



# **African Telecommunications Union**

**Report**

*of the*

**1<sup>st</sup> Meeting of the African Spectrum Working Group  
(AfriSWoG-1)**

*held from*

**12<sup>th</sup> to 14<sup>th</sup> November 2013**

*in*

**Nairobi, Kenya**

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## 1. INTRODUCTION

The ATU General Secretariat in line with circular No. 76/04/ATU/AfriSWoG convened the 1<sup>st</sup> meeting of African Spectrum Working Group (AfriSWoG) in Nairobi, Kenya from 12<sup>th</sup> to 14<sup>th</sup> November 2013. The meeting was held at the African Advanced Level Telecommunications Institute (AFRALTI) centre.

The objectives of the meeting included the following:

1. Launch of the Group as an inaugural meeting;
2. Establishment of the Group's own leadership;
3. Development of a working methodology and work plan of its activities;
4. Study the technical aspects of the WRC-15 agenda items and produce a report which will form the basis for technical discussions during the 2<sup>nd</sup> African Preparatory meeting for WRC-15 which shall be held in Khartoum - Sudan from 27<sup>th</sup> to 31<sup>st</sup> January, 2014;
5. Preparation for the forthcoming ITU Inter-regional WRC-15 Workshop to be held in Geneva - Switzerland from 4<sup>th</sup> to 5<sup>th</sup> December, 2013; and
6. Itemise urgent issues to be studied other than WRC-15 agenda items such as White Space.

The meeting was attended by 41 participants as representatives from 16 Member States (Burkina Faso, Burundi, Cameroun, Congo, Cote d'Ivoire, Ghana, Kenya, Malawi, Mozambique, Niger, Rwanda, Tanzania, Togo, Uganda, Zambia and Zimbabwe); 5 Associate Members (Ericsson, Google, Intelsat, SES and Qualcomm); the Radiocommunication Bureau of ITU; East African Communications Organization (EACO) and AFRALTI as partner organizations; Tertiary Education and Research Network of South Africa (TENET), Council for Scientific and Industrial Research of South Africa (CSIR) and iHub as interested organizations. The full list of participants is attached in **Annex 1**.

## 2. OPENING CEREMONY

Mr. Kezias Mwale, the Technical Coordinator acting on behalf of the Secretary General, Mr. Abdoukarim SOUMAILA, welcomed delegates and recalled the adoption of AfriSWoG framework by the Administrative council and reminded participants of the various ATU organs.

He highlighted that the AfriSWoG was a non-permanent organ of ATU and stressed the need for AfriSWoG meeting to develop technical recommendations that will feed into African Preparatory meeting for WRCs and other Radiocommunication conferences. He informed delegates that Africa must step-up the preparations for WRCs and promote the views and defend the interests of the continent in these fora. He thanked the member state of Kenya and Communications Commission of Kenya in particular for their continued support and goodwill towards activities of

ATU. He concluded by emphasizing the need to put in place a management structure and working methods to facilitate the work of AfriSWoG at this meeting and future meetings.

Mr. Eustace N. Maboreke, Director of the African Advanced Level Telecommunications Institute (AFRALTI) in his opening remarks, emphasized the role of AFRALTI in capacity building in Africa with respect to ICT and also informed the meeting that the Institute would in future engage AfriSWoG accordingly in its capacity building programs.

Mr. Philippe AUBINEAU, Counsellor, ITU-R Study Groups, ITU Radiocommunication Bureau, in his opening remarks, conveyed greetings and best wishes from the Director of BR, Mr. Francois Rancy, and expressed gratitude to ATU for the invitation to the 1<sup>st</sup> AfriSWoG meeting and looked forward to sharing the ITU's information on pertinent matters such as the preparations for WRC-15 and ITU-R Study Group activities including work on Cognitive Radio systems and White spaces.

### **3. APPOINTMENT OF THE MEETING BUREAU**

The meeting agreed to appoint the following meeting bureau:

Chairman	- Mr. Andrew KISAKA	(Tanzania)
Rapporteurs	- Mrs. Christine MUGIMBA	(Uganda)
	- Mr. Charles ACHEAMPONG	(Ghana)

### **4. ADOPTION OF AGENDA AND WORK PROGRAMME**

The draft agenda and draft work programme was adopted with amendments. The adopted Agenda is attached as **Annex 2**.

### **5. MANAGEMENT STRUCTURE AND DEVELOPMENT OF WORKING METHODS**

Following the appointment of the meeting Bureau and adoption of the agenda and work programme for the 1<sup>st</sup> AfriSWoG Meeting, members were briefed on the structures and working methods of various Regional groups, such as CITELE, CEPT, APT and RCC by Mr. Philippe AUBINEAU.

#### **5.1 Case Studies of other Regional Groups**

Presentations of the structures and working methods of other regional groups were made by the BR of the ITU. One of the main objectives of these regional groups is to ensure the development of common proposals for WRCs.

Following this presentation, the general conclusion of the meeting was that most regional groups have at least two sub-working groups having a common agenda: one dealing with radiocommunication conference preparation and the other dealing with technical studies relevant to spectrum and radiocommunication.

## 5.2 Formation of the AfriSWoG Structure and adoption of working methods

The meeting deliberated at length on the structure of AfriSWoG, and decided that there was need to have a simple and effective structure that would ensure adequate participation of all members of AfriSWoG.

It was then agreed by the meeting that the structure would have two sub-working groups: **Sub-Working Group for Radiocommunication Conference Preparation (RCP)** and **Sub-Working group for Spectrum Management and Engineering (SM&E)**. These sub-working groups would report to the plenary of AfriSWoG, which in turn would report to the relevant ATU meeting. Figure 1 below shows the adopted structure of AfriSWoG.

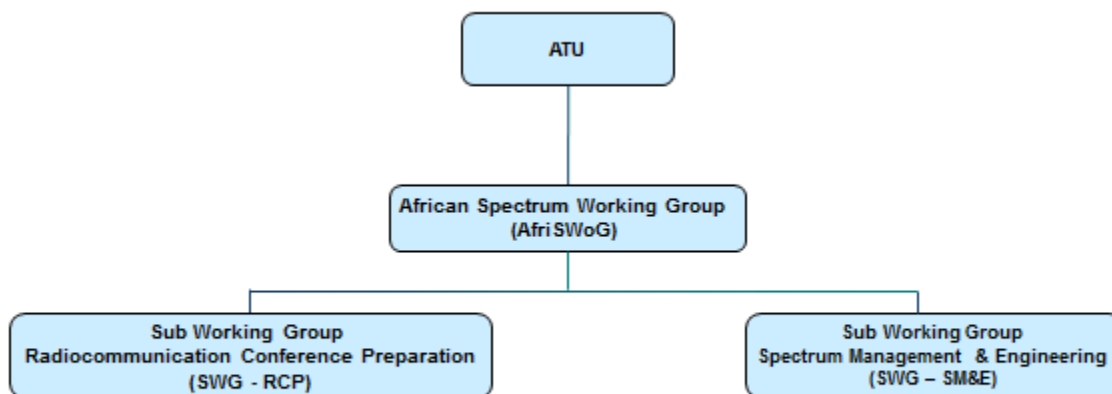


Figure 1: AfriSWoG Structure

## 5.3 Participation in AfriSWoG Meetings

It was recognized that focal points of AfriSWoG, as well as designated representatives of member's states and associate members may participate in the meetings/activities of AfriSWoG, along with representatives of ITU BR.

The meeting noted that, to facilitate the work of AfriSWoG it was very important that the various WRC Chapter coordinators and Agenda Item rapporteurs must participate in the work.

To this end, the meeting urged the General Secretariat to encourage the various WRC Chapter coordinators and Agenda Item rapporteurs to participate in its next meeting.

## 5.4 Working Methods

Following the adoption of the Structure of AfriSWoG, the meeting then tasked a group to consolidate content based on the input contributions from Zambia and Qualcomm submitted to the meeting on proposal for the working methods of AfriSWoG.

The meeting adopted the draft working methods document with the exception of Section (IX) on the issue of copyright. There was no consensus on this issue and consequently, it was agreed that the matter be referred to the Administrative Council through the General Secretariat. The meeting requested the ITU BR to explain the ITU approach on this issue and as a response the BR representative referred to information which can be found at: <http://www.itu.int/en/ITU-T/ipr/Pages/policy.aspx>, as well as at <http://www.itu.int/en/Pages/copyright.aspx>."

The adopted Working Methods is attached as **Annex 3** to this report.

Further the meeting adopted a formal template to be used for requesting studies attached as **Annex 4** to this report.

The meeting then agreed to proceed in its deliberation in-line with the adopted working methods. The input contribution documents were then grouped into the adopted sub-working groups as shown in **Table 1** below:

*Table 1: Groupings of Input Documents*

Grouping	Input Documents Allocation	
General Matters	Admin documents:	ADMN-1, ADMN-2
	Input documents:	INPT-3, INPT-6
	Info documents:	INFO-1, INFO-2, INFO-3, INFO-4, INFO-6, INFO-7, INFO-8, INFO-12, INFO-14, INFO-15, INFO-16
SWG - SM&E	Input documents:	INPT-3, INPT-5
	Info documents:	INFO-13, INFO-15
	Templates:	TPLT-1, TPLT-3
SWG - RCP	Input documents:	INPT-1, INPT-2, INPT-3, INPT-4, INPT-7, INPT-8, INPT-9
	Info documents:	INFO-5, INFO-9, INFO-10, INFO-11, INFO-13, INFO-16, INFO-17, INFO-18
	Templates:	TPLT-2, TPLT-3

## 6. PRESENTATIONS

ITU-BR presented an overview of work in respect to ITU-R Study Group 1 on Spectrum management including ITU-R studies on cognitive radio systems and white spaces. Some of the key reports cited included Reports ITU-R M.2225 and ITU-R SM 2152. He reminded the meeting that the WRC-12 had agreed that there was no need to modify the Radio Regulations, and that RA 12 approved Resolution ITU-R 58 to study further the implementation and use of cognitive radio systems.

The presentation also provided information on the following key areas in respect to White spaces; geo-location database, authorisation /licensing regime, protection of incumbent radiocommunications services, coordination in border areas and economic aspects, as well as upcoming ITU seminars and workshops on this topic.

A presentation on TV white spaces trials done by Google in partnership with CSIR<sup>1</sup> and Tenet in Cape Town - South Africa was made to the meeting. The presenters refereed all the meeting participants and all interested to [www.tenet.ac.za/tvws](http://www.tenet.ac.za/tvws) for more information.

All presentations made during the meeting can be found on ATU website [www.atu-uat.org](http://www.atu-uat.org)

## 7. REPORTS ON SUB-WORKING GROUPS

### **7.1 Spectrum Management & Engineering (SM&E)**

SWG-SM&E on its first meeting discussed the Technical Coordinator on the request for study on Digital Sound broadcasting including the optimisation of the GE84 FM Sound broadcasting Plan. In concurring with the proposed study the meeting observed the following:

1. Demand is far outstripping availability of FM frequencies to fully enable provision of FM sound broadcasting services in a number of countries to an extent where some countries have put a moratorium on licensing of new FM stations;
2. Furthermore there are issues of interference with the aeronautical band that have resulted in enforcement of stringent filtering parameters and other technical conditions such as offset of centre frequencies, power caps;
3. The study for addressing scarcity is welcomed given the key role of FM broadcasting services in providing access to information; and

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<sup>1</sup> The Council for Scientific and Industrial Research (CSIR) in South Africa (<http://www.csir.co.za>)

4. The need to increase the scope to include a critique of existing standards such as DRM and their related updates.

The Sub-working group agreed to adopt the request to study on Digital Sound broadcasting including the optimisation of the GE84 FM Sound broadcasting Plan as proposed (**Annex 5** refers) and invited contributions on this study using **Annex 6**.

## **7.2 Radiocommunication Conference Preparation (RCP)**

SWG-RCP on its 1<sup>st</sup> meeting discussed the input documents with respect to both WRC-15 Agenda Items 1.1, 1.2 and 9.1 issue 3.

### *7.2.1 Preliminary views and results on issues under Agenda Items 1.1 and 1.2*

The meeting noted the various positions and preliminary views from ECCAS, ECOWAS, SADC and certain administrations and associate members in identifying additional spectrum that can be identified for IMT in order to meet the expected increased demand for mobile broadband services and also the compatibility study between the mobile service and other services in certain frequency bands.

It was noted that sharing could not be feasible in certain bands especially those used for the aeronautical services. It was further noted that most preliminary views on the C-band was not to change the current allocation status of the band.

### *7.2.2 Alternative Approach For Interpreting The Monte Carlo Simulation Results for Studies under Agenda Item 1.2*

The meeting was informed that the objective of this approach was to reconcile the use of Monte Carlo approach with the need to take into account time element by converting the discrete Interference Probability (IP) into a probability which would better reflect the impact of interference on the DTT Channel 48 was noted but that views were divided in the last JTG 4-5-6-7 meeting on this approach.

### *7.2.3 Agenda Item 9.1.3 on use of satellite orbital slots for public international telecommunications services.*

The meeting noted ITU-R WP-4A document (Annex 23 to Document 4A/343) on WRC-15 Agenda Item 9.1.3 on use of satellite orbital slots for public international telecommunications services. Considering the importance of the agenda item to African countries, and the need to ensure that slots are available for international telecommunications services, administrations were urged to actively participate and contribute to work under ITU-R WP-4A. In addition, the



meeting urged the WRC-15 Chapter 5 Coordinator to keenly coordinate how best the region can effectively participate in positively influencing the outcome of this agenda item.

#### 7.2.4 Correspondence Group (CG)

The meeting agreed to establish a CG where there was the need to resolve certain issues pertaining to some WRC-15 agenda items and that such CGs would be headed by the Chapter Coordinator who would be supported by the Agenda Item Coordinator, other members of ATU and AfriSWoG are invited to participate in this CG.

In furtherance to the above and based on the input contribution by Egypt, the meeting established one (01) CG to deal with studies on out of band emissions in respect to Agenda Item 1.2 as reflected in **Annex 7**.

#### 7.2.5 Compilation of Preliminary Views and/or positions

The meeting discussed and adopted a common template to be used by AfriSWoG and member states in summarising preliminary views and/or positions as per **Annex 8**.

The meeting further noted a number of views from ATU member states, regional groups and associate members in respect to Agenda item 1.1 and 1.2.

The compilation of all views in respect to 1.1 and 1.2 is contained in **Annex 9** and **Annex 10**, respectively.

Furthermore the AfriSWoG recommendations emanating out of the compilation of the views was developed as contained in **Annex 11**. These recommendations are subject to change as new substantive information is received and analysed by AfriSWoG.

### **8. PREPARATION FOR THE 1ST ITU INTER-REGIONAL WORKSHOP WRC-15 PREPARATION**

The ITU-BR representative in his presentation gave an overview of the WRC -15 agenda items and responsible groups and also the objectives of the forthcoming ITU Inter-Regional Workshop on WRC-15 preparation, which will be held with interpretation in the six official languages of the ITU. He highlighted that an audio and video webcast will be available to enable participants who cannot attend to remotely follow the deliberations of the Workshop to be held in Geneva on the 4<sup>th</sup> to 5<sup>th</sup> December, 2013.

He emphasised the need to have one regional representative per session to discuss orally some preliminary views of the ITU Regional Groups.

The meeting agreed that General Secretariat would coordinate this activity in liaison with AfriSWoG Chairman and chapter coordinators and to ensure participation of ATU member

states as well as inform ITU-BR on the designated representatives. The outcome of the coordination would be reported to AfriSWoG accordingly.

The meeting further agreed that compilation of information by the Chapter coordinators under the assistance of Agenda Item rapporteurs should be ready by 22<sup>nd</sup> November 2013.

## **9. ELECTION OF MANAGEMENT TEAM OF AfriSWoG**

The nomination /election of the Management Team as comprised in Article 11 of the working methods was presided over by the representative of General Secretariat (Mr. Kezias MWALE) under the agreement of the meeting which cited neutrality reasons for this decision.

### **9.1 Distribution of representation**

The meeting agreed that the nominations should consider Regional distribution and balance during the nominations of the Management Team. Following consultations among the regional groups, the meeting agreed on the following distribution of positions:

- Chairman (01) – EAC
- Vice-Chairman (02) – SADC, ECOWAS
- Rapporteur (02) – ECCAS, NORTH AFRICA

### **9.2 Nomination and Appointment of persons to the Management Team**

#### **9.2.1 Nomination and Appointment of Chairman**

EAC regional group nominated Mr. Andrew KISAKA from Tanzania nomination for the Chairman position. The meeting ratified his nomination by acclamation and as such appointed him as Chairman.

#### **9.2.2 Nomination and Appointment of Vice-Chairmen**

The ECOWAS and SADC regional groups nominated Mr. Ahmed BORAUD from Niger and Mr. Silulami DOYI of South Africa as the Vice-chairmen of AfriSWoG as well as the Chairman for SWG-RCP and SWG-SM&E, respectively. The meeting ratified their nomination by acclamation and as such appointed them as Vice-chairmen of AfriSWoG as well as the Chairman for SWG-RCP and SWG-SM&E, respectively. The meeting urged them to collaborate closely.

### 9.2.3 Nomination and Appointment of Rapporteurs

ECCAS regional group nominated Mr. Mouhamadou AWALLOU from Cameroun for the position of Rapporteur for both AfriSWoG and the SWG-RCP. The meeting ratified his nomination by acclamation and as such appointed him Rapporteur for both AfriSWoG and the SWG-RCP.

Considering that North Africa regional group was not represented in the meeting, the meeting agreed that the second rapporteur for both AfriSWoG and the SWG-SM&E would be from the North Africa regional group and requested the General Secretariat to liaise with the region with a view to establishing the nomination for rapporteur for both AfriSWoG and the SWG-SM&E from the region.

## **9.2 Appointments effect and tenure of the Appointed Management Team**

The Management Team position holders appointments was with immediate effect and as such commissioned them to start its work with immediate effect and that their term of office would expire at the end of WRC-15 as per the adopted working methods.

## **10. ANY OTHER BUSINESS**

### **10.1 Studies on TV White Spaces**

There was a proposal on the floor to begin the studies on TV White Space. The meeting agreed that the request for this study should be submitted using the adopted template for requesting studies (Annex 4 refers) by any interested ATU member for adoption consideration. Further, the meeting observed that since ITU-R is currently undertaking studies on this issue, output documents of these studies could serve as inputs to the Sub-Working Group - SM&E. In this regard, the meeting encouraged SWG-SME to closely follow the studies in order for the sub-working group to appropriately guide ATU membership through AfriSWoG recommendations.

### **10.2 Harmonized Calculation Method for Africa (HCM4A) project**

Mr. Shola TAYLOR from Nigeria in his capacity as chief coordinator for the HCM4A project informed the meeting that the HCM4A Agreement was due to be finalized and sent to countries in Africa with a view to having countries sign the agreement. He urged the meeting participants to advise relevant authorities in their countries on this development.

### **10.3 Candidature for ITU Deputy Secretary General**

Mr. Shola TAYLOR from Nigeria informed the meeting of his candidature for the position of ITU Deputy Secretary General. The meeting welcomed this candidature and encouraged member to inform their various Administrations for support consideration of his candidature.

## **11. DATE OF NEXT MEETING**

The meeting agreed that in considering the date for the next meeting amongst others, ATU's Preparatory Meeting and the ITU-R activities should be considered. It was agreed that the next meeting of AfriSWoG should ideally take place during the 1st day of the 2nd ATU Preparatory meeting scheduled to take place in Sudan from 27th to 31st of January 2014 in order to review the Recommendations on the identified key agenda items/issues before submission the ATU meeting. In this regard the meeting urged the Chairman to coordinate with the General Secretariat on the possibility of having the meeting.

## **12. ADOPTION OF THE MEETING REPORT**

The meeting adopted the contents of the report as a true reflection of what transpired during the 1st meeting of the African Spectrum Working Group (AfriSWoG) between 12<sup>th</sup> and 14th November 2013.

## **13. VOTE OF THANKS**

Mr. Bernard AMISSAN-OCRAN from Ghana, on behalf of the participants, expressed profound gratitude to the member state of Kenya for hosting this meeting. He equally thanked AFRALTI, the General Secretariat, participating member states, associate members, and the logistics team all of whom he said played a key role in the success of a meeting.

## **14. CLOSING REMARKS**

Mr. Philippe AUBINEAU, the representative of the ITU BR, on behalf of the Director of BR and on his own behalf, expressed profound appreciation at the invitation to participate in the historical 1<sup>st</sup> meeting of AfriSWoG and wished the group all the best in its future endeavors. He expressed pleasure at outcomes of the meeting and the developments in general regarding AfriSWoG.

The Chairman in his closing remarks applauded the General Secretariat for taking the AfriSWoG initiative and for organizing its 1<sup>st</sup> meeting. He also thanked all participants for their active participation and encouraged continuous discussions between the face-to-face meetings of AfriSWoG via electronic means or otherwise. He particularly thanked associate members and the representative ITU BR for their active participation and requested their participation in all of future meetings of AfriSWoG.

Further, the Chairman urged all WRC-15 Chapter Coordinators to actively follow, advise on and coordinate information gathering and sharing for their respective chapters. In this regard, he requested participants to endeavor to remind the chapter coordinators of their role, wherever possible.

The Chairman concluded by declaring the meeting closed.

## **15. ATTACHMENTS**

Appendix 1: List of Annexes to the Meeting report

Appendix 2: List of inputs documents to the Meeting

### **Appendix 1: List of Annexes to the Meeting report**

Annex 1: List of participants

Annex 2: Agenda

Annex 3: Adopted Working Methods

Annex 4: Template for requesting a study

Annex 5: Digital Sound Broadcasting and Optimization of FM broadcasting plan

Annex 6: Template for input contribution for work of AfriSWoG

Annex 7: Terms of Reference for Correspondence Group on OoBE Studies under AI 1.2

Annex 8: Template for Proposals for ATU WRC-15 Common Views and-or Positions

Annex 9: A compilation of views on WRC-15 Agenda Item 1.1

Annex 10: A compilation of views on WRC-15 Agenda Item 1.2

Annex 11: Preliminary Recommendations on the key issues under WRC-15 AI 1.1 and 1.2

## **Appendix 2: List of inputs documents to the Meeting**

INPT 1 - ITSO Input Contribution on WRC-15 Agenda Item 1.1 – Commentary

INPT 2 - ITSO Input Contribution on WRC-15 Agenda Item 1.1

INPT 3 – Qualcomm Input Contribution on various issues

INPT 4 - Egypt Input contribution on establishment of CG on OoBE studies under WRC-15 AI 1.2

INPT 5 - General Secretariat requesting studies on Digital Sound Broadcasting + Optimization of GE84 Plan

INPT 6 - Zambia Input Contribution on Proposals for Working Methods of AfriSWoG

INPT 7 - SADC Input Contribution on the sub-region preliminary views on various WRC-15 Agenda Items

INPT 8 - ECCAS Input Contribution on the sub-region preliminary views on various WRC-15 Agenda Items

INPT 9 - Final Report ECOWAS WRC-15 Preparatory and DSO meeting ABUJA 1-5 July 2013 - provided by Nigeria

INPT 9 - Annex 1 - Input to 5D July Meeting regarding work on Agenda 1.2

INPT 9 - Annex 2 - Input to JTG 4-5-6-7 Comment on 5D LS to JTG July 2013 Meeting - Suitable frequency bands under WRC-15 Agenda item 1.1

INPT 9 - Annex 3 - Input to JTG 4-5-6-7 July 2013 Meeting on its work on Agenda 1.2

INPT 9 - Annex 4 - Response to ITU-R WP 6A Questionnaire on DTT Spectrum requirements

INFO 1 - ATU Membership

INFO 2 - AfriSWoG Focal Points

INFO 3 - ATU WRC-15 Chapter and Vice Coordinators

INFO 4 - ATU WRC-15 Work Plan and WRC-12 Outcome Implementation Strategy - outcome of WRC-15 APM-1

INFO 5 - Views on WRC-15 Agenda Item by various member states and organizations - outcome of WRC-15 APM-1

INFO 6 - ITU-R Resolution 1-6 Working methods for ITU RA, ITU-R Study Groups and RAG

INFO 7 - ITU-R Resolution 2-6 Working methods for ITU Conference Preparatory Meeting (CPM)

INFO 8 - Guidelines for the working methods of ITU RA, ITU-R Study Groups and related groups

INFO 9 - Alternative MC method as proposed by France during the Oct 2013 JTG meeting

INFO 10 - GVF Satellite Industry Position Paper - submitted by ITSO

INFO 11 - Working Document towards studies under WRC-15 agenda item 9.1, issue 9.1.3 - submitted by Uganda

INFO 12 – WRC-15 key dates - submitted by Uganda

INFO 13 - Report\_DAKAR WRC-15 Preparatory Meeting Report\_EN

INFO 14 - Other Region spectrum working group's Organization - provided by BR

INFO 15 - Information relevant to itemization of Topics for possible study - provided by BR

INFO 16 - CPM-15, RA-15 and WRC-15 updated preparations - provided by BR

INFO 17 - Info on the 1st WRC-15 Inter-Regional Workshop - provided by BR

INFO 18 - ICAO Positions on WRC-15 Agenda Items - provided by ITSO

TPLT 1 - Template for proposing Topics for (urgent) study by AfriSWoG

TPLT 2 - Template for Proposals for ATU WRC-15 Common Views and Positions

TPLT 3 - Template for input contribution to work of AfriSWoG