



**ORGANISATION DE L'AVIATION CIVILE INTERNATIONALE**  
**DIX-SEPTIEME REUNION DU GROUPE REGIONAL DE PLANIFICATION**  
**ET DE MISE EN OEUVRE DE LA REGION AFI (APIRG/17)**  
**(Burkina Faso, 2-6 aout 2010)**

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**Agenda item 3: AFI planning and implementation strategy**

**National and Regional performance framework**

*(Presented by 'ASECNA)*

**SUMMARY**

Performance objectives in planification and assessment at national and regional level :  
 ASECNA Services et Infrastructure Plan

**1. Context**

ASECNA is the air navigation service provider for 17 western and central African states<sup>1</sup> as well as Madagascar and the Comoros. ASECNA provides air navigation and meteorological services intended to guarantee the regularity and the safety of international commercial air transport, as well as international general aviation

The Agency major strategic objectives are:

- Reporting results to member states' Civil Aviation Regulatory Authorities;
- Maintaining continuous improvement of operational performance with quality assurance in order to satisfy airspace and airports users in terms of cost and safety.

**2. Implementation of Air Navigation Services and Infrastructure**

2.1 The aim of the Air Navigation Services and Infrastructure Plan is to make ASECNA air navigation services compliant to the World Air Navigation Plan and so forth to AFI Air Navigation Plan.

2.2 ASECNA Services and Infrastructure Plan meets operational objectives in accordance to users needs; this Plan meets also the regional strategy , Regulatory Authorities orientations and the Director General's directives as regard to optimization of resources and respect of the commitments entered into with the financial backers . It meets aircraft operations fundamental needs as well as needs to upgrading air navigation system to international and regional air traffic growth, regional planning criteria , ATS routes network and ATS regional air traffic.

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<sup>1</sup> Benin Burkina-Faso Cameroon Centrafrique Chad Congo Ivory-Coast Gabon Bissau-Guinea Equatorial-Guinea Mali Mauritania Niger Senegal Togo

### **1996/1998 Air Navigation Services and Infrastructure Plan**

Objective: to eliminate in priority ATM shortcomings by the renewal or implementation of equipments for implementing new services (ATM, ADS, RADAR etc.) or to reinforce or improve services (ATS, MET et AIS).

### **2000-2006 Air Navigation Services and Infrastructure Plan**

Objective: to increase significantly VHF coverage for ASECNA airspace and route network.

### **2007-2008 Air Navigation Services and Infrastructure acting Plan**

Objective: long term Investments specifically in CNS and shortcomings mitigation in AIS, ATM, AOP, MET and SAR.

### **2009-2013 Air Navigation Services and Infrastructure Plan**

Objective: to maintain an efficient air navigation system providing air navigation services within ASECNA airspace and specifically in a rational and optimised way.  
This Plan represents the whole infrastructure that will be implemented during the period between 2009 and 2013, in each FIR, Centre and domain

## **3. Evaluation**

3.1 Evaluation of the Plan means measuring the Plan global performance with regard to operational objectives.

3.2 With the case of 2007-2008 Air Navigation Services and Infrastructure acting Plan, evaluation of terminated projects for Senegal, Mauritania and Bissau Guinea shows that performance evaluation is easier as far Infrastructure such as Equipment is concerned; how the project of acquiring and implementing an Equipment has been achieved ;performance criteria are related to evaluation timeline, costs, availability, industrial in a given environment, maintenance staff qualification etc..

3.3 Performance in regional planning relates to Navigation, satellite telecommunication and surveillance services performance. Performance criteria depend on many factors (installations, procedures, human factors, organization, regulation) and on different actors. This makes it difficult for reducing gap levels and meeting objectives set forth..

3.4 In the light of its acting Plan for 2007\_2008 an evaluation of services performance showed that they were not greatly satisfactory due to shortcomings in COM, le MET and AIS (in some FIRs).

## **4 Planification and Evaluation performance framework**

National performance criteria are related to implementation of an air navigation system for safe and regular traffic flow in terminal areas according to users needs.

### Example of Mauritania

2007-2008 Infrastructure and airport services Acting Plan

<b>project</b>	<b>opérationnal objectives</b>	<b>reception date temporary or définitive</b>	<b>Observations</b>
Approach and Landing visual aids NOUADHIBOU	a) improve, strengthen and maintain level of services; b) save and rescue human lives in case of air accident on the airport or immediate vicinity c) implement reliable mobile and fixed communications; d) improve work conditions	October 05 2008	Satisfactory (runway lightning category 1 + 2 PAPI)
Approach and Landing Aids - GNSS (N-AS) NOUAKCHOTT		August 11 2007	GNSS Procedures in operation, state regulation acted
Voice Communications - VHF (C-MVV) NOUAKCHOTT	a) improve and reinforce level of services; b) implement reliable mobile and fixed communications; c) implement interconnections; d) pursue introduction of AFI GNSS ; e) implement ADS-B	November 20 2008	VHF coverage extension, with shortcomings (Birmogrein, Atar et Nema)
Voice Communications ATS/DS (C-FV) NOUAKCHOTT			Very satisfactory ( Nouakchott/Alger implemented in 2009)

### Example of Dakar FIR

**Objective** : ATM Rationalisation

**Specific Objective** : En route control in Dakar FIR upper space from an unique ACC located in Dakar

**Due time** : 2010

**Performance Criteria:**

- Airspace reorganization (rationalized airspace ) 100%
- Risk mitigation 100%
- ATC Organization 90%
- Qualified Human resources 100%
- CNS means availability 100%
- other services availability 80%
- Installations 100%
- Users and Regulator Satisfaction 100%
- Regulation 100%

## **5. Action Follow up**

The meeting is invited:

- To note ASECNA work as to performance of services and Infrastructure planification
- To recommend to States and Air Navigation Providers to use performance criteria for planification and evaluation.