



**Twenty First Meeting of the Africa-Indian Ocean Planning and Implementation Regional Group (APIRG/21)
(Nairobi, Kenya, 9 – 11 October 2017)**

Agenda Item 3: Performance Framework for Regional Air Navigation Planning and Implementation

STATUS OF IMPLEMENTATION OF PBN PROCEDURES

[Presented by the Agency for the Safety of Air Navigation in Africa and Madagascar]

Executive Summary	
<p>This working paper aims at presenting the status of the implementation of the PBN procedures in ASECNA member states.</p> <p>Action by the meeting: the meeting is invited to:</p> <ul style="list-style-type: none"> a) Take note progress realized by the ASECNA in the elaboration and the implementation of the flight procedures design; b) Urge States of the AFI region to develop the regulatory framework for the approval of the flight procedures design; c) Encourage users that have the ability to effectively fly these published procedures and provide feedback to designers 	
Specific Objectives:	This briefing note relates to the strategic objectives: A, B, C and E. Safety, Air Navigation Capacity and Efficiency, and Environmental Protection.
Financial Incidences	Groundless
References:	<ul style="list-style-type: none"> - DOC 9750: Global Air Navigation Plan; - Resolution A-38, relating to ASBU; - A37-11 Resolution; - AFI Road map for the PBN; - Doc 9613- Manuel PBN.

1. INTRODUCTION

1.1 With the aim of stopping the proliferation of the regional RNAV and RNP standards, the ICAO created in 2007 the PBN concept which clearly redefines the RNAV and RNP per operations zones.

1.2 The Resolution A36-23, and A37-11 of the ICAO Assembly, call on contracting states, to implement ATS routes ATS and procedures of departures, arrivals and approaches, in line with the PBN concept and demand for these States and planning and implementation regional groups (PIRG) to develop each, plans of implementation of the PBN.

1.3 To follow up the ICAO resolutions, APIRG adopted, in December, 2008, the "Road map for the implementation of the Navigation based on the Performances (PBN) in the Africa - Indian Ocean Region (AFI)".

1.4 The AFI road map for the PBN plans the implementation of the PBN in 3 stages, the short term, the middle term, and the long term. About the flights procedures of design, the objectives of realization were fixed about:

- a) Implementation of the SIDs and the STARS PBN on the international airports.
- b) Implementation of the RNP APCH (with Baro-VNAV) for instruments runways.
- c) Implementation of the continuous descent operations (CDO) and continuous climb operations(CCO).

2. Status of PBN flight procedures implementation

2.1 Within the framework of the AFI road map for the PBN implementation, the ASECNA develops and implements the approaches procedures with guide vertical line (APV / BaroVNAV), the STARS and the SIDs based on the PBN criteria in all the international airports of 17 member states.

2.2 The two appendices below gives the global state of the elaboration and the implementation of the flights procedures design in the international airports of 17 member states of the ASECNA.

3. Actions by the meeting

The meeting is invited to:

- a) Take note progress realized by the ASECNA in the elaboration and the implementation of the flight procedures design;
- b) Urge States of the AFI region to develop the regulatory framework for the approval of the flight procedures design;
- c) Encourage users that have the ability to effectively fly these published procedures and provide feedback to designers

Appendices 1: RNP APCH (LNAV et LNAV/VNA) approach Procedures

	AIRPORTS	RNP APCH (LNAV)	RNP APCH (LNAV/VNAV)	REMARKS
1	Antananarivo			Implemented
2	Mahajanga			Implemented
3	Niamey			Implemented
4	Dakar			Implemented
5	Libreville			Implemented
6	Abidjan			Implemented
7	Lomé			Studies ended - awaiting the flight test for implementation in 2017
8	Bamako			Studies ended - awaiting the flight test for implementation in 2017
9	Cotonou			Studies ended - awaiting the flight test for implementation in 2017
10	N'Djamena			Studies ended - awaiting the CAA approval for implementation in 2017
11	Ouagadougou			Implemented
12	Yaoundé			Implemented
13	Douala			In progress for implementation in 2017
14	Moroni			Implemented
15	Port – Gentil			Implemented
16	Malabo			Implemented
17	Nouakchott			Planned for 2018
18	Brazzaville			Implemented
19	Point Noire			Implemented
20	Bissau			Implemented
21	Bangui			In progress for implementation in 2017
22	Nouadhibou			Planned for 2018
23	Bobo-Dioulasso			Implemented
24	Garoua			Implemented
25	Franceville			Implemented
26	Sarh			Implemented
27	Toamasina			Implemented
28	Ollombo			Implemented
29	Bata			Implemented
30	Gao			Implemented
31	Niamtougou			Implemented
32	Mopti			Studies ended - awaiting the flight test for implementation in 2017

Appendices 2 : CDO/CCO Procedures

	AIRPORTS	CDO Procedures	CCO Procedures	REMARKS
1	Antananarivo			In progress for implementation in 2018
2	Niamey			Planned for 2019
3	Dakar			Awaiting the CAA approval for implementation in 2018
4	Libreville			in progress for implementation in 2018
5	Abidjan			Awaiting the CAA approval for implementation in 2018
6	Lomé			Planned for 2020
7	Bamako			Planned for 2019
8	Cotonou			Planned for 2020
9	N'Djamena			In progress for implementation in 2018
10	Ouagadougou			In progress for implementation in 2018
11	Douala			Planned for 2019
12	Moroni			Planned for 2021
13	Malabo			Planned for r 2020
14	Nouakchott			Planned for 2019
15	Brazzaville			In progress for implementation in 2018
16	Bissau			Planned for 2021
17	Bangui			Planned for 2021

END.