



**INTERNATIONAL CIVIL AVIATION ORGANIZATION  
TWELFTH MEETING ON THE IMPROVEMENT OF THE AIR TRAFFIC SERVICES  
IN THE SOUTH ATLANTIC**

**(Sal, Cape Verde, 15 – 17 December 2004)**

Agenda item 3: Air Traffic Management

**New Airspace Structure**

(Presented by Brazil)

**Summary**

This working paper presents a proposal for discussing a strategy for a new airspace structure in the EUR/SAM Corridor, taking into consideration the growth of traffic in the northwest portion of the mentioned corridor. The SAT Group must discuss about the convenience of either start the process of implementing Random Routing area in the EUR/SAM Corridor or, as a first step, to implement lateral/longitudinal separation minima of 30 NM, applying RNP 4 and ADS/CPDLC. Besides, the SAT Group shall establish a short term strategy to manage northwest traffic in the EUR/SAM Corridor.

**1. Introduction**

- 1.1. Conclusions SAT/11 TF/12 and SAT/11 TF/13 of SAT 11/TF meeting were formulated in order to implement a Random Routing Area in the EUR/SAM Corridor by November 2006, using ADS/CPDLC.
- 1.2. Also in the SAT/11/TF, it was noted the traffic growth in the northwest portion of the EUR/SAM Corridor. Concerns were expressed during the meeting about the introduction of random routing in that complex area, class G airspace where only flight information and alert services are provided and where some ATS incidents have been reported. In this sense, it will be important to adopt some short term measures to deal with this situation.

## **2. Strategy for implementation of a new airspace structure in the EUR/SAM Corridor**

- 2.1. The increment of traffic in the northwest portion of EUR/SAM Corridor indicates that some measure shall be taken to attend the traffic demand in the region.
- 2.2. Recently, the Air Navigation Commission has approved the Guidance material for the issuance of required navigation performance (RNP) 4 operational approvals. This Guidance material was sent to States via State Letter AN 13/33.7-04/86, on September 24, 2004.
- 2.3. Safety Assessment is necessary to implement a new airspace structure, including a Random Routing Area. In case of implementing a Random Routing Area, the safety assessment is much more complicated, taking into consideration that this analysis was never done in any airspace.
- 2.4. In the other hand, the safety assessment for a Fixed Route System, based on RNP 4, could be done, taking into consideration the guidance material developed by FAA and could be easier to implement. However, in accordance with Annex 11, attachment B, the implementation of RNP 4 in oceanic airspace depends on the ADS/CPDLC functionalities.
- 2.5. As mentioned above, some short term measure shall be taken in order to deal with the traffic growth in the northwest portion of EUR/SAM Corridor. The better way to do it is to use the current RNP 10 separation standard (50 NM) in order to expedite the the airspace restructure in the region. However, even using the current separation standard, there will be a need of safety assessment to implement a new airspace structure.

## **3. Suggested Action**

- 3.1. The Meeting is invited to adopt the following **Project of Conclusion**:

### **CONCLUSION 12/XX STRATEGY TO RESTRUCTURE THE EUR/SAM CORRIDOR AIRSPACE**

**THAT SAT12/TF ADOPTS THE FOLLOWING STRATEGY TO RESTRUCTURE THE EUR/SAM CORRIDOR AIRSPACE:**

- A) DEVELOP A SHORT TERM PLAN, USING THE CURRENT SEPARATION STANDARDS, BASED ON RNP 10.**
- B) STUDY THE FEASIBILITY OF IMPLEMENTING RNP 4, USING ADS/CPDLC CAPABILITIES.**
- C) CONTINUE STUDIES TO IMPLEMENT A RANDOM ROUTING AREA, USING ADS/CPDLC FUNCTIONALITIES.**
- D) ESTABLISH MEANS TO DEVELOP THE SAFETY ASSESSMENT FOR THE IMPLEMENTATION OF THREE OPTIONS MENTIONED ABOVE.**

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