



INTERNATIONAL CIVIL AVIATION ORGANIZATION

First Meeting of the Africa - Indian Ocean Aviation System Planning and Implementation Group (AASPG/1)

Libreville, Gabon, 3 - 7 November 2025

Agenda Item 4: Implementation of safety and air navigation goals, targets and indicators, including priorities set in the Regional Aviation Safety and Air Navigation Plans

4.4. AFI Airspace Monitoring

Regional Support to ARMA

(Presented by the Secretariat)

SUMMARY	
This working paper discusses the challenges faced by the AFI Regional Monitoring Agency (ARMA) in fulfilling its mandate due to limited human and financial resources. It proposes that AASPG consider mechanisms to strengthen regional support to ARMA, including financial contributions, secondment of experts, and governance alignment.	
<i>Action by the Meeting in paragraph 3</i>	
Strategic Objectives	<ul style="list-style-type: none"> • A – Safety • B - Air Navigation Capacity and Efficiency
References	ICAO Doc. 9574, ICAO Doc. 4444 – PANS ATM, AFI RAN/7 reports, and APIRG Reports

1 INTRODUCTION

- 1.1 The Africa-Indian Ocean Regional Monitoring Agency (ARMA) is responsible for the monitoring of the safety of the AFI reduced vertical separation minimum (RVSM) airspace. This includes monitoring of the operations by regional air operators carried out in the adjacent performance-based communication and surveillance (PBCS) airspace.
- 1.2 ARMA is therefore responsible for monitoring in the forty-eight (48) AFI States, including six (6) within the South Atlantic (SAT) airspace.
- 1.3 The introduction of RVSM - reducing the vertical separation minima between flight levels FL290 and FL410 inclusive, from 2000 ft (600M) to 1000 ft (300M) - was as a result of a study carried out by the ICAO Review of the General Concept of Separation Panel (RGCSPP), which has since been renamed the Separation and Airspace Safety Panel (SASP). The aim was to enhance airspace capacity and operational efficiency.

- 1.4 With the introduction of the reduced vertical separation minimum (RVSM), it was necessary that the AFI region carry out a safety study on the risk involved with RVSM implementation in the region to allow for a safe transition.
- 1.5 In 2004, the Air Traffic and Navigation Services Company Limited (ATNS) and ICAO signed a Memorandum of Understanding (MoU) in which ATNS agreed to fund a consultant to facilitate RVSM implementation in the AFI region for a period of twelve (12) months.
- 1.6 Following the successful implementation of the AFI RVSM airspace on 25 September 2008, ICAO and the Republic of South Africa signed an agreement establishing ARMA to maintain the required safety levels within AFI RVSM airspace. South Africa, through its Air Traffic and Navigation Services (ATNS), accepted the responsibility to host and operate ARMA on behalf of ICAO.

2. DISCUSSION

- 2.1. Since its establishment in 2008, ARMA has successfully carried out its responsibility as required. ARMAs' principal objective includes providing:
 - evidence of the effectiveness of the RVSM minimum aircraft system performance specifications (MASPS), and altimetry system modifications made in order to comply with the MASPS, in achieving the desired height-keeping performance.
 - confidence that the technical target level of safety (TLS) will be maintained.
 - evidence of altimetry system error (ASE) stability.
- 2.2 ARMA has five key performance areas, these include:
 - Maintaining a database of AFI aircraft and aircraft operator approvals for RVSM operations;
 - Conducting safety and readiness assessments and reporting results appropriately;
 - Monitoring aircraft height-keeping performance and the occurrence of large height deviations and reporting results appropriately;
 - Monitoring aircraft operator compliance with State approval requirements; and
 - Initiating necessary remedial actions if RVSM requirements are not met.
- 2.3 The responsibilities of ARMA include the preparation of annual reports on the performance of the AFI RVSM airspace; this requires submission of reports to APIRG (now AASPG), the SAT Group, the Global RMA Coordination meeting, the AFI ATS Events group (AEAG) and the AFI Tactical Action Group (TAG). ARMA management is also required to participate in all relevant RVSM-related safety meetings.
- 2.4 Over time, the responsibilities of ARMA have expanded. The introduction of PBCS required the monitoring of aircraft and operators to ensure continued compliance with equipment performance standards in the airspace. Accordingly, APIRG/27 & RASG-AFI/10 reviewed the mandate of ARMA and widened the scope of responsibilities to include both RVSM and PBCS monitoring across the AFI airspace including the high seas airspace of the SAT area and Indian Ocean through **Decision 6/08**.

- 2.5 This expanded mandate has increased ARMA's workload and the need for adequate staffing and funding.
- 2.6 To date, ARMA's operations have been fully supported by the Republic of South Africa, both financially and administratively. While this national commitment has sustained ARMA for over 17 years, the Agency's regional nature calls for broader support from all AFI States.
- 2.7 Recently, ARMA has faced operational challenges linked to staffing gaps, including the resignation of the Manager. As a result, recent AASPG subsidiary group meetings (AAO/SG/8 and SMO/SG/1) could not be provided with the required RVSM performance reports. These challenges underline the need for sustained regional engagement to ensure continuity of ARMA's critical safety monitoring functions..
- 2.9 The continued reliance on the host State alone is not sustainable. To ensure the long-term operation of ARMA, AFI States should consider contributing to the Agency's funding or providing human resource support. Such contributions could be structured in line with ICAO Policies on charges for Airports and Air Navigation Services (Doc 9082).
- 2.11 In addition, ARMA would benefit from a strengthened governance framework through direct linkage to one of the ICAO Regional Offices (ESAF or WACAF), like other regional programmes. This would enhance oversight, coordination, and accountability while ensuring that operational and financial burdens are shared among all AFI States.
- 2.11 In this regard, the AASPG is invited to provide guidance on mechanisms to ensure the continuity and sustainability of ARMA's work.

3 ACTION BY THE MEETING

- 3.1 The meeting is invited to:
- a) Note the information contained in the working paper;
 - b) Commend South Africa for hosting and supporting the Regional Monitoring Agency since its establishment; and
 - c) Provide guidance on mechanisms to ensure sustainable regional support for ARMA.