Agenda Item 3: Planning and implementation (Projects and ASBU Modules)
3.1: Airspace (safety, capacity and efficiency)

ANGOLA AIR NAVIGATION PLAN
(Presented by Angola)

SUMMARY
This Information Paper presents the current status of Airspace and the project of Angola Air Navigation Plan (AANP) to be Implemented.

REFERENCE(S):
• APIRG/22 Conclusion 22/35: Seamless Air Traffic Management.
• DOC 7474 (AFI Air Navigation Plan)
Related ICAO Strategic Objective(s):
• This information paper relates to Safety and Air Navigation Capacity and Efficiency in the Luanda FIR.

1. INTRODUCTION
1.1 - The existing Angola Air Navigation Plan (AANP) is not in compliance with the new methods of air navigation at all. New structure of air navigation is required and has to be designed based in FANS and GNSS systems accordingly.

1.2 - Structure of the AANP for the Luanda FIR will be organized into the following sections: • Performance Based Navigation (PBN) • Communications • Navigation • Surveillance • Air Traffic Management (ATM) • Aeronautical Information Management (AIM) • Aviation Weather • ICAO Aviation System Block Upgrades (ASBU).

1.3 – The project “Modernization of the Air Navigation System for Angola designed by the provider Empresa Nacional de Navegação Aérea (ENNA) will be based in the AANP.

2. DISCUSSION
2.1 - PERFORMANCE BASED NAVIGATION (PBN)
• Assessment and evaluation of obstacles at the Luanda FIR • Update of WGS-84 coordinates at the Luanda FIR • Implementation of SIDs and STARs at the Luanda TMA • Continuous implementation of GNSS procedures at the Luanda FIR.

2.2 - COMMUNICATIONS
• Voice communication improvement to eliminate gaps communication at the Angola airspace (there are existing silence zones) • data communication implementation of ATN, AIDC and OLDI, improve AMHS system.
2.3 - NAVIGATION
● Implementation and improve navigation aids for airport terminal and routes at the Luanda FIR
● Implementation of Ground Based Augmentation Satellite (GBAS).

2.4 - SURVEILLANCE
● There is one existing ADS-C/CPDLC at the Luanda FIR ● Need to implement systems PSR, MSSR, ADS-B and MLAT.

2.5 - AIR TRAFFIC MANAGEMENT (ATM)
● Air traffic Service is conventional at the Luanda FIR ● Continuous work for redefinition of the Luanda FIR requirements (terminal zone, A/D, CTR, ATZ, APP, Luanda TMA, ACC, FIS) ● Implementation Surveillance Control at Luanda TMA and FIR ● Implementation Surveillance Control at Oceanic zone ● Implementation surveillance Control in routes ● Implementation of combining operational procedures between the Old and New Airports.

2.6 - AERONAUTICAL INFORMATION MANAGEMENT (AIM)
● Improve AMHS ● Implementation of aeronautical cartography area ● AIS website creation ● Continuous work for AIS/AIM transition plan ● Extension and implementation AIS connectivity between airports at the Luanda FIR.

2.7 - AVIATION WEATHER
● Implementation of AWOS stations at the Luanda FIR ● Implementation of SYNERGIE WEB aeronautical data information and its monitoring system.

2.8 - ICAO AVIATION SYSTEM BLOCK UPGRADES (ASBU)
● Implement Block 0 – performance improvements on B0 - FICE, B0-DATM (AIS/AIM) and B0 – AMET.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

a)

b)

c)

d)

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