INTERNATIONAL CIVIL AVIATION ORGANIZATION

WESRTEN AND CENTRAL AFRICAN OFFICE

Sixth Meeting of the APIRG Communications, Navigation and Surveillance Sub-group (CNS/SG/6)

Dakar, Senegal, 18–22 May 2015

Agenda Item 5: Regional Performance Objectives

Categorization and prioritization of regional objectives

(Presented by the Secretariat)

SUMMARY
This working paper reviews the AFI Performances objectives as defined by APIRG 19 Meeting
Action by the meeting is at paragraph 3.
RERENCE ▪ **Annex 10**- Aeronautical Telecommunications ▪ **Annex 11-** Air Traffic Services ▪ **Doc 9702** - Report of the Seventh Africa-Indian-Ocean Regional Air Navigation o AFI / RAN /7 Meeting ▪ Report on the AFI SP AFI / RAN /8 Meeting ▪ GANP (**Doc.9750**) ▪ Report on APIRG 19 Meeting *Note: References can be downloaded from **www.icao.int/wacaf.***
Related **ICAO Strategic Objectives**: **A**: ***Safety; B: Air Navigation Capacity and Efficiency*** Related **ICAO ASBU Performance Improvement Areas and Block0 Modules**: All

1. Introduction

1.1. The traditional Air Navigation planning approach addresses only ANSP needs, while the ASBU methodology calls for addressing regulatory as well as user requirements. The ultimate goal is to achieve an interoperable global system whereby each State has adopted only those technologies and procedures corresponding to its operational requirements.

1.2. An ASBU Module is generally made up of a grouping of elements which define required CNS Upgrade components intended for aircraft, communication systems, air traffic control (ATC) ground components, and decision support tools for controllers, etc. The combination of elements selected ensures that each Module serves as a comprehensive and cohesive deployable **performance capability**.

1.3. Therefore defining clear performances objectives will enable State plan and implement ASBU Modules with regards to all stake holders' requirements.

2. Discussion

2.1 In the ASBU methodology, the performance objective will be the title of the ASBU module itself. Furthermore, the methodology indicates alongside corresponding Performance Improvement area (**PIA**).

2.2 : Key to the achievement of a globally interoperable ATM system is a clear statement of the expectations/benefits to the ATM community. The expectations/benefits are referred to eleven Key Performance Areas (**KPAs**) and are interrelated and cannot be considered in isolation since all are

noted that while safety is the highest priority, the eleven KPAs shown below are in alphabetical order as they would appear in English. They are:

Access/Equity; **Capacity**; **Cost Effectiveness**; **Efficiency**; **Environment**; **Flexibility**; **Global Interoperability**; **Participation of ATM Community**; P**redictability**; **Safety**; and **Security**.

2.3 However, out of these eleven KPAs, for the present, only five have been selected for reporting through Air Navigation Reporting Forms (**ANRF**), which are **Access & Equity**, **Capacity**, **Efficiency**, **Environment** and **Safety**. The KPAs applicable to respective ASBU module are to be identified by marking **Y** (Yes) or **N** (No). The impact assessment could be extended to more than five KPAs mentioned above if maturity of the national system allows and the process is available within the State to collect the data.

2.4 A module categorization has been developed below with the objective of ranking each module in terms of implementation priority. On the basis of operational requirements and taking into benefits associated, AFI region has chosen all 18 Block 0 Module for implementation. The categories of 18 Block 0 Modules are as follows:

a) Essential (**E**): These are the ASBU modules that provide substantial contribution towards global interoperability, safety or regularity. The five (5) Modules for all States of AFI region are **FICE, DATM; ACAS, FRTO** and **APTA**

b) Desirable (**D**): These are the ASBU modules that, because of their strong business and/or safety case, are recommended for implementation almost everywhere. The eight (8) Modules for all States of AFI region are **ACDM, NOPS, ASUR, SNET, AMET, TBO, CDO**, and **CCO**

c) Specific (**S**): These are the ASBU modules that are recommended for implementation to address a particular operational environment in specific countries of AFI region (for example South Africa). The (3) Modules are **OPFL, ASEP** and **WAKE**.

d) Optional (**O**): These are the ASBU modules that address particular operational requirements in specific countries of AFI region and provide additional benefits that may not be common everywhere. The two (2) Modules are **SURF** and **RSEQ**.

2.5 Based on the above priorities for implementation within the AFI Region have been allocated to Block 0 modules with regard to the following criteria:

- Priority 1 = immediate implementation;
- Priority 2 = recommended implementation.

Although AFI region has categorized all 18 Block 0 Modules for its implementation, only 9 Modules will have priority 1 as it covers most of the AFI States. Remaining Modules are priority 2 and applies to only specific State (s) of AFI region.

The categorization and priorities are summarized in Appendix to this Working Paper.

3. Action by the meeting

The meeting is invited to:

a) Take note of the information given above
b) Identify CNS implication in the implementation of the AFI Performance objectives
c) Update the status of implementation of the 9 Modules assigned with priority 1
d) Provide consistent information for the update of the remaining modules of Block 0

End

APPENDIX

Categorization and prioritization of Block 0 Modules for the AFI Region

PIA	Module Description	Module	Category	Priority
PIA 1	Improve Traffic flow through Runway Sequencing (AMAN/DMAN)	B0-RSEQ	O	2
	Optimization of Approach Procedures including vertical guidance	B0-APTA	E	1
	Increased Runway Throughput through optimized Wake Turbulence Separation	B0-WAKE	S	2
	Safety and Efficiency of Surface Operations (A-SMGCS Level 1-2)	B0-SURF	O	2
	Improved Airport Operations through Airport-CDM	B0-ACDM	D	1
PIA 2	Increased Interoperability, Efficiency and Capacity through Ground-Ground Integration	B0-FICE	E	1
	Service Improvement through Digital Aeronautical Information Management	B0-DAIM	E	1
	Meteorological information supporting enhanced operational efficiency and safety	B0-AMET	D	1
PIA 3	Improved Operations through Enhanced En-Route Trajectories	B0-FRTO	E	1
	Improved Flow Performance through Planning based on a Network-Wide view	B0-NOPS	D	2
	Initial capability for ground surveillance	B0-ASUR	D	2
	Air Traffic Situational Awareness(ATSA)	B0- ASEP	S	2
	Improved access to Optimum Flight Levels through Climb/Descent Procedures using ADS-B	B0- OPFL	S	2
	ACAS Improvements	B0-ACAS	E	1
	Increased Effectiveness of Ground-Based Safety Nets	B0-SNET	D	2
PIA 4	Improved Flexibility and Efficiency in Descent Profiles (CDO)	B0-CDO	D	1
	Improved Safety and Efficiency through the initial application of Data Link En-Route	B0-TBO	D	2
	Improved Flexibility and Efficiency Departure Profiles - Continuous Climb Operations (CCO)	B0-CCO	D	1