



WORKING PAPER

**SPECIAL AFRICA-INDIAN OCEAN (AFI)
REGIONAL AIR NAVIGATION (RAN) MEETING**

Durban, South Africa, 24 to 29 November 2008

Agenda Item 5: Development of a set of comprehensive programmes in the safety field (Safety Committee)

Agenda Item 6: Development of a set of comprehensive work programmes in the air navigation field, aimed at improving efficiency of the air navigation system (Efficiency Committee)

ADS-B COOPERATION IN THE INDIAN OCEAN

(Presented by Seychelles)

(Prepared by ASECNA, DSNA (France) and SCAA (Seychelles))

SUMMARY

This paper presents a subregional initiative related to ADS-B in the Indian Ocean. Three ANSPs have recently signed a cooperation arrangement aiming at sharing experience, closely collaborating and acting jointly. Stakeholders buy-in is considered essential.

Action by the meeting is in paragraph 4.

1. INTRODUCTION

1.1 ADS-B, already implemented in several countries, provides immediate benefits.

1.2 However, an optimisation and extended benefits may only be achieved through a joint approach aiming at establishing an homogeneous area (cf. Fig. 1).

1.3 A meeting gathering the AFI Indian Ocean ANSPs was held in November 2007 at Saint-Denis (Reunion Island). Exchange of views and information took place and resulted in the elaboration of the cooperation arrangement signed by three partners: ASECNA, DSNA and SCAA.

2. COOPERATION HIGHLIGHTS

2.1 Acquiring and sharing experience on ADS-B:

a) technology;

b) implementation (usage, safety studies, etc.); and

- c) experiments.

2.2 Operational and performance improvements:

- a) increased safety and fluidity of traffic;
- b) extension and redundancy of the surveillance coverage through ADS-B data exchanges; and
- c) ultimately, when performing *radar-like* control, potential redesign of airspace taking into account the application of reduced separation minima.

2.3 Coordinated actions to combine efforts and involve all stakeholders (e.g. to improve aircraft equipage and certification).

3. **MAJOR BENEFITS AT STAKES**

3.1 Safety in relation with:

- a) the introduction of surveillance in a non-radar environment; and
- b) the support to search and rescue operations.

3.2 Flight efficiency and environmentally sustainable conditions in relation with potential fuel savings and subsequent lower gas emissions.

3.3 GASP/GANP contributions:

- a) GSI-5: Consistent Coordination of Regional Programmes;
- b) GSI-12: Use of Technology to Enhance Safety; and
- c) GPI-9: Situational Awareness.

4. **ACTION BY THE MEETING**

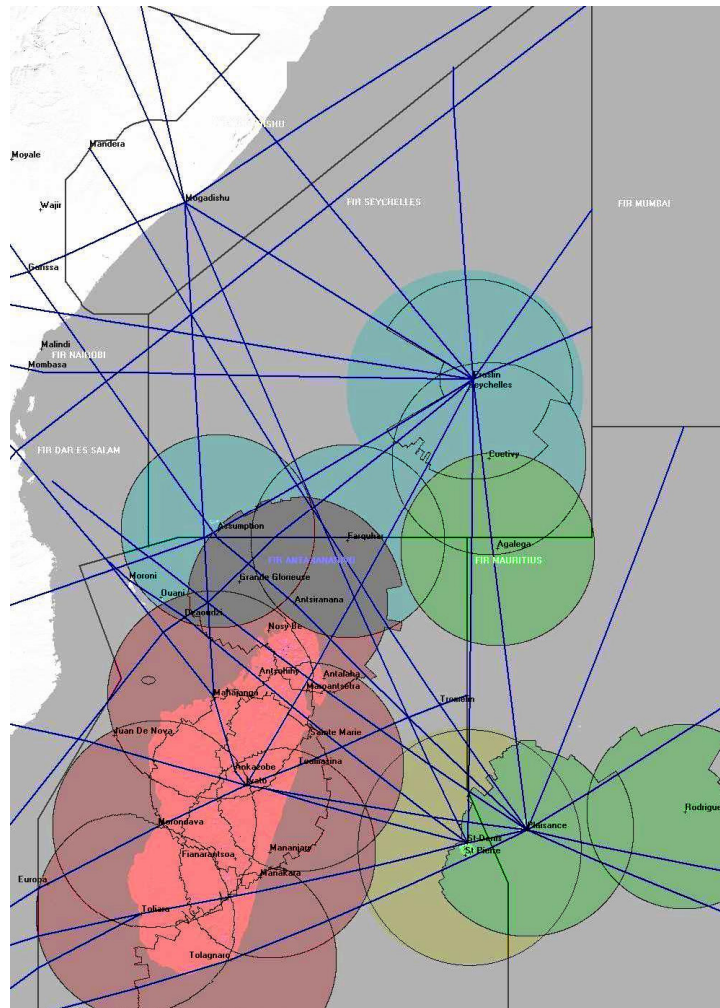
4.1 The Meeting is invited to:

- a) take note and support this subregional initiative;
- b) collect stakeholders early appreciation.

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APPENDIX

Fig. 1. Theoretical ADS-B Sub-regional coverage (UIR) based on current VHF locations



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