



Agenda Item 2: *Air traffic management (ATM) (by the ATM Working Group)*

EUR/SAM CORRIDOR AIRSPACE CONCEPT Action Plan

(Presented by Portugal)

Summary

This paper presents the proposed action plan for the development of the EUR/SAM Corridor following the discussion and comments received from the SAT Corridor Members and Airspace users.

1. Introduction

- 1.1. This paper addresses SAT 19/17 conclusion – *New Airspace concept in the EUR/SAM Corridor* by proposing a phased approach for the gradual implementation of the EUR/SAM Airspace Concept, which through optimized ATS Routes and ADS-C, CPDLC and PBN requirements, would allow lateral and longitudinal separation reduction and optimum flight level allocation.
- 1.2. **Free route concept (based in DCT segments) will be gradually introduced according to PBN and ADS-C/CPDLC requirements and appropriate separation.**

2. Background

- 2.1. The 38th ICAO General Assembly approved the Global Air Navigation Capacity & Efficiency Plan for the period 2013- 2018. The Global Plan Aviation System Block Upgrades (ASBU) will enable aviation to visualize global harmonization, capacity increase and the improvement of environmental efficiency that modern air traffic growth is currently demanding in every region around the world. In this sense, the PBN was selected as one of the main objectives to be complied with, in order to obtain improvement in safety and efficiency.
- 2.2. Advancements in aircraft avionics and air traffic management flight data processing systems have recently driven analysis of whether the lateral and longitudinal separation standards in the current EUR/SAM Corridor airspace could be reduced to increase the efficiency of the airspace.
- 2.3. In accordance with the ICAO PANS ATM Doc 4444, the distance-based separation minima values are 50 NM longitudinal, 30 NM longitudinal, 50 NM lateral and 30 NM

lateral, provided that a set of requirements are met or exceeded which includes that aircraft be authorized for RNP-10 or RNP-4, have direct pilot-controller voice communication or CPDLC and provide ADS-C position reports.

- 2.4. The gradual implementation of the EUR/SAM Airspace Concept, would allow States, Air Navigation Providers and users to comply with safety and efficiency strategic objectives applying ADS-C, CPDLC and PBN requirements.

3. Discussion

3.1. The proposed action plan follows, as an initial work breakdown structure, the Road Map presented to the SAT 19 meeting (appendix M to the SAT 19 Final Report).

3.2. The action plan is divided in a three steps phased approach :

- **Phase 1 - 50 NM Longitudinal Separation based on RNP10**
- **Phase 2 - Data Link Mandate to apply 50 NM Longitudinal Separation based on RNP10**
- **Phase 3 - 30 NM Lateral / Longitudinal Separation based on RNP4**

3.3. **Attachment A** details the Implementation Plan for the application of 50NM longitudinal Separation and 30NM Lateral/Longitudinal separation in EUR/SAM Corridor.

3.4. It is proposed that SAT 20 **approves** the following Draft Action Plan which will be also submitted to the **SAM and WACAF ICAO Offices**.

Why	To provide improved ATM services to RNP10 and RNP4 equipped aircraft in EUR/SAM corridor and allow harmonization of separation minima application with adjacent centres sharing extensive boundaries where separation based on RNP is implemented or planned to be implemented.
What	Provided that support is received from SAT Study Group on the Improvement of the Airspace Structure in the EUR/SAM Corridor (IAS/SG), endorse the Implementation Plan for the application of 30NM or 50NM longitudinal and 30NM lateral separation minima in accordance with PANS ATM Doc4444.
Who	SAT Members
When	SAT 20

4. ACTIONS BY THE MEETING

4.1. The SAT 20 meeting is invited to:

- a) Note the information provided;
- b) Amend as necessary and approve the draft action plan.
- c) Provide direction as deemed necessary for the accomplishment of this action plan.

The following Attachments are provided with this working paper as separate files:

ATTACHMENT A: EUR/SAM CORRIDOR AIRSPACE CONCEPT Action Plan