



STATUS OF ATU PREPARATIONS FOR WRC-19

Presentation to the ICAO AFI Regional Preparatory Group Workshop for the International Telecommunication Union World Radio Conference (ITU-WRC 19) preparatory.

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STRUCTURE OF ATU Preparatory Meetings (APM WRC-19)

The ATU Preparatory Meetings (**APM**) are responsible for developing the African Common Proposals (**ACP**) and briefs for WRC-19 and RA-19.

Below is the structure of APM:

Chairman: Mr Papa Cire Cisse,
SENEGAL

Vice Chairman: Mr Augustine
Nwaulune, NIGERIA

Secretary General: Mr
Abdoulakarim Soumaila

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MEMBERS OF THE AFRICAN TELECOMMUNICATION UNION

The ATU is composed of 45 African member states, with four (4) African Regional Economic Communities.



1. EAC- East African Community
2. ECCAS-Economic Community of Central African States
3. ECOWAS-Economic Community of West African States
4. SADC- Southern African Development Community





RECENT AND FUTURE ATU Preparatory Meetings

APM 1: 17-21 September 2016 in Nairobi, Kenya
WG Meetings (WG 1, WG 2, WG 3, WG 4, WG 5, WG 6)

APM 2: 11-15 September 2017 in Dakar, Senegal
WG Meetings (WG 1, WG 2, WG 3, WG 4, WG 5, WG 6)

APM 3: 17-21 September 2018 in Cairo, Egypt
WG Meetings (WG 1, WG 2, WG 3, WG 4, WG 5, WG 6)



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ATU Working Group Structure WRC 19

Chapter	Title	Agenda items	ATU Representatives /Rapporteur
Chpt 1 WG-1	Land, Mobile & Fixed services	1.11, 1.12, 1.13, 1.14, 1.15	Usman Aliyu, Nigeria ualiyu@ncc.gov.ng Ali Al Hadji, Cameroun AlhAlichetima@yahoo.fr
Chpt 2 WG-2	Broadband applications in the mobile service.	1.16, 9.1.1, 9.1.5, 9.1.8	Baxton Siweru, Zimbabwe siweru@potraz.gov.zw
Chpt 3 WG-3	Satellite Services.	1.4, 1.5, 1.6, 1.17, 9.1.2, 9.1.3, 9.1.9	Arthur Gnonsou, Benin garthur@arcep.bj
Chpt 4 WG-4	Science Services.	1.2, 1.3, 1.7	Mandialy Bodian, Senegal Mandialy.bodian@artp.sn
Chpt 5 WG-5	Aeronautical and Maritime & Amateur services.	1.1, 1.8, 1.9.1, 1.9.2, 1.10, 9.1.4	Lisa Tele, South Africa lisat@atns.co.za Abdouramane El Hadjar, Cameroun choco0742@live.ca
Chpt 6 WG -6	General issues	2, 4, 9.1.6, 9.1.7, 10	Peter Ngige, Kenya ngige@ca.go.ke



WG 5 Agenda Item : 1.10

Global Aeronautical Distress and Safety System (GADSS)

Support regulatory provisions that facilitate the implementation of the Global Aeronautical Distress and Safety System (GADSS) in accordance with ICAO's requirements, while protecting incumbent services.

Task WG5 to review the provisions contained within Chapters VI, VII and VIII (Articles 21–45) of the Radio Regulations related to aeronautical use of frequencies to determine whether any additional or modifications to existing provisions are required.



WG 1 Agenda Item : 1.11

Railway Radiocommunication Systems (RSS)

Support global or regional harmonization of frequency bands for use by railway radio communication systems between train and trackside (RSTT) within the existing mobile service allocation so that no additional constraints are imposed on services to which these frequency bands are already allocated.

Encourage administrations contribute and actively participate in sharing studies in the identified potential bands, in order to among other things, ensure that existing services are protected.

Encourage administrations to study the current and future spectrum needs for RSTT applications in order to support studies on harmonized frequency bands.

Request ICAO to provide information on ILS usage of 328.6 – 335.4 MHz in Africa to help in conducting the studies.



WG 1 Agenda Item : 1.12

Intelligent Transport Systems (ITS)

Encourage administrations to contribute and actively participate in sharing and compatibility studies on the agenda item.

Encourage administrations to ensure that the possible global or regional harmonized frequency bands for Intelligent Transport Systems (ITS) within existing allocations should not impose additional constraints on services already having allocations in these or adjacent frequency bands.

Invite administrations to consider developments on AI 1.16 when considering this agenda item (i.e. AI 1.12) due to frequency overlaps around 5.8GHz.



WG 2 Agenda Item : 1.13

Additional spectrum identification for IMT between 24.25 and 86 GHz

Support sharing and compatibility studies for the band and urge administrations to contribute and actively participate in the studies.

Note that ICAO does not support any identification of the frequency band for IMT that could impact aviation systems, within new or existing allocations to the mobile service in the frequency range 24.25 to 86 GHz, unless agreed ITU-R studies demonstrate no adverse impact to those systems. According to ICAO, the frequency band 24.25 – 24.65 is used for airport surface detection equipment (ASDE) in other regions outside of Africa.

Support the identification of the 32GHz band as a candidate for IMT under Resolution 238 (WRC15).

Support sharing and compatibility studies for the band and urge administrations to contribute and actively participate in the sharing and compatibility studies.



WG 1 Agenda Item : 1.14

High-Altitude Platform Stations (HAPS)

Support the introduction of technologies that seek to provide broadband connectivity in unserved and underserved regions and therefore support the sharing and compatibility studies provided that these studies demonstrate that HAPS and existing and planned services (including the services in the bands under consideration under AI 1.13 and 1.6 and adjacent bands) can co-exist.

Support appropriate regulatory actions to facilitate the use of HAPS, including modifying regulatory provisions in currently identified bands and identifications in candidate bands

Invite developers of HAPS to test and do trials in African areas with heavy-rain in order to test the robustness of the systems with respect to high attenuation (due to rain-fade).



WG 1 Agenda Item : 1.15

Land-mobile and fixed service applications in 275-450 GHz

Encourage administrations to closely follow the ongoing studies on the identification of frequency bands in the range 275-450 GHz for Land Mobile and Fixed Service applications to ensure the protection of passive services identified in No 5.565



WG 2 Agenda Item : 1.16

Wireless access systems, including radio local area networks (WAS/RLAN), in frequency bands between 5 150 MHz and 5 925 MHz

Take a preliminary view of No Change for all the bands (i.e. 5 150 - 5 350; 5 350 - 5 470; 5 725 – 5 850; 5 850 - 5 925 MHz) under this AI based on the previous study results which showed that co-existence is not feasible implying that the incumbent services would not be affected.

Encourage administrations to contribute and actively participate in studies with a view to ensure protection of existing in-band and adjacent band primary services.

Note that Côte d'Ivoire had proposed to consider footnote 5.453 of the RR which allocate the bands 5 725 – 5 850 MHz and 5 850 – 5 925 MHz to Fixed and Mobile Services at a primary basis for more than 47 countries worldwide and 18 African countries; so that it is premature to take a NOC as a preliminary view on all these bands.



WG 2 Agenda Item : 9.1.1

Implementation of IMT in 1885 - 2025 MHz and 2110 - 2200 MHz

Support the on-going studies in WP4C and WP5D, and to urge African administration to contribute and actively participate.



WG 2 Agenda Item : 9.1.5

Impacts of referencing Recommendations ITU-R M.1638-1 and ITU R M.1849-1 in Nos. 5.447F and 5.450A of the Radio Regulations

Support the on-going studies in WP5A, and to urge African administration to contribute and actively participate.



WG 2 Agenda Item : 9.1.8

Implementation of narrowband and broadband machine-type communication infrastructures from the spectrum perspective

Note Senegal view that “for the implementation of machine-based, narrow-band and broadband, Senegal supports studies for the development of Recommendations, Reports and / or Manuals, as well as the possibility of providing the necessary spectrum this type of network. Senegal has initiated a pilot project for "remote TV" in the 800 MHz band and proposes that compatibility studies are carried out in said band”.

Note GSMA view that all IMT bands should ideally be explored and considered for IoT applications and not to exclude some of them at least at the consideration stage. GSMA believes all IMT bands have an equal potential to be used for IoT applications as part of the new IMT service offerings.



WG 3 Agenda Item : 1.4

Review of Annex 7 to Appendix 30

Support the study of each limitation under Annex 7 to Appendix 30; studies of which these studies seek to explore ways of allowing better utilization of the orbit spectrum resource without creating undue constraints to all services in the band 11.7-12.7 GHz in all Regions.

Note that removal of these limitations should be associated with some implications on other networks currently in operation and registered successfully either in the PLAN or LIST but not implemented in some cases. That removal of these limitations may allow new networks to be registered which may increase or create burdens for coordination of new assignment.

Note that the principle of the Planned bands is to allow equitable access to the spectrum and associated orbital resources, removal of these limitations will add new orbital locations and frequency assignment, these resources must be allotted to member states first which may require further studies that is not in the scope in the agenda item, and therefore removal of these limitations may deviate the current principle of the Plan.

Note that based on the above, some administrations noticed that No change method is not included in the current draft CPM text, and therefore these administrations are in the view that No change method to satisfy this agenda item may reflect concerns mentioned above.



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WG 3 Agenda Item : 1.5

Earth stations in motion 17.7 19.7 GHz and 27.5-29.5 GHz

Note the need for compatibility studies with adjacent bands due to the fact that this band is adjacent to the band 24.25-27.5 GHz being studied for IMT;

Conclude that there is an increasing need for mobile-satellite broadband communications and given the studies conducted both in ITU-R WP4A and by the sub-regions and countries identification of the frequency bands 17.7-19.7 GHz and 27.5-29.5 GHz for ESIM operations can be supported whilst ensuring protection of, and not imposing undue constraints on, other existing primary services allocated in these frequency bands.

Conclude that each sub-region and countries having carried out the detail studies should submit their findings and report to the forthcoming meeting of WP4A as a sub-regional or country specific contribution.



WG 3 Agenda Item : 1.6

Non-GSO FSS satellite systems in 37.5-39.5 GHz and 39.5-42.5 GHz

Support the studies under Resolution 159 (WRC-15) which aim at developing a regulatory framework for new non-GSO FSS satellite systems, while protecting GSO FSS systems in the frequency bands above 30 GHz.

Encourage administrations to contribute towards further development of the three working documents in WP4A.

Note that the overlap in frequency bands with other AIs should not be an issue because this AI does not involve spectrum allocation/identification but rather regulatory framework for non-GSO FSS satellite systems in the stated four bands.



WG 3 Agenda Item : 7

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

Encourage administrations to support, contribute and actively participate in the studies;

Note that the milestone approach is the most favoured option at this stage;

Note that studies are currently focusing on non-GSO FSS.

Note that Report ITU-R SA.2348-0 identifies some of the regulatory challenges which this proposal for a simplified regulatory regime would seek to address in dealing with non-GSO small satellites with short duration missions.



WG 3 Agenda Item : 9.1.2

Compatibility of IMT and BSS (sound) in the frequency band 1 452-1 492 MHz in Regions 1 and 3

Encourage administrations to support, contribute and actively participate in the studies;

Encourage administrations to contribute and actively participate in the studies in order to ensure protection of incumbent services including IMT in the range 1452 – 1492MHz.

Note the good progress on this agenda item within the responsible ITU-R WP, namely WP 4A and WP 5D.

Note that some countries have or plan to implement services other than IMT in part or whole of the range.



WG 3 Agenda Item : 9.1.3

New non-Geo-satellite orbit systems in 4/6GHz bands
allocated FSS

Note that ITU-R studies so far show that it would be difficult to operate non-GSO circular orbit system for the purposes of global broadband network in the 6/4 GHz frequency bands.

Encourage administrations to review studies conducted on the issue in time, and make proposals during the next ITU-R Study Group 4 approval process of the studies.



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WG 3 Agenda Item : 9.1.9

Spectrum needs and possible allocation of the frequency band 51.4-52.4 GHz to the FSS (E-to-s)

Support studies on evaluation of additional spectrum needs for development of the FSS in accordance with resolves to invite ITU-R 1 of Resolution 162 (WRC 15).

Support sharing and compatibility studies with existing services for the consideration of a new primary allocation to the FSS in the frequency band 51.4-52.4 GHz (Earth-to-space) limited to FSS feeder links for geostationary orbit use as long as the protection of existing services are ensured.

Recall that 52% of responding countries to the ATU Questionnaire on the possible allocation of the band to FSS stated that they would support the allocation.

Invite administrations to consider developments under AI 1.13 due to potential overlaps of the bands.



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WG 4 Agenda Item : 1.2

In-band power limits for earth stations in 401-403 MHz and
399.9-400.05 MHz

Support the studies for the in-band power limits for earth stations operating in the mobile-satellite service, meteorological-satellite service and Earth exploration-satellite service in the frequency bands 401-403 MHz and 399.9-400.05 MHz to ensure protection of existing and future meteorological operations. In this regard, APM19-2 is invited to urge African administrations to contribute and actively participate in the studies.



WG 4 Agenda Item : 1.3

Meteorological-satellite and Earth exploration-satellite services in 460-470 MHz

Encourage administrations to contribute and actively participate in the studies being carried out in accordance with Resolution 766 (WRC 15) whilst maintaining a “no change “ to the current allocation status until studies prove that incumbent services are adequately protected with no additional constraints imposed on them. This view was informed by the heavy deployment of Mobile and Digital terrestrial television (DTT) services in the band and adjacent band in the majority of the African countries which need to be protected.



WG 4 Agenda Item : 1.7

Telemetry, tracking and command in the space operation service for non-GSO satellites with short duration missions

Support the ongoing studies and to urge ATU administrations to contribute and actively participate in the studies with a goal of ensuring protection of incumbent services, including the safety of life COSPAS – SARSAT system operating in the 406 – 406.1 MHz band.



WG 5 Agenda Item : 1.1

Amateur service in 50-54 MHz in Region 1

Note that SADC resolved to support the allocation of the 50 – 54 MHz band to amateur service considering among others that in most SADC countries the range is already allocated to amateur on a primary basis.

Support the allocation of 50 – 54MHz (or part thereof) to the Amateur service in principle subject to favourable compatibility studies with the incumbent services – final study result to inform the final decision.



WG 5 Agenda Item : 1.8

Global Maritime Distress Safety Systems (GMDSS)

Support studies on GMDSS Modernization following related activity in the IMO, in accordance with Resolution 359 (Rev.WRC 15).

Support introduction of additional satellite operator in the GMDSS, subject to IMO approval, in order to achieve, redundancy and global coverage in maritime safety services.

Encourage administrations to contribute to the development of suitable CPM text on the actual regulatory measures that could give effect to the objective in 1 and 2 above.



WG 5 Agenda Item : 1.9.1

Autonomous maritime radio devices

Urge administrations to ensure that any change to the regulatory provisions and spectrum allocation resulting from this agenda item do not adversely impact existing services.

Support the ongoing studies to protect the GMDSS system and the AIS devices that is crucial for maritime safety from the autonomous maritime devices.



WG 5 Agenda Item : 1.9.2

New VDES satellite component

Urge administrations to ensure that any change to the regulatory provisions and spectrum allocation resulting from this agenda item do not adversely impact existing services.



WG 5 Agenda Item : 9.1.4

Stations on board sub-orbital vehicles

Support the ongoing studies and encourage active participation in order to positively influence the outcomes of the studies.

Request the Secretary General to source experts who could conduct short seminars on the complex agenda items such as this one (i.e. AI 9.1-4).



WG 6 Agenda Item : 8

Deletion of country footnotes or country names from footnotes.

Note that it is desirable that preparations for AI 8 (footnotes) commence early in order to resolve the potential impact or issues on other administrations; and therefore,

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 view to identifying and resolving any potential issues that may arise, at an early stage.

Note ITU recommendation and invitation to administrations to indicate as soon as possible the footnote that they would like to modify. It was observed that this recommendation is consistent with numbers 1 and 2 above and therefore valid.

Note ICAO invitation that countries named regarding AI 8 in their contribution document (Input 01 - APM19-2 - ICAO Positions on WRC-19 Agenda Items) to kindly review their respective footnotes which ICAO said could have a negative impact on radio navigation services in their current form.



WG 6 Agenda Item : 9.1.6

Wireless Power Transmission (WPT) for electric vehicles

Support the ongoing sharing and compatibility studies between Wireless Power Transfer (WPT) systems and existing services.

Note that the 85kHz band is the preferred band with high probability of harmonisation and is the least likely to cause interference to other services.

Urge administrations to contribute to and actively participate in the ongoing studies to ensure that existing services are protected from spurious and out of band emissions from WPT applications, and to positively influence the outcome of the studies.

Note ICAO concern regarding the impact modulation on aviation systems.

Note that WP 1B Report ITU-R SM.2303 contains the potential impact/effects of radiation from WPT systems and invited administrations to consider the information.



WG 6 Agenda Item : 10

WRC-23 Agenda

Urge administrations and WG6 to actively consider possible issues for discussion under this agenda item with a view to resolving any possible arising issues at an early stage: doing so would avoid the past experience whereby AI 10 issues are raised during the concluding stages of WRC thereby presenting significant challenges in the thorough considerations of the issues.



Additional ATU Preparatory Meeting Information

<http://atu-uat.org/events>



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Thank you

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