and adjacent bands services to which the frequency bands referred to in this agenda item, in particular, existing and future FSS services be guaranteed. 2. Support the initial position from APM23-2 of not supporting a new ISS allocation, maintaining the usage of the FSS allocations for the intersatellite links. This is mainly because no transmissions to earth are expected. 3. Consider supporting the usage of the bands 18.1-18.6, 18.8-19.3, 19.7-20.2 GHz (service provider-to-user) and 27.5-29.1, 29.5-30 GHz (user-to-service provider) covered under F2 and F4 in method B. This is based on the current allocations in our AfriSAP.

	<ol style="list-style-type: none"> 4. Support the within the cone operation for the intersatellite links and this is because the studies on the Expanded cone operation have not been completed. It is recommended that option C1 is chosen for ATU. 5. Support setting of hard limits as a way to protect other non-GSO FSS, as a sharing mechanism as opposed to the coordination method (N2). 6. Support the protection of other GSO FSS by setting hard limits (G2). 7. Consider the modification of the definition of the “expanded cone” concept by imposing altitude limitations on service providers and users and thus excluding LEO-to-LEO links 8. Support studies on the “augmented cone” concept of operations with the below conditions: <ol style="list-style-type: none"> I. Max altitude for Non-GSO users: 1550 km II. Min altitude for service providers: 7500 km <p><i>Part 2: Way forward</i></p> <p><i>Request ATU administrations to:</i></p> <ol style="list-style-type: none"> 1. Follow-up the activities at working party 4A under this agenda item including the sharing and compatibility studies between satellite-to-satellite links and other services in the same bands and adjacent bands in order to develop technical conditions and regulatory provisions for the use of satellite-to-satellite operations in the 11.7-12.7 GHz, 18.1-18.6 GHz, 18.8-20.2 GHz and 27.5-30 GHz frequency bands in accordance with Resolution 773 (WRC-19). 2. Contribute to WP4A proposing draft new resolution for “within the cone” concept and on-going studies and the modification of the definition of the “expanded cone” concept by imposing altitude limitations on service providers and users and thus excluding LEO-to-LEO links in order to submit them at the next 4A in September 2022. 3. Monitor and Conduct studies on the “augmented cone” concept (same exact studies as they were done for the “within the cone” one) 4. Actively participate and contribute to the studies and discussions to ensure that adjacent GSOs and NGSOs stations are protected as well as protection of terrestrial stations from off-axis emissions and the Draft CPM text currently being discussed.
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	<p>5. Review applicability of current regulation to protect GSO FSS in specific 9.11A and limits included in table 22-2.</p>
<p>AI 1.18</p> <p>consider studies relating to spectrum needs and potential new allocations to the mobile-satellite service for future development of narrowband mobile-satellite systems, in accordance with Resolution 248 (WRC-19)</p>	<p><i>APM23-3 agreed:</i></p> <p><u>Part 1: Common position:</u></p> <ol style="list-style-type: none"> 1. Consider supporting Method A, a <u>No Change</u> and <u>Suppression</u> of Resolution 248 given the lack of agreement within the ITU-R on the technical characteristics and operational parameters to conduct the necessary sharing and compatibility studies to ensure the protection of existing primary services in the frequency bands under study or in the adjacent bands. 2. Contribute to the studies to provide technical characteristics and operational standards to conduct the necessary sharing and compatibility studies to ensure the protection of existing primary services in the frequency bands under study or adjacent bands. <p><u>Part 2: Way forward</u></p> <p><i>Request ATU administrations to:</i></p> <ol style="list-style-type: none"> 1. Initially, Support Method A due to lack of sharing and compatibility studies with radiocommunication services operated in the same and adjacent frequency bands in accordance with Article 5 of RR 2. Acknowledge the importance of and developing interest among ATU Member States to venture into small satellite technologies that will deliver narrow band applications. 3. Follow and actively participate in the studies to ensure that existing services allocated in the frequency band 2 010-2 025 MHz are protected and adjacent bands, without causing undue constraints on their further development.
<p>AI 1.19</p> <p>consider a new primary allocation to the fixed-satellite service in the space-to-Earth direction in the frequency band 17.3-17.7 GHz in Region 2, while protecting existing primary services in the band, in accordance with Resolution 174 (WRC-19)</p>	<p><i>APM23-3 agreed:</i></p> <p><u>Part 1: Common position:</u></p> <ol style="list-style-type: none"> 1. Decide that, as a matter of principle, any new primary allocation to FSS in the frequency band 17.3-17.7 GHz in Region 2 shall ensure the protection of existing services in the frequency band and adjacent bands in Region 1 and not create undue constraints on future developments of services in this band. In particular, any new allocation in R2 in the band 17.3-17.7 GHz, shall not claim protection from the broadcasting-satellite service feeder-link earth stations operating under Appendix 30A, nor put any limitations or restrictions on the locations of the broadcasting-satellite service feeder-link earth stations anywhere within the service area of the feeder link.

	<p>2. Support the development of the necessary regulatory procedures including the technical and operational procedures to ensure the protection for existing services in band and the adjacent band.</p> <p><i>Part 2: Way forward</i> Request ATU administrations to:</p> <p>Follow and actively participates in the discussions and ongoing studies at ITU-R to ensure the protection of existing services in the frequency band and adjacent bands in the ATU region.</p>
<p>AI 7 Topic A</p> <p>Tolerances for certain orbital characteristics of non-GSO space stations in the FSS, BSS, and MSS</p>	<p>APM23-3 agreed:</p> <p><i>Part 1: Common position:</i></p> <p>1) Support studies on identifying acceptable tolerances for the following orbital characteristics: for the inclination of the orbital plane, the altitude of the apogee of the space station, the altitude of the perigee of the space station and the argument of the perigee of the orbital plane;</p> <p>2) Agree that:</p> <ul style="list-style-type: none"> i. The development of tolerances under this topic should be limited to the fixed-satellite service, the broadcasting-satellite service and the mobile-satellite service. ii. Specific regulatory measures for tolerances ought to be taken in order to avoid collision with another non-geostationary space station. Tolerances for the orbital characteristics should on one hand provide flexibility of satellite operators to manoeuvre their satellites without wasting too much fuel on the other hand provide no room for abuse to go out of the notified orbital characteristics; iii. Special cases in the orbiting phase should be taken into account and that regulatory procedures should clearly define this. iv. Appropriate regulatory provisions ought to be developed for frequency assignments to non-GSO space stations that do not maintain or exceed the orbital tolerances and the effects that will result from these exceedances on the file submitted to the ITU. <p><i>Part 2: Way forward</i> Request ATU administrations to:</p> <p>1. Contribute to the studies on this topic and actively participate in discussions.</p>

	<p>2. Support to adapt Appropriate regulatory measures for frequency assignments to non-GSO space stations if the operations are beyond the specified allowable tolerances.</p>
<p>AI 7 Topic B</p> <p>Post-milestone reporting procedure for non-GSO systems</p>	<p><i>APM23-3 agreed to:</i></p> <p><u><i>Part 1: Common position:</i></u></p> <ol style="list-style-type: none"> 1. Support changes to Resolution 35 (WRC-19) to remove resolves 19 and adoption of changes to RR Article 11 and a new resolution to capture the post-milestone procedure for systems subject to Resolution 35 (WRC-19) in order to ensure that the real number of deployed non-GSO satellite system in the space is reflected in the MIFR taking into consideration the complexity of the operation of Non-GSO systems. 2. Support that the development of the post-milestone procedures for Non-GSO satellite to cover the mandate of the WRC-19 Plenary session was only limited to frequency assignments to non-GSO systems in specific bands and services(FSS/MSS/BSS) subject to Resolution 35 (WRC-19). 3. Encourage that the operational features of non-GSO systems with a small number of satellites need to be further taken into account. 4. Support a regulatory solution aligning the post milestone procedures in this new Resolution with No. 11.49 and Resolution 35 (WRC-19). 5. Consider the application of only No. 13.6 by the BR insufficient as a solution for this Topic. <p><u><i>Part 2: Way forward</i></u></p> <p><i>Request ATU administrations to:</i></p> <ol style="list-style-type: none"> 1. Support the development of appropriate regulatory consequences for frequency assignments to non-GSO space stations that do not respect the future post-milestone procedures. 2. Consider when developing the post-milestone reporting procedures, some operational flexibility which is necessary for the maintenance of the non-GSO system in the FSS, BSS and MSS, may need to be duly considered without allowing any abuse.
<p>AI 7 Topic C</p> <p>Protection of geostationary satellite</p>	<p><i>APM23-3 agreed:</i></p> <p><u><i>Part 1: Common position:</i></u></p>

<p>networks in the MSS operating in 7/8 & 20/30 GHz from emissions of the Non-Geostationary Satellite systems operating in the same frequency bands and identical directions</p>	<p>Support the proposed regulatory solution to protect GSO MSS networks from the emissions of non-GSO systems and networks operating in the same bands and identical directions:</p> <ol style="list-style-type: none"> 1. 7 250-7 375 MHz (space-to-Earth), 2. 7 900-8 025 MHz (Earth-to-space), 3. 20.2-21.2 GHz (space-to-Earth), and 4. 30-31 GHz (Earth-to-space). <p><u>Part 2: Way forward</u> Request ATU administrations to:</p> <p>Support the studies on assessing the protection of GSO MSS operating in 7/8 and 20/30 GHz from emissions of non-geostationary satellite systems.</p>
<p>AI 7 Topic D</p> <p>Modifications to Appendix 1 to Annex 4 of Appendix 30B</p>	<p>APM23-3 agreed to:</p> <p><u>Part 1: Common position:</u></p> <ol style="list-style-type: none"> 1. Topic D1: Support the only method identified under this topic. 2. Topic D2: <ol style="list-style-type: none"> a. Support Method D2-2 as indicated in the draft CPM text in Annex (1) b. Support the possible upgrade of the Preliminary Draft Revision to Recommendation ITU-R S.1503-3 to a Draft Revision to Recommendation in Annex (2) 3. Topic D3: Support BR sending a reminder to the notifying administration regarding the confirmation of the BIU/BBIU date under Nos. 11.44B, 11.44C, 11.44D, and 11.44E, as applicable. <p><u>Part 2: Way forward</u> Request ATU administrations to:</p> <p>Topic D1: Support the only method identified under this topic to align Appendix 1 to Annex 4 of RR Appendix 30B with the values of orbital separation in §§ 1.1 and 1.2 of Annex 4 of RR Appendix 30B. With these modifications.</p> <p>Topic D2: Support Method D2, Modification of Appendix 4 to support the implementation of agreed revisions to Recommendation ITU-R S.1503-3, including new data elements and modified data elements</p> <p>Support possible endorsement of draft CPM text contribution in Annex (1) to upcoming Working party 4A.</p>

	<p>Support possible endorsement of draft contribution to the upcoming Working Party 4A in Annex (2) to upgrade the Preliminary Draft Revision to Recommendation ITU-R S.1503-3 to a Draft Revision to Recommendation.</p> <p>Topic D3:</p> <p>Support BR sending a reminder to the notifying administration regarding the confirmation of the BIU/BBIU date under Nos. 11.44B, 11.44C, 11.44D, and 11.44E, as applicable.</p>
<p>AI 7 Topic E</p> <p>Improved procedures under RR Appendix 30B for new ITU Member States.</p>	<p>APM23-3 agreed to:</p> <p><u>Part 1: Common position:</u></p> <ol style="list-style-type: none"> 1. Support ongoing studies to improve procedures under Appendix 30B of the Radio Regulations for new ITU Member States, in order to ensure equitable access to orbital and frequency resources. 2. Agree to Request WRC-23 to grant new ITU Member States, including South Sudan, the same right as those granted to administrations having no assignments in the Appendix 30B List, or under coordination, as adopted in Resolution 170 (WRC-19) 3. Support option 3 of Part E above noting that it is concerned with the pending network and not the network in the List (in operation) given that 7 administrations must coordinate with the satellite network in the List. <p><u>Part 2: Way forward</u></p> <p>Request ATU administrations to:</p> <ol style="list-style-type: none"> 1. Participate actively at the next WP4A meeting and support the 7 ITU new Member States concerned in this topic that include South Sudan.
<p>AI 7 Topic F</p> <p>Impact of excluding feeder-link/Up-link service and coverage areas in the bands subject to RR Appendix 30A and RR Appendix 30B</p>	<p>APM23-3 agreed to:</p> <p><u>Part 1: Common position:</u></p> <ol style="list-style-type: none"> 1. Note that for the down-link, there are provisions that facilitate an Administration or a group of named Administrations to coordinate the downlink. Nevertheless, it has not yet been the case for the feeder-link/up-link. 2. Note that there is no provision for the feeder-link/uplink to prevent one Administration from creating an obstacle to the establishment of space systems by other countries in the feeder-link/uplink. 3. Consider the following for satisfying this Topic: <ol style="list-style-type: none"> a. Introducing a provision in RR Appendix 30A that allows an Administration to request the exclusion of its national

	<p>territory from the service area of satellite networks of other Administrations .</p> <ol style="list-style-type: none"> Adding a footnote to that new provision and § 6.16 of Article 6 of Appendix 30B to request a notifying administration of a satellite network having high receiving sensitivity (relative satellite antenna gain of at least -20 dB) over territory of other Administration to accept uplink interference emanating from the territory of other Administration if so requested. Mandate WG4B to prepare the common African contribution proposing CPM text of the Topic to the next Working Party 4A. <p><i>Part 2: Way forward</i> Request ATU administrations to:</p> <ol style="list-style-type: none"> Actively participate in the work of WP4A in order to defend the Topic. to take into account case study (view to identify Appendix 30B assignments that mainly create an obstacle to the establishment of space systems by other countries) proposed by eight countries in the discussion of Topic F. Actively participate in the work under AIs 1.15 and 1.2 to ensure that these WRC-23 agenda items will not create obstacles for the deployment of national or sub-regional satellite networks of other countries in RR APP 30B.
<p>AI 7 Topic G: Revisions to Resolution 770 (WRC-19) (GSO PROTECTION FROM SINGLE ENTRY NON-GSO IN Q/V BANDS) to allow its implementation</p>	<p>APM23-3 agreed to: <i>Part 1: Common position:</i> Support the modification of Resolution 770, with the need to follow up on the results of discussions on this agenda item to ensure that there is no impact on geostationary satellites.</p> <p><i>Part 2: Way forward</i> Request ATU administrations to: Actively participate at the next WP4A meeting that will be held from 14-22 September 2022 and provide contributions.</p>
<p>AI 7 Topic H: Enhanced protection of RR Appendices 30/30A in Regions 1 and 3 and RR Appendix 30B</p>	<p>APM23-3 agreed to: <i>Part 1: Common position:</i></p> <ol style="list-style-type: none"> Support the enhancement of the protection of Appendices 30/30A in Regions 1 and 3 and Appendix 30B for networks in the Plan and the List. Support studies on this topic to provide a fair solution that ensures that the reference situation (EPM - equivalent protection margin) is not degraded due to the concept of “implicit agreement” in Appendices (30), (30A) and (30B).

	<p>3. Support the application of EPM degradation tolerance of 0.25 dB instead of 0.45 dB for protection of an assignment in the appendices 30, 30A in region 1 & 3 plans or assignments with national coverage from submission of a non-national coverage.</p> <p>4. Mandate WG4B to prepare the common African contribution proposing CPM text of the Topic to the next Working Party 4A.</p> <p><i>Part 2: Way forward</i> Request ATU administrations to:</p> <ol style="list-style-type: none"> 1. Actively participate in the work of WP4A in order to defend their interests in the Topic. 2. Contribute to the ongoing studies under this agenda item
<p>AI 7 Topic I: Special Agreements under RR Appendix30B.</p>	<p>APM23-3 agreed to:</p> <p><i>Part 1: Common position:</i></p> <ol style="list-style-type: none"> 1. Support the development of specific measures/regulatory text to restore adequate overall aggregate carrier-to-interference levels without changing the orbital position of the national allotment. 2. Support the development of a new WRC Resolution allowing national allotment, subject to agreements under § 6.15 of RR Appendix 30B, according to the proposal submitted to WP 4A in document 4A/641 3. Support Method I2 4. Mandate WG4B to prepare the common African contribution proposing CPM text of the Topic to the next Working Party 4A. <p><i>Part 2: Way forward</i> Request ATU administrations to:</p> <p>Participate and support the studies.</p>
<p>AI 7Topic J: Modification to Resolution 76 (Rev. WRC-15).</p>	<p>APM23-3 agreed to:</p> <p><i>Part 1: Common position:</i></p> <p>Support the contents of Document 691 in modification of Resolution 76 (Rev. WRC-15).</p> <p><i>Part 2: Way forward</i> Request ATU administrations to:</p> <p>Actively participate in the drafting of the CPM text for this topic.</p>
<p>AI 7 Topic K: Modification to Resolution 553</p>	<p>APM23-3 agreed to:</p> <p><i>Part 1: Common position:</i></p>

<p>(Rev.WRC-15) to ensure equitable access to the frequency band 21.4-22 GHz</p>	<ol style="list-style-type: none"> 1. Support: the proposals mentioned in the current working document; 2. Examine the Resolution 553 (Rev. WRC-15) with a view of finding any other modification which can help African countries to benefit from the Resolution. <p><i>Part 2: Way forward</i> Request ATU administrations to:</p> <ol style="list-style-type: none"> 1. Participate at the next WP4A that will be held from 14-22 Sept 2022 and contribute to discussions, taking into account other possibilities of applying the special procedure of Resolution 553 (Rev. WRC-15). 2. Contribute to the development of the CPM text.
<p>AI 7 Topic L: Development of proposed approaches to meet the needs to enable TT&C links of non-GSO IOS-based satellite systems performed by a spacecraft to maintain, repair, upgrade, refuel, de-orbit, or re-orbit a space asset Space debris object (CPO/RPD).</p>	<p>APM23-3 agreed to:</p> <p><i>Part 1: Common position:</i> Decide that it is necessary to ensure the protection of existing services in the frequency bands that will be used for TT&C frequencies for non-GSO satellite systems for maintenance in the IOS orbit (orbital service).</p> <p><i>Part 2: Way forward</i> Request ATU administrations to:</p> <ol style="list-style-type: none"> 1. Actively participate in the studies to determine the regulatory provisions of TT&C frequencies for non-GSO satellite systems for maintenance in the IOS orbit (orbital service) and emphasizing that it is necessary to ensure the protection of existing services in the frequency bands that will be used for this service. 2. Consider this matter with a view to develop the proposed approaches to address the needs of enabling TT&C links for Non-GSO IOS satellite systems and develop a common position at APM23-4.

1.5 Chapter 5: General issues

The Table below summaries the APM23-3 outcomes for AIs under this chapter:

<i>Agenda Item (AI)</i>	APM23-3 Outcomes
AI 2	<p>APM23-3 agreed to:</p> <p><i>Part 1: Common position:</i></p>

<p>to examine the revised ITU-R Recommendations incorporated by reference in the Radio Regulations communicated by the Radiocommunication Assembly, in accordance with further resolves of Resolution 27 (Rev.WRC19), and to decide whether or not to update the corresponding references in the Radio Regulations, in accordance with the principles contained in resolves of that Resolution;</p>	<p>Support the revision of ITU-R Recommendations incorporated by reference in the Radio Regulations communicated by the Radiocommunication Assembly, in accordance with <i>further resolves</i> of Resolution 27 (Rev.WRC-19), with a view to updating the corresponding references in the Radio Regulations.</p> <p><u>Part 2: Way forward</u></p> <p><u>Request ATU administrations to:</u></p> <ol style="list-style-type: none"> 1. Support the work of the radiocommunication study groups and the Radiocommunication Assembly on revision of those Recommendations to which mandatory references are made in the Radio Regulations; 2. Examine any indicated revisions of ITU-R Recommendations containing text incorporated by reference and to prepare proposals on possible updating of relevant references in the Radio Regulations. 3. Note and review the report of the Director of the Radiocommunication Bureau. to the second session of CPM. 4. Participate and monitor the progress of the ITU-R studies in the relevant Working Parties, which may propose revisions of ITU - R Recommendations.
<p>AI 4</p> <p>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;</p>	<p><u>APM23-3 agreed to:</u></p> <p><u>Part 1: Common position:</u></p> <p>Support the principle and intent of Resolution 95 (Rev.WRC-19), which is the regular review of Resolutions and Recommendations from previous conferences to ensure that the Resolutions and Recommendations remain relevant and up to date.</p> <p><u>Part 2: Way forward</u></p> <p><u>Request ATU administrations to:</u></p> <ol style="list-style-type: none"> 1. Participate in ITU-R studies where some of these recommendations and resolutions are being considered for reviews, replacement or abrogation. 2. Make efforts to study Recommendations and Resolutions of previous conferences to identify those that may have accomplished their purpose and are due for abrogation or those that may need reviewing or replacement in line with the African interest

	<ol style="list-style-type: none"> 3. Keenly follow activities and proposals from other sub regional groups on this agenda item to ensure that Africa will not be negatively impacted by the abrogation, review or replacement of certain resolutions or recommendations 4. Study the BR Director's report relating to this agenda item once it is submitted to ensure that any proposal for abrogation, review or replacement of some resolutions or recommendations is in line with African common interests. 5. Rapporteur on Agenda Item 4 to propose Recommendations and Resolutions for review by ATU administrations as per Part G: 2 above
<p>AI 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.WRC19);</p>	<p>APM23-2 agreed to:</p> <p><u>Part 1: Common position:</u></p> <p>Support as matter of principle, actions that promote global or regional harmonization of the use of radio spectrum including and in this particular case, removing country names from footnotes or adding names to footnotes where such actions foster harmonization, taking into consideration Resolution 26, <i>resolves and further resolves 1 "</i></p> <p><u>Part 2: Way forward</u></p> <p><u>Request ATU administrations to:</u></p> <ol style="list-style-type: none"> 1. Review relevant footnotes in the RR well ahead of time and identify footnotes that might require actions that foster global or regional harmonization by the concerned Member State under this agenda item. These actions could either be removal from or addition onto footnotes of country name. 2. Consider joining footnotes that support African spectrum use harmonization for example footnote 5.441B and 5.429B for the purpose of achieving continental/regional harmonization In the case of footnote 5.441B, APM23-3 requested the Member State of South Africa to lead in the development of regulatory text towards Agenda Item 1.1. 3. Review Annex B of the AfriSAP which indicates the RR Footnotes Containing <u>Explicit</u> References to African country names with a view to assessing the continued need of their country name in the said footnotes.

	<p>4. Make known, as early as possible, their proposals under agenda item 8 to other administrations who may be affected, with a view to resolving any potential challenges in seeking agreement of other administrations at WRC.</p> <p>5. Examine the preliminary proposals/positions of other administrations or regional groups and take appropriate action.</p>
<p>AI 9.2 on any difficulties or inconsistencies encountered in the application of the Radio Regulations;</p>	<p><i>APM23-3 agreed to:</i></p> <p><u>Part 1: Common position:</u></p> <p>Support measures to address any difficulties or inconsistencies encountered in the application of the Radio Regulations.</p> <p><u>Part 2: Way forward</u></p> <p>Request ATU administrations to:</p> <ol style="list-style-type: none"> 1. Note that the Director of the Radiocommunications Bureau will prepare a draft report to the second session of CPM. 2. Study and review the report of the Director of the Radiocommunications Bureau to WRC-23, and take appropriate action. 3. Examine the preliminary proposals/positions of other regional groups and take appropriate action.
<p>AI 9.3 ‘on action in response to Resolution 80 (Rev.WRC07); Resolution 80 (Rev.WRC07) Due diligence in applying the principles embodied in the Constitution</p>	<p><i>APM23-3 agreed to:</i></p> <p><u>Part 1: Common position:</u></p> <ol style="list-style-type: none"> 1. Strongly support, as a matter of principle, the full implementation of Resolution 80 (Rev.WRC-07) as a primary mechanism to foster application of equity and fulfilment of principles embodied in the ITU Constitution. 2. Note the report of the ATU Conference of Plenipotentiaries held in Algeria from 25 to 26 July 2022 in relation to an African Common Proposal to ITU PP-22 on the implication of invocation of Article 48 of the ITU Constitution.

	<p><u>Part 2: Way forward</u></p> <p><u>Request ATU administrations to:</u></p> <ol style="list-style-type: none"> 1. Note that the Director of the Radio Communications Bureau will prepare a draft report to the second session of CPM (CPM23-2). 2. Study and review the report of the Director of the Radiocommunications Bureau to WRC-23, and take appropriate action. 3. Continue making follow up on the outcome of Radio Regulations Board (RRB) meetings to see which issues have been identified as part of its <i>Report on Resolution 80 (Rev.WRC-07) to WRC-23</i>. 4. Note the response from the BR on the current status of the implementation of <i>resolves 1</i> of Resolution 80 (Rev.WRC-07) as requested by APM23-2 which stated that: <p style="margin-left: 40px;"><i>“the ITU-R has been carrying out numerous analyses to improve the efficient use of the GSO spectrum resource. This contribution to the efficient use has been accomplished through a variety of techniques and through adoption of numerous ITU-R Reports and Recommendations. In addition, other ongoing activities reflect the technical actions related to improving equitable access to the geostationary-satellite orbit/spectrum, in particular the current studies under WRC-23 Agenda item 7 Topics E and F”.</i></p> 5. Note that ATU Conference of Plenipotentiaries held in Algeria from 25 to 26 July 2022 adopted an African Common Proposal on implication of invocation of Article 48 of the ITU Constitution <i>whereby</i> it is proposed that: <ol style="list-style-type: none"> a. No Changes should be made to ITU Constitution; b. No Changes should be made to Radio Regulations; and, c. ITU PP-22 would request WRC to develop a guide on this issue taking into account points (a) and (b) above.
<p>AI 10 To recommend to the Council items for inclusion in the agenda for the next WRC, and</p>	<p><i>APM23-3 agreed to:</i></p> <p><u>Part 1: Common position:</u></p>

<p>to give its views on the preliminary agenda for the subsequent conference and on possible agenda items for future conferences, in accordance with Article 7 of the Convention.</p>	<ol style="list-style-type: none"> 1. Consider “<i>resolve 3</i>” of RESOLUTION 804 (REV.WRC-19), which “<i>encourages administrations and regional telecommunication organizations to submit, to the extent practicable, information on possible items/topics for the agenda of future WRCs under the WRC standing agenda item mentioned in resolves 1 to the second session of CPM</i>”, 2. Note anew possible topic for agenda of future WRCs as proposed by SADC as highlighted in (3) below, 3. Examine the topic for the agenda of future WRCs as proposed: 4. Topic 1: Protection of Radio Quiet Zones (RQZ) from Satellite mega-constellations submitted as per official template i.e. Annex 2 of the Resolution 804 (Rev.WRC-19). See Pages 6 and 7 below), and 5. Note that WG5 received a proposal under AI 10 from GSOA and that WG5: 6. Decided to note the proposal. 7. Advised GSOA to channel the proposal through Sub-Region(s) or ATU Member State(s) and resubmit at future meetings of WG5 and/or APM. 8. Decide that proposals to ATU Working Groups or APMs under AI 10 ought to be submitted by Sub-Regions or ATU Member State(s) only for reasons of ownership and accountability of subsequent necessary actions such as studies, and that for purposes of avoidance of doubt, proposals from Associate Members, Partners and Others, ought to be channelled through Sub-Region(s) or ATU Member State(s). <p><u>Part 2: Way forward</u></p> <p><u>Request ATU administrations to:</u></p> <ol style="list-style-type: none"> 9. Consider the proposal in Part 1 above with a view to addressing potentially difficult issues with the topics at the next meeting of WG5 and APM23-4, 10. Submit to an extent practicable possible items/topics for the agenda of future WRCs, at the next WG5 in order to allow other administrations to examine the proposals in good time before APM24-4. 11. SADC to provide more information on the proposed Agenda Item for WRC-27 as submitted
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