



INTERNATIONAL CIVIL AVIATION ORGANIZATION

AFI PLANNING AND IMPLEMENTATION REGIONAL GROUP SEVENTEENTH MEETING (APIRG/17) (Burkina Faso, 2 to 6 August 2010)

Agenda Item 3: Issues relative to the planning and to the implementation of air navigation in the AFI Region.

Point on the Communication, Navigation and Surveillance (CNS)

(Note presented by ASECNA)

Sommaire

This working paper presents briefly ASECNA Surveillance plan. It indicates the situation of its implementation and its perspectives.

REFERENCES :

- Aeronautical Surveillance Plan, by ICAO for AFI Region AFI (Doc 7474) ;
- APIRG 16 meeting report
- RAN/AFI/SP Report
- Report of the first meeting on aeronautical surveillance implementation.

1. Introduction

1.1. The implementation of ASECNA surveillance plan allowed a first level of surveillance services through 5 SSR implemented in Ndjamen, Dakar, Niamey, Abidjan and Brazzaville for the needs of the en route control. They are completed by ADS-C cover on all the FIRs including Antananarivo FIR.

1.2. To use these Radars and supply the ADS-C service, ASECNA endowed the 5 ACC concerned, with flight data processing automatic system and air situation display which can handle flight plan track, radar and ADS-C.

2. Implementation status

FIR	Object	State of implementation	Date	Observations
Ndjamena	SSR (mode A/C compatible mode S)	Operational	10/05/07	Safety Assessment finalised (FHA, PSSA, SSA)
	FDPS/FPASD/ADSC-C/CPDLC	Operational	01/07/10	
Dakar	SSR (mode A/C compatible mode S)	Preoperational	01/07/10	Safety Assessment finalised (FHA,PSSA,SSA)
	FDPS/FPASD/ADSC-C/CPDLC	Operational	24/09/09	
Niamey	SSR (mode A/C compatible mode S)	Preoperational	11/03/10	Safety Assessment finalised (FHA, PSSA, SSA)
	FDPS/FPASD/ADSC-C/CPDLC	Operational	01/07/10	
Abidjan	SSR (mode A/C compatible mode S)	Preoperational	01/07/10	Safety Assessment finalised (FHA,PSSA, SSA)
	FDPS/FPASD/ADSC-C/CPDLC	Operational	01/07/10	
Antananarivo	FDPS/FPASD/ADSC-C/CPDLC	Operational	Year 2001	Safety Assessment finalised (FHA, PSSA, SSA)
Brazzaville	SSR (mode A/C compatible mode S)	Equipments implemented	ADS/CPDLC operational implementation expected on January 2011 and SSR on May 2011.	
	FDPS/FPASD/ADSC-C/CPDLC			

3. Drawback in the implementation process

3.1 Presently, all ASECNA FIRs are equipped with ADS-C/CPDLC/SSR. Meanwhile, due to the aircraft fleet low percentage of equipage in our airspace, these equipments operational use remain very weak.

4. Perspectives

4.1 The technologies of surveillance evolution leads ASECNA to update the equipment and service plan (PSE 2009/2013) in view to take into account ADS-B and MULTILATERATION. This will allow ASECNA to spread surveillance services over its whole air space.

4.2 ICAO Actions undertaken to standardize MULTILATERATION will be likely to encourage the usage of this technology.

4.3 These new technologies (ADS-B and MULTILAT) being cooperative require a board equipment capable to perform air /ground communications. The lack of on board equipage will cancel all the efforts done to install grounds equipments. In view to assure efficient implementation, it is essential that air and ground equipment be done simultaneously.

5. Required action

The meeting is invited to :

- 5.1 Take note of the information provided in the present working paper;
- 5.2 Encourage ICAO in its actions to provide aviation community with MULTILATERATION Standardization.
- 5.3 Plan a mandatory carriage of ES transponder to support ADS-B operation.
