



International Civil Aviation Organization
SATFIT/6 MEETING
[Brazil, Recife 03 May 2011]

Agenda Item 6: Other Business.

Flight test to OPTIMI (Oceanic Position Tracking Improvement and Monitoring)

(Presented by Brazil)

SUMMARY

This paper presents the interest of Brazil and SESAR Joint Undertaken to expand the Oceanic Position Tracking Improvement and Monitoring functionalities currently defined for Atlantic airspace in the NAT, EUR and AFI regions, to the CAR and SAM Atlantic airspace.

1. Introduction

1.1 In June 2009, as a consequence of the tragic loss in the Atlantic Oceanic of Air France Flight 447, the SESAR Joint Undertaken took action on the improvement monitoring of air traffic in oceanic and remote low density airspace.

After that, the OPTIMI was launched as a collaborative project with air navigation service providers, airlines, manufacturers, SATCOM providers and other entities involved in the aviation sector at the European Atlantic Airspace.

In May 2010, initial conversations took place between the European Commission and Brazil to improve the mutual technical and operational cooperation on ATM matters. In August 2010, a Letter of Understanding was signed by DECEA and SESAR Joint Undertaken, agreeing in possible joint activities in those topics connected to OPITIMI.

2. Discussion

2.1 Taking into consideration that an OPTIMI-like experience focusing on the EUR-SAM corridor and on the AORRA airspace would increase the monitoring and safety in oceanic airspaces, Brazil would like to urge the ANSP to support the flight tests in South Atlantic that soon will be initiated by SESAR to establish a pattern of operation related to OPTIMI.

In this way, the herein items should be discussed and harmonized between ANSP before the flight tests take place:

2.1.1 Use of FANS 1/A based ADS-C **Periodic Contracts** reports with a 15 minutes period (Requested by SESAR).

Note: this is a pattern to be used in regular situations and do not prevent the Controller to change this parameter for situations where a higher or lower reporting rate may be required.

2.1.2 Use of FANS 1/A based ADS-C deviation alert on the following events:

a) **Lateral Deviation Change Events** of 5NM from the nominal route (Requested by SESAR).

Note1: despite the airways are defined as RNP-10, which have a primary area of protection of 10 NM.

Note2: in case of turning the airways of EUR-SAM Corridor into RNP-4, the parameters would remain the same, except the lateral deviation which could be reduced to 4 NM, according to the primary area of protection of 4 NM.

b) **Altitude Range Change Events** of 300ft (requested by SESAR) or 200ft above/below the nominal altitude.

Note1: we should take into consideration that in RVSM airspace the applicable tolerance is 200ft.

c) **Vertical Rate Change Events** of 5000ft/min (Requested by SESAR).

Note: Based on the maximum rate of climb/descent often used by large body aircrafts.

d) Deviation from nominal waypoint.

3. Conclusion

3.1 The meeting is invited to:

3.1.1 Discuss about the parameters to be harmonized between ATC Units, which are used to trigger the events started by the system, related to OPTIMI.

3.1.2 Brazil would like to encourage the others ATC units to join the SESAR and support the flight tests to be carried out in the Atlantic Oceanic region.

END