INTERNATIONAL CIVIL AVIATION ORGANIZATION

**AFI PLANNING AND IMPLEMENTATION REGIONAL GROUP
COMMUNICATIONS, NAVIGATION AND SURVEILLANCE SUB-GROUP SECOND MEETING
CNS/SG/2**

(Dakar, Senegal , 22-25 May 2007)

(Presented by ASECNA)

SUMMARY

The present Working Paper gives a progress report on the implementation of rationalized AFS Projects in ASECNA area. After APIRG 15 meeting, ASECNA has planned to overcome AFS and is involved in regional projects. The interoperability between AFS systems requires close cooperative actions between ANSP.

Agenda Item 4: Aeronautical Fixed Service

1. Improvement of the Aeronautical Fixed Service

Since the last CNS/SG/1 meeting the following AFI planned circuits have been implemented or improved through AFISNET satellite links:

Links and Circuits	Supported AFS Services	Date of implementation	Link Equipments	Service status
Alger – Niamey	AFTN-ATS/DS)	April 2006	AFISNET Station in ALGER	Ok
Alger – Dakar	ATS/DS	April 2006	AFISNET Station in ALGER	Ok
Dakar – Bissau	AFTN-ATS/DS)	January 2006	AFISNET Station in Bissau	Ok
Dakar – Banjul	AFTN-ATS/DS)	January 2007	AFISNET Station in Banjul	Ok
Accra – Ouagadougou	AFTN-ATS/DS	March 2007	Interconnection of existing AFISNET stations in ACC & OUA	Ok
Accra-Bobo-Dioulasso	ATS/DS	March 2007	Interconnection of existing AFISNET stations in ACC & BOY	Ok
Brazzaville – Sao Tome	AFTN-ATS/DS	March 2007	AFISNET Station in Sao Tome	Ok
Libreville – Sao Tome	ATS/DS	March 2007	AFISNET Station in Sao Tome	Ok
Malabo– Sao Tome	ATS/DS	March 2007	AFISNET Station in Sao Tome	Ok

2. <u>Near future projects to solve the deficiencies</u>

2.1 Modernization of Automatic Message Switching Systems

The renewal of the Automatic Messages Switching system in progress in the following centres (Douala, Bangui, Malabo, Abidjan, Libreville , Niamey, Dakar and Brazzaville) to be completed by September 2007 will improve notably the AFTN operation.
These equipments are designed with an option to comply AMHS functionalities.

2.2 Implementation of AFI planned AFS circuits

2.2.1 On going Projects

ASECNA is involved in regional projects (NAFISAT/SADC 2, CAFSAT) to implement the remaining AFS circuits.
Coordinating meetings have been held in one side with ATNS & ICAO and the other side with AENA, ONDA , ENNA in order to build an harmonized balanced interconnecting process between AFISNET and the above networks. on the and one can hope that by the end of year 2007 the following AFS circuits will be achieved:

Terminal I	Terminal II	AFS Service		Actions in progress
		AFTN	ATS/DS	
Brazzaville	Luanda	x	x	*Within the framework of the AFISNET and NAFISAT SADC/2 networks interoperability, planned for the July, 2007.*
Abidjan	Luanda		x	
Brazzaville	Nairobi	x		
Brazzaville	Khartoum		x	
N'djamena	Khartoum		x	
N'Djamena	Tripoli		x	
Niamey	Tripoli		x	
Niamey	Addis	x		
Antannarivo	Seychelles		x	
Bata	Douala		x	*Implementation of an AFISNET node in progress in Bata*
Bata	Sao Tome		x	
Bata	Libreville		x	
Nouakchott	Las Palmas	x	x	*Implementation of a CAFSAT node in progress in Nouakchott*
Nouadhibou	Las Palmas		x	*Implementation of a AFISNET node in progress in Las Palmas*
Mopti	Bamako	x	x	*Implementation of an AFISNET node in progress in Mopti*
Mopti	Gao	x	x	

2.2.2 Future Projects to be planned

One can hope that by the end of year 2007 the above AFS circuits will be achieved:
It remains the following AFS circuits to be implemented in a cooperative approach:

Terminal I	Terminal II	AFS Service		Actions in progress
		AFTN	ATS/DS	
Bangui	Gbadolite		x	ASECNA and RVA to coordinate
Bissau	Banjul		x	ASECNA and GCAA to coordinate
Bissau	Conakry		x	ASECNA and Roberts FIR to coordinate
Banjul	Conakry		x	

3. <u>Other technical disposals to solve the deficiencies</u>

In addition to its efforts for the implementation of the AFTN and ATS/DS circuits, ASECNA carried out improvement actions in:

- Upgrading the transmission rate of the most AFTN circuits in accordance with APIRG/12 conclusion 12/13 ·
- Implementing a Frame relay network in accordance with APIRG/13 conclusion 13/10;
- Implementing SATPHONE as ATS/DS backup in all its centres;
- Conducting a technical and operational internal evaluation of AFS and its related equipments;
- Upgrading continually the backbone of its network to suit the technology evolution.

4. <u>Conclusion</u>

The meeting is invited:

- To note the information given above
- To encourage the cooperative actions regarding the AFS circuits implementation/improvement