



International Civil Aviation Organization

**Twelve Meeting of the APIRG Air Traffic Management, Aeronautical Information Management, Search and Rescue Sub-Group  
[Senegal, Dakar 25-29 July 2011]**

**Agenda Item 4: Performance Based Navigation (PBN) Implementation in AFI Region  
and AFI ATS routes network**

**Implementation of Outstanding AFI Routes: AFI RouteLab and Air Navigation Plan**

*(Presented by the International Air Transport Association)*

**SUMMARY**

ICAO and IATA and the stakeholders in an effective implementation of the spirit of Collaborative Decision Making (CDM) process:

- Address the issue of slow pace of implementation of routes;
- Revised old and new route requirements of airspace users;
- Discussed and agreed on the implementation of more than 31 routes.

IATA hosted three (3) meetings/workshops of PRNDWG in 2010. Meetings initiated AFI coordinated collective efforts toward the contribution of Aviation to safely reduce CO2 emissions and set a new process of timely implementation of infrastructure improvement meeting users' requirements. This is in line with ICAO Global Plan Initiatives.

References:

- APIRG 15 and 16 approved routes
- AFI Air Navigation Plan
- Recommendations of the Special AFI RAN held in November 2008 in Durban
- Report of the First Joint Meeting of the APIRG Performance Based Navigation and Global Navigation Satellite System Implementation Task Forces.
- Report on PRND WG 1 & 2, Johannesburg

**1. INTRODUCTION**

- 1.1. In April 2010, APIRG First Joint Meeting of the APIRG Performance Based Navigation and Global Navigation Satellite System Implementation Task Force agreed that IATA host the first PRND Working Group meeting.
- 1.2. The first meeting was held from 13 to 16 2010 July in Johannesburg, South Africa. In the spirit of CDM implementation, the Meeting brought together relevant stakeholders, including States, ICAO, IATA, Air Navigation Service Providers, Civil Aviation Authorities and Airlines. Subsequently, two more PRND Working Group meetings/workshops (RouteLab 2&3) were held in Johannesburg. RouteLab 2 was held on 26-28 October 2010 while RouteLab 3 was held on 02-03 November 2010.
- 1.3. PRND WG meetings focused mainly on processes leading to the implementation operators' Users Requirements.  
States/ANSPs, ICAO and IATA committed to take the required steps to ensure the implementation of all the route requirements agreed on in the workshops.
- 1.4. The Work Group adopted a RouteLab style format where individual route proposal packages were presented to individual States with clear objectives, benefits, timelines and supporting draft

documentation i.e. Formatted AIC supplements, LOA and LAT/LONG coordinates. 5NLCs were acquired on-site.

## 2. DISCUSSION

### AFI Air Navigation Plan

- 2.1. Out of 22 route segments agreed upon at APIRG 15 and 16, only 6 were implemented; many become irrelevant and operators set new priorities required to further improve flight operations in the Region. Below listed in Table 1 is the list of the routes that were not implemented.

Table 1

No	Route Designator	Meeting	Country	Comment
1.	UG402	APIRG15	Algeria, Niger, Burkina Faso, Benin	Accelerate Implementation
2.	UG403	APIRG15	Algeria, Niger	No longer Required
3	UG404	APIRG15	Morocco, Algeria, Mali, Niger	Accelerate Implementation
4	UG629	APIRG15	Morocco, Algeria, Mali, Niger, Nigeria	Accelerate Implementation
5	UG981	APIRG15	Niger, Nigeria, Cameroun, Guinea, Gabon	Accelerate Implementation
6	UG616	APIRG15	Niger, Nigeria	No Longer Required
7	UB525	APIRG 16	Ethiopia, Sudan, Egypt	No Longer Required; UT124
8	UL612	APIRG 16	DR Congo, Sudan, Egypt	No Longer Required; UG607
9	UM220	APIRG 16	Sudan	Review with South Sudan
10	UM365	APIRG 16	Sudan	Review with South Sudan
11	UM665	APIRG 16	Sudan	Accelerate Implementation

### RouteLab

- 2.2. Out of 31 routes agreed upon at the RouteLab 1, Nine (09) routes have not been implemented due to various reasons. A review of these routes as listed in Table 2 is required with a view of implementing them before APIRG 18.

Table 2

No	Route Designator	Route Segment	Country	Comment
1.	UT127	TIKAR-MRW	Sudan	Internal Route structure Review
2.	UT151	OXILO-DCT-LAG	Nigeria	VHF Coverage
3	UT152	MLK-DCT-LAG	Sudan	Rejected; Suggest use of UB763
4	UT253	NV-KESOM-MOGDU-DCT-BKK	India	Engaged ASIA Region
5	UT261	BRN-DCT-ATMUL	Egypt	Awaiting Military Clearance
6	UT263	LUKRO-KAN	Nigeria	Rejected; Suggest UH206 via JOS
7	UT271	TLE-MPK	Nigeria	Rejected; Suggest UA609 via OPALA
8	UG402	TMS-DCT-GAO-DCT-TYE	Algeria	On-going
9	UW900	OZT-GAO-LV (See UG981 APIRG 15)	Nigeria	VHF Coverage

## **Achievements**

- 2.3. RouteLab 1: 31 Routes agreed upon for implementation. To date 22 routes have been implemented. Annual savings of 50 million kg of CO<sub>2</sub>.
- 2.4. RouteLab 2: 18 Routes agreed upon for implementation. 18 routes implemented. Potential annual Savings of 1.9 million kg of CO<sub>2</sub> for two airlines based on one-way daily service over AORRA.
- 2.5. RouteLab 3: 08 Routes agreed upon for implementation. 08 partially implemented (AFI Segment only). Potential annual savings of 2.3 million kg of CO<sub>2</sub> for two airlines based on one-way daily service over the Indian Ocean.

## **3. ACTION BY THE MEETING**

- 3.1. The meeting is invited to:
  - a) Request States and Air Navigation Service Providers to proceed towards implementation of the User Required routes in Table 1 (Items 1,3,4,5,9,10,11) and Table 2 (Items 1 to 9) by 22 September 2011 AIRAC date.
  - b) Request States and Air Navigation Service Providers to coordinate change of route designations (UT) to regional designation in accordance with Annex 11 to the Chicago Convention with ICAO Regional Office by 20 October 2011 AIRAC date.

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