



International Civil Aviation Organization
Western and Central African Office

**Twelfth Meeting of the Air Traffic Management/Aeronautical Information Management/Search and Rescue Sub-Group (ATM/AIM/SAR SG/12)
(Dakar, Senegal, 25 - 29 July 2011)**

Agenda Item 4 : Performance Based Navigation (PBN) implementation

IMPLEMENTATION OF IFLEX PHASE I

(Presented by the International Air Transport Association)

SUMMARY

This working paper presents the ATM/AIM/SAR Sub-Group with results of joint ICAO IATA flexible ATS Route Management Workshops - Phase I

References:

Report of

- First Flexible ATS Route Management Workshop held in Dakar, Senegal, 11-13 January 2011 at the initiative of IATA and with the support of ICAO
- Second Flexible ATS Route Management Workshop held in Dubai, UAE, 15-17 February 2011 at the initiative of IATA and with the support of ICAO
- Third Flexible ATS Route Management Workshop held in Paris, France, 8-10 March 2011 at the initiative of IATA and with the support of ICAO

1. INTRODUCTION

- 1.1. On the 26 August 2010, the SAT States completed the implementation of phase 4 of a Random Route area for aircraft operating between Africa and South America called Atlantic Ocean Random Routing RNAV Area (AORRA).
- 1.2. Thereafter, the iFlex project have been introduced at the initiative of IATA and with the support of ICAO to further more flexible airspace structure. Using what is already available on the aircraft and within ATC ground system, the move from Fixed to Flexible can be accomplished in a progressive, orderly and efficient manner. Success requires engagement of all stakeholders working together to implement user-preferred trajectories and reduce the reliance on the fixed route system wherever safely possible
- 1.3. In view of the above, thru a process of three iFlex workshops, IATA and ICAO together with States and ANSPs embarked on the implementation of additional flexible tracks in Oceanic and Terrestrial airspace. The flexible tracks and RNP 10/RNAV 5 routes were to be implemented on 7 April 2011. iFlex Oceanic involved having additional crossings in the EUROSAM corridor in order to provide flexible routing to North America-South Africa traffic. iFlex terrestrial involved providing more access routings to AORRA airspace. To support iFLEX tracks, additional RNP 10/ RNAV5 routes had been created.
- 1.4. As there was no confirmation, in writing, that all safety assessment work had been completed by all States concerned, ICAO and IATA agreed to postpone the implementation date and divide the implementation process in two phases:

Phase I

Implementation of user-preferred trajectories concept within Dakar Oceanic FIR, Sal FIR, Piarco FIR, Cayenne Rochambeau FIR, Dakar Terrestrial FIR and Accra FIR commencing with a trials from 30 June 2011 to 25 August 2011 and only limited to Emirates Airlines and Delta Air Lines. The outcome of the trials will define further availability of those user-preferred trajectories to other operators.

Phase II

To enhance access to and from the Atlantic Ocean Random Routing Area (AORRA) and user preferred trajectories implemented in Phase I, to implement additional RNP10/RNAV5¹ routes over continental AFI and MID airspace.

2. Phase I - Purpose

- 2.1. The purpose of this information paper is to advise all airspace users on flight trials in order to evaluate the impact on operations from the introduction of new way points within Dakar FIR/UIR, Accra FIR/UIR; Sal FIR/UIR, Cayenne Rochambeau FIR/UIR and Piarco FIR/UIR.
- 2.2. These new waypoints were developed with three main objectives:
- Allow more crossing segments to the EUR – SAM corridor (UN741, UN866, UN873, and UN857);
 - To introduce more entry and exit points to and from AORRA airspace.
 - To provide more user preferred trajectories within FIRs
- 2.2.1. Until recently, the only available option to cross the EUR/SAM corridor within the DAKAR FIR/UIR (GOOO) was Airway UL 435 marked in BLUE in Figure 1 in Appendix A. With the introduction of additional way points four more crossing segments will become available for the trial, as depicted in RED in Figure 1 in Appendix A.

Additional entry/exit points on the AORRA airspace boundary (marked in yellow) will also be available during the trial period.

The greater choice of route planning for traffic operating through DAKAR FIR/UIR (GOOO) is designed to deliver efficiency benefits resulting in shorter routes planned and consequently reduced CO2 emissions. Safety benefits through increased flight planning options especially for weather avoidance in an active Inter Tropical Convergence Zone will also be realized.

It should be noted that no changes in ATM procedures are envisioned to support the additional EUR – SAM crossings and new AORRA entry/exit points.

- 2.2.2. To provide greater options to operators for route planning, Accra FIR provides 16 additional trajectories as depicted in BLUE in Figure 2 in Appendix A.

¹ Second Flexible ATS Route Management Workshop Report – Appendix C

² First Flexible ATS Route Management Workshop Report iFLEX within Luanda FIR, Brazzaville FIR and Sao Tome TMA initially envisioned as flexible tracks, however on recommendation of iFLEX working group, it had been proposed to implement those tracks rather as RNP 10 routes.

³ MIDANPIRG/12 CONCLUSION 12/9: RNAV 5 IMPLEMENTATION IN THE MID REGION

That, States that have not yet done so, be urged to:

a) update their AIP to change RNP 5 to RNAV 5; and

b) take necessary measures to implement RNAV 5 area in the level band FL 160 - FL460 (inclusive)

- 2.2.3. Sal FIR/UIR, Cayenne Rochambeau FIR/UIR and Piarco FIR/UIR established FIR crossings to provide additional flexibility to operators.

3. Trial Period

- 3.1. During the trial period, from 30 June 2011 to 24 August 2011, the use of these waypoints will be limited to Delta Airlines and Emirates Airlines (note original planned dates had been delayed). Based on the successful completion of the trial (to be announced by Notam) and analysis of the data collected, the new waypoints will become available to all operators
- 3.2. If any further clarification required you can contact: iflex@iata.org

Appendix A

Figure 1

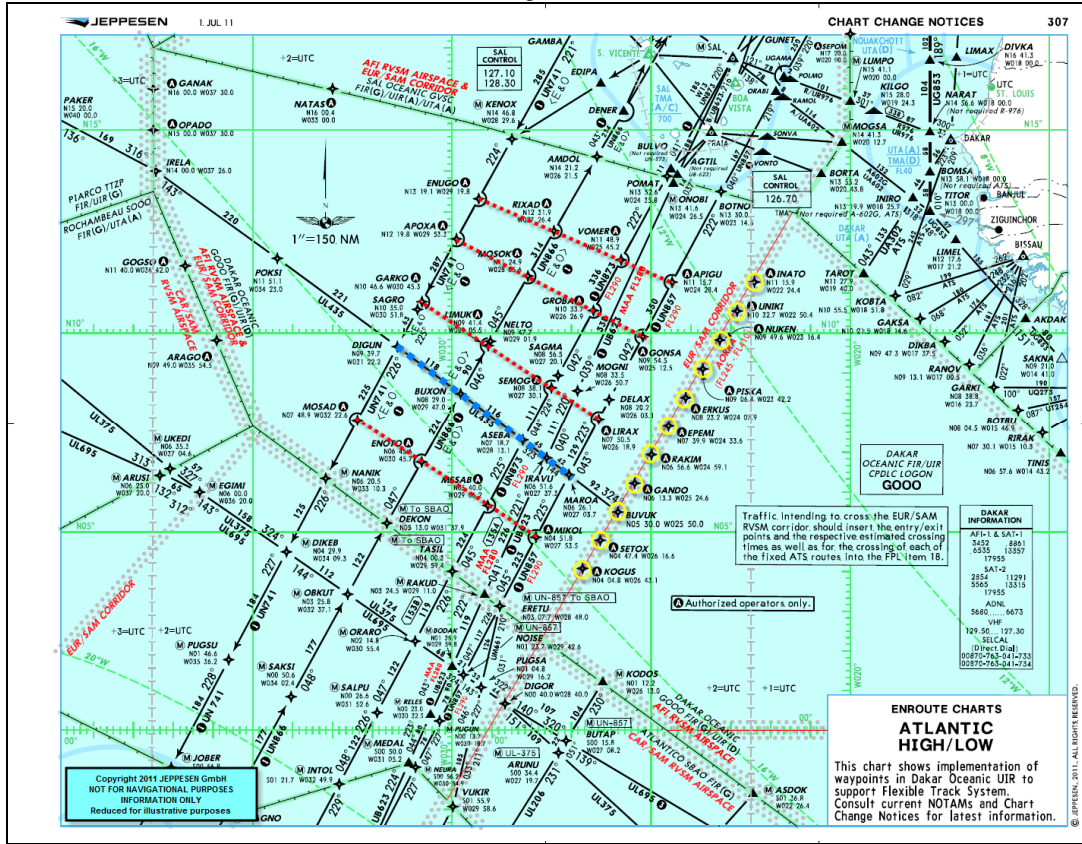


Figure 2

