

#### INTERNATIONAL CIVIL AVIATION ORGANIZATION

# Third Meeting of the APIRG Communications, Navigation and Surveillance Sub-Group (Nairobi, 26-30 April 2010)

## **Agenda Item 5:** Aeronautical mobile service (AMS)

(Presented by the Secretariat)

#### **SUMMARY**

This paper reviews the progress in the implementation of the Aeronautical Mobile Service (AMS) and identifies deficiencies that are still to be resolved.

Action to be taken is at paragraph 3

**Reference:** APIRG/16 Report

S/SG/2 Report SP AF RAN Report

#### 1. INTRODUCTION

**1.1** With the implementation of all the pending VSAT networks in AFI, the main area of serious deficiencies is AMS. Since the last CNS meeting no new AMS systems have been implemented and this has lead to deterioration of the system.

#### 2 DISCUSSION

- 2.1 At the last CNS/SG meeting IATA informed the meeting that VHF Survey will be done every 18 months. States were requested to cooperate and to submit the designed VHF forms. Only four States submitted the first VHF survey forms to the regional office.
- 2.2 Reports have been received in the regional office on serious deficiencies in AMS at the following FIRs: Luanda, DR Congo, Brazzaville, Ndjamena, Nigeria and Zimbabwe. However, in Harare FIR there has been improvement in the quality of communication but the coverage of the VHF signal has been reduced.

2.3 The VHF stations in AFI Region have been affected by interference from other VHF facilities notable FM broadcast. Close coordination between the frequency regulators and the Civil Aviation Authorities is needed in order to overcome these difficulties.

#### 2.4 **HF Communications**

**2.4.1** Due to large Continental areas and oceanic areas, some States have to operate HF voice communication facilities. The HF communication has been subjected to propagation difficulties and interference. With the ICAO frequency management program, improvement in the service is envisaged. AFI is also hoping to take the matter with ACP-WG-F for submission to ITU-R.

### **Identification of deficiencies**

- **2.5** The secretariat has updated the list of deficiencies in AMS field as shown in **Appendix A** based on mission reports to States.
- 2.6 The Secretariat has received reports of serious deficiencies concerning FIRs Luanda and Kinshasa. Luanda FIR is particularly worrying in the absence of communications both, VHF and HF communications while crossing the FIR.

#### 3 ACTION BY THE MEETING

- **3.1** The CNS/SG is invited to:
  - a) Note the information provided above;
  - b) States to update any the meeting on the VHF projects being undertaken;
  - c) Review and update the list of deficiencies at Appendix A;
  - **d**) Adopt a conclusion regarding deficiencies related to VHF communication in FIRs Luanda, Kinshasa, Brazzaville and N`Djamena.

# LIST OF DEFICIENCIES IN THE AIR NAVIGATION FIELDS AMS

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State Name	Requirements	Facilities or Services	Description of Deficiency	Date first reported	Comments on Deficiency	Description of Corrective action	Executing Body	Target date for implementation	Priority
Angola	AMS AFI/7 Rec. 9/12	Luanda FIC	Inadequate VHF coverage of busy ATS routes	1998	Implement remote VHF stations	5 VHF stations to be installed by the end of 2001	ENANA		U
	AMS AFI/7 Rec. 9/12	Luanda FIC	HF poor quality and unavailable in oceanic area	2004	Improve facilities	Install adequate equipment	ENANA		U
Congo	AMS AFI/7 Rec. 9/12	Brazzaville FIC	Inadequate VHF Coverage	2009	Improve facilities	Install adequate equipment	ASECNA	2011	U
Chad	AMS AFI/7 Rec 9/12	N`Djamena FIR	Inadequate VHF Coverage	2009	Improve facilities	Install adequate equipment	ASECNA	2011	U
Dem. Rep. of Congo	AMS AFI/7 Rec. 9/12	Kinshasa FIR	Inadequate VHF coverage of busy ATS routes	1998	Improve facilities	Extension VHF coverage in progress	DR Congo	2006	U
	AMS AFI/7 Rec. 9/12	Kinshasa FIR	HF poor quality Selcal not available	1998	FIC Kinshasa OP> April 2005	New equipment being installed	DR Congo	2006	U
Libya	AMS AFI/7 Rec. 9/12	Kinshasa FIR	Inadequate VHF coverage of busy ATS routes	2004	Implement remote VHF stations		Libya		U
Malawi	AMS AFI/7 Rec. 9/12	FIR Lilongwe	VHF coverage incomplete	2001	Install additional VHF relay stations at Muzuzu and Zomba	Extension VHF coverage in progress. Equipment in place	Malawi	2003	U
Nigeria	AMS AFI/7 Rec 9/12	Kano FIR	Inadequate VHF Coverage	2009	Improve facilities	Install adequate equipmemt	NAMA	2011	u
Somalia	AMS AFI/7 Rec. 9/12	Mogadishu ACC	Lack of VHF coverage of busy ATS ROUTES	1998	Implement remote VHF stations	Install VHF relays	Somalia		U