



## INTERNATIONAL CIVIL AVIATION ORGANIZATION

## WESRTEN AND CENTRAL AFRICAN OFFICE

Sixth Meeting of the APIRG Communications, Navigation  
and Surveillance Sub-group (CNS/SG/6)

Dakar, Senegal, 18–22 May 2015

**Agenda Item 4: Review the status of implementation of CNS/SG Work Programme and related Task forces/Working Groups as assigned by APIRG****Spectrum issues***(Presented by the Secretariat)***SUMMARY**

This working paper reviews the progress made by the AFI Frequency Management Group with regards to of the AFI Air Navigation Plan, identifies deficiencies and remedial action

**Action by the meeting is at paragraph 3.**

**REFERENCE**

- **Annex X**- Aeronautical Telecommunications -Volume V
- **Doc. 9718**-Handbook on Frequency Spectrum requirements for Civil Aviation-Volumes I & II
- **Doc 9702** - Report of the Seventh Africa-Indian-Ocean Regional Air Navigation
  - AFI / RAN /7 Meeting
- Report on the AFI SP AFI / RAN /8 Meeting
- Reports on APIRG Meetings

*Note: References can be downloaded from [www.icao.int/wacaf](http://www.icao.int/wacaf).*

Related ICAO Strategic Objectives: **A: Safety; B: Air Navigation Capacity and Efficiency**

Related ICAO ASBU Performance Improvement Areas and Block0 Modules: All CNS related Modules

**1. Introduction**

ICAO is preparing its participation to ITU World Radio Conference (ITU-WRC-15) which will take place in Geneva, Switzerland from 2<sup>nd</sup> to 27<sup>th</sup> November 2015. In this regard the ICAO position for WRC-15 adopted by its Council was transmitted to AFI contracting States by the Secretariat and actions have been undertaken in the region in coordination with the AFI Frequency Management Group

**2. Discussion**

2.1 The Secretariat coordinates the attendance of the AFI civil Aviation community to the first and third preparatory meetings of the African Telecommunication Union (ATU) held respectively in Dakar, Senegal from 18 to 20 March 2013 and in Abuja, Nigeria from 26 to 30 January 2015.

2.2 During these meetings the ICAO views were presented based on the aim to ensuring that the ITU Radio Regulations shall not be in conflict with ICAO Standards and Recommended Practices, enabling the advancement of technological innovation to maintain and enhance the safety of the global air transport system as well as increasing efficiency in spectrum utilization.

2.3 ICAO position on the WRC-15 Agenda Items of particular importance to civil aviation (1.1; 1.5; 1.17 and 9.1.5) was presented in detail and ICAO specific views on the other various Agenda Items recorded under each respective agenda items in particular agenda items 1.4: 1.6: 1.7: 1.10: 1.11: 1.12: 1.16: 4: 8: 9.1.1: 9.1.6 and

2.4 The attention of the meetings was drawn on that a long-term VSAT spectrum availability and protection from interference needs to be guaranteed across the entire African continent and other parts of the world as recommended by the ICAO 12<sup>th</sup> Air Navigation Conference held in November 2012 in Montreal.

2.5 ASECNA, the Rapporteur of AFI Frequency Management Group presented the spectrum requirements for the safe provision of various air navigation services as recommended by the international Civil Aviation Organization (ICAO Doc. 9718 refers.);

The Rapporteur highlighted instance of interferences with FM broadcasting stations systems in some countries experienced in some of the adjacent VHF bands (108 to 116 MHz) and affecting both Air Traffic Controller /Pilot voice and data Communications and Aeronautical Radio Navigation Services including critical phase of flight (approach and landing phases) as well.

2.6 The C-Band operated by the aeronautical VSAT networks for both Ground/Ground and Air/Ground communication within and across the continent was reported to be interfered by IMT devices in some countries leading to aeronautical service short come. The meetings were reminded on the outcome of ITU studies reported in M.2109 and S.2199 that concluded on the incompatibility of sharing the 3 400 – 4 200 MHz and 4 500 – 4 800 MHz bands between FSS and IMT.

2.7 The first preparatory meeting confirmed that there have been reports of such interferences between the FM sound broadcasting band (87.5 to 108 MHz) and the adjacent aviation band (108 to 136 MHz) in some countries, considered the threat on the C-Band and therefore recommended the following:

*That:*

*a) Air Navigation Service Providers (ANSPs) such as ASECNA and Civil Aviation Authorities (CAAs) are encouraged to inform the Telecommunication Regulators as soon as such interferences occur for urgent and immediate actions;*

*b) Countries that have experienced such interferences are urged to investigate and share the results with all Administrations through the ATU Secretariat, in order to share experience to facilitate timely intervention by other Administration;*

*c) ATU members states reinforce their support to the existing and future FSS earth stations in the 3 400-4 200 MHz band used for satellite communications related to safe operation of aircraft and reliable distribution of meteorological information by participating in the studies for possible technical and regulatory measures called upon by Resolution 154 (WRC-12).*

2.8 The issue related to the protection of the C-Band will be discussed under WRC 15 **Agenda Item 9.1.5: Fixed Satellite Service (FSS) systems used for aeronautical purposes.**

ICAO in liaison with AFI/FMG Rapporteur developed the Contribution to the work of ITU Radiocommunication Study Groups (Working Party 4A). This contribution was endorsed by the conference Preparatory Meeting (CPM) as a draft revised Resolution 154 to be presented to WRC-15 and States could use it as the basis to make their proposals to the Conference (November 2015). The draft Resolution is presented in Appendix to this Working Paper.

The future action should aim to avoid that the text gets downgraded or weakened in the CPM meeting because of the real risk of strong opposition by the IMT Community.

ATU is convening its 4<sup>th</sup> and last preparatory meeting in Nairobi Kenya from 20 to 24 July 2015.

### **3. Action by the meeting**

The meeting is invited to:

- a) Take note of the information given above
- b) Urge AFI States to strongly support ICAO position for WRC-15
- c) Encourage Administrations/Organization to support the draft revised resolution 154 that will be discussed under WRC-15 agenda item 9.1.5

End