



Agenda Item 4: Performance Based Navigation (PBN) in the South Atlantic; RNP4 in the EUR/SAM corridor

**REDUCTION OF LONGITUDINAL SEPARATION MINIMUM FOR RNP10
(Aircrafts equipped) AND RNP4 IMPLEMENTATION PLAN**

(Presented by SENEGAL ASECNA)

SUMMARY

The aim of this paper is to make a proposal on the Reduction of Longitudinal Separation Minimum for RNP10 equipped aircraft and on the RNP4 implementation in the EUR/SAM corridor and make a comparison with the proposal made at SAT18 meeting.

Action by the meeting in paragraph 3.

I. Introduction

- 1- The reduction of the longitudinal separation from 80NM (10mn) to 50NM for RNP10 and ADS/CPDLC equipped aircraft will increase the capacity of the airspace and thus enable aircraft to have optimum flight levels.
- 2- The implementation of RNP4 have the same advantages but the route segregation will have more benefit than flight level segregation as proposed during the SAT/18 meeting.

II. Discussion

- 1- To reduce the longitudinal separation for RNP10 and ADS/CPDLC equipped aircraft ,we propose:
 - the longitudinal separation 50NM be transformed into time based(07mn)
 - reduce the difference in the estimate that need to be revised from 03mn to 01mn (after agreement between neighboring centers)
- 2- The EUR/SAM corridor long Term PBN implementation plan as proposed during the SAT/18 present, in our view some drawbacks:
 - The flight levels allocated to RNP4 aircraft are not enough (only 04 levels:F360, F370, F380 and F390)
 - Since we managed aircraft according to their routes, this vertical segregation will lead the applying 3 different separation minima for the same group of aircraft. This has the consequence to increase the workload of the air traffic controller and errors during the coordination.
- 3- Instead of the vertical segregation, we propose **route** segregation;

- the non RNP4 equipped aircraft (RNP10 with ADS/CPDLC and RNP10 without ADS/CPDLC) will be constrained to follow a route (example UN857) and the current separation in use up to now will be applied.
- the remaining routes of the corridor will be only RNP4 with a 30NM. lateral and longitudinal separation.
- RNP4 equipped aircraft can fly via routes intended to be used for non-equipped aircraft but, would not in this case benefit from the 30NM longitudinal and lateral spacing.

4- The advantages of this route segregation are:

- only one separation minimum for aircraft on the same route
- the portion of the airspace allocated to RNP4 equipped aircraft will be considerable.

Our statistics based on the field 18 of the flight plan showed us that 64% aircraft on the corridor are RNP.

III. ACTION BY THE MEETING

The SAT/19 meeting is invited to consider the drawbacks of vertical segregation mentioned above and to advise SATMA to conduct statistics on RNP4 equipped aircraft for more accurate result.

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