



**INTERNATIONAL CIVIL AVIATION ORGANIZATION**

**AFI PLANNING AND IMPLEMENTATION REGIONAL GROUP  
EIGHTEENTH MEETING (APIRG/18)  
Kampala, Uganda (27 – 30 March 2012)**

**Agenda item 3.7: Single Sky Concept: Implementation of the Cotonou Declaration by AFI ANSPs**

*(Presented by ASECNA, ATNS, ENNA)*

<b>SUMMARY</b>
AFI Single African Sky Concept is supported by a roadmap made of stakeholders' action plans with short and long term goals for seamless air navigation services provision and seamless CNS/ATM resources associated with modern solutions to institutional and regulatory framework for the achievement of a qualitative and economic objectives as well as a collaborative and cooperative process at AFI level to help meet goals in a qualitative and economic way.
<b>REFERENCE(S):</b>
<b>Related ICAO Strategic Objective(s):</b>

**1. INTRODUCTION**

1.1 The 3<sup>rd</sup> AFI ANSPs Conference held in Cotonou in November 2010 set the will of a collaborative management of AFI airspace towards a Single African Sky as a common vision. A Working Group led by ENNA (Algeria), ATNS and ASECNA<sup>1</sup> was established to provide the Single African Sky Roadmap.

**2. Single Sky Objectives**

2.2 Single Sky concept aims to better organize the airspace through the establishment of common rules and procedures as well as better cooperation between States and ANSPs in order to meet the following objectives:

- Seamless service provision and airspace capacity optimization;
- User preferred routing leading to significant fuel savings and reduction of greenhouse gases emissions.

**3. AFI ATM Modernization Initiatives**

3.1 Initiatives in AFI Region, ranging from States sharing one FIR, airspace reorganization and the modernization of ATM systems management, can serve as examples:

<sup>1</sup> Bénin Burkina-Faso Cameroun Côte d'Ivoire Comores Congo Centrafrique Gabon Guinée-Bissau Guinée-Equatoriale Mali Mauritanie Madagascar Niger Sénégal Tchad Togo Réunion

- The Agency for Air Navigation Safety in Africa and Madagascar (18 member States in Africa and Indian Ocean) with its airspace rationalization program and its single sky project;
- Roberts FIR which includes air space of Liberia, Guinea and Sierra Leone;
- Tanzania/Burundi/Rwanda airspace management; and
- The Euromed project, a single sky project for European and African Mediterranean States.

#### **4. Single Sky Roadmap**

##### **4.1 Methodology**

4.1.1 Three fundamental phases are required to develop the roadmap:

- Definition concept
- Development concept
- Implementation

##### **4.2 AFI single Sky Roadmap**

4.2.1 The AFI Single Sky roadmap is a set of stakeholders' action plan with short and long term goals for seamless provision of air navigation services combined with appropriate choices of technological, regulatory and institutional solutions for the achievement of qualitative and economic objectives; human factor is part of the process.

4.2.3 Stakeholders are Member States, ANSPs and airspace users (airlines/aircrafts).

4.2.4 The action plans of the roadmap set out the objectives (regulatory, institutional, policy, based on performance and safety), resources (CNS infrastructure, ATM systems, human resources skills profile and qualification), expected deliverables and implementation deadlines:

- *Air Navigation Service Providers*

- ✓ Feasibility study, safety study, Cost/Benefice analysis, environmental impact study in relation with seamless sky ;
- ✓ Implementation of minimum requirements for seamless sky ;
- ✓ Concept validation;
- ✓ CNS/ATM systems planning in accordance with AFI air navigation plan and interoperability;
- ✓ Single sky concept implementation project management;
- ✓ Bilateral and regional cooperation in the framework of the harmonization of procedures and systems interoperability.

- *Member States*

- ✓ The African Union meeting of Ministers in charge of Civil Aviation under the auspices of WACAF for a political will to move toward a single African Sky;
- ✓ Institutional measures such as separation of power between an operator and the regulator for efficient implementation of AFI single sky;
- ✓ Implementation of ICAO standards and recommended practices;
- ✓ Regulatory safety framework oversight in ATM
- ✓ Creation of FAB (functional Airspace Block);
- ✓ Steering Committee or other member states body in charge of the implementation and funding of AFI Single Sky roadmap ;
- ✓ harmonization of ATC personnel licenses;
- ✓ Environmental measures for sustainable development.

- *Airspace users*

- ✓ Avionics planning in accordance with ground CNS/ATM infrastructure and services planning;
- ✓ Civil/military cooperation in the military needs and use of airspace;
- ✓ Technical cooperation among ANSPs within the single sky concept validation.

#### **4.3 FAB concept (functional airspace blocks)**

4.3.1 The creation of Functional Airspace Block, entity with more than one member state, has the following objectives:

- Traffic flow optimisation;
- Route network optimization;
- Capacity increase and efficiency of airspace management with performance based operations.

#### **4. ACTIONS FOLLOW UP**

4.1 The meeting is invited:

- To adopt the AFI Single Sky Roadmap logical framework as presented by ASECNA, ATNS, and ENNA (SAS/SG);
- To create a Task Force with the mandate to develop necessary guidelines for the implementation of AFI Single Sky Roadmap activities. The Task Force will develop a questionnaire to be sent to States and ANSPs on the implementation status of minimum requirements for seamless sky.

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