



International Civil Aviation Organization

Middle East Regional Monitoring Agency Board

Twenty-first Meeting (MIDRMA Board/21)
(Cairo, Egypt, 14 – 15 January 2026)

Agenda Item 5: RVSM Monitoring and Related Technical Issues

**USE OF ARCHIVED ADS-B DATA FOR THE ADS-B HEIGHT MONITORING SYSTEM
(AHMS)**

(Presented by the MIDRMA)

SUMMARY

This paper presents the experience gained by the MIDRMA during the implementation of the ADS-B Height Monitoring System (AHMS) project in coordination with the Civil Aviation Authorities (CAAs) of Bahrain, Oman, and Kuwait. It highlights the substantial progress achieved and the operational challenges faced, particularly concerning the request, receipt, and use of archived ADS-B data from States. The paper further proposes the adoption of an ICAO MIDRMA Board Conclusion to formally authorize the use of such data under the same terms and conditions governing the use of Traffic Data Samples (TDS) for RVSM safety and risk analysis purposes.

Action by the meeting is at paragraph 3.

REFERENCES

- MIDRMA Board/20
- ICAO Docs 9574 and 9937
- MIDANPIRG/21 Report

1. INTRODUCTION

1.1 The Middle East Regional Monitoring Agency (MIDRMA) has achieved notable progress in the regional implementation of the ADS-B Height Monitoring System (AHMS), a cornerstone initiative aimed at enhancing the monitoring of Reduced Vertical Separation Minimum (RVSM) operations.

1.2 The successful collaboration with the Civil Aviation Authorities (CAAs) of Bahrain, Oman, and Kuwait enabled the MIDRMA to conduct extensive testing and validation of archived ADS-B data. These efforts demonstrated the feasibility and reliability of ADS-B-based RVSM height monitoring and confirmed the readiness of the region to transition toward full operational implementation.

1.3 Despite these achievements, the process of obtaining archived ADS-B data has required considerable effort from the MIDRMA team due to administrative, legal, and technical constraints. The need for an agreed framework governing the use of this data has become increasingly evident.

2. DISCUSSION

2.1 The MIDRMA expresses its appreciation to the CAAs of Bahrain, Oman, and Kuwait for their valuable cooperation and contribution to the success of the AHMS validation phase. The results confirmed the effectiveness of ADS-B data in monitoring aircraft height-keeping performance and in supporting ICAO's global safety objectives.

2.2 However, the process of requesting, transferring, and handling archived ADS-B data continues to face obstacles related to data ownership, protection, and the legal framework for its use. In some cases, administrative delays and differing national data-handling regulations have hindered the timely receipt of data required for analysis.

2.3 To ensure continuity and uniformity in AHMS operations across the ICAO Middle East Region, it is essential to establish a common understanding and formal agreement among all MIDRMA Member States regarding the use of archived ADS-B data.

2.4 It is therefore proposed that the MIDRMA Board adopts a conclusion authorizing the use of archived ADS-B data by the MIDRMA under the same terms and conditions applicable to the annual or monthly Traffic Data Samples (TDS) used for RVSM risk analysis.

2.5 Specifically, the proposed framework should include the following provisions:

- a. The archived ADS-B data shall be used solely for RVSM safety and risk analysis purposes conducted by the MIDRMA; and
- b. The data shall not be shared with any third party unless prior written consent is obtained from the concerned Civil Aviation Authority; and
- c. The MIDRMA shall ensure the confidentiality and secure handling of all received data in accordance with established ICAO and regional data protection principles; and
- d. Each State shall facilitate the timely submission of archived ADS-B data when requested by the MIDRMA to support ongoing and future AHMS operations.

2.6 The adoption of such a framework will provide clarity, consistency, and legal assurance for all parties involved, while enabling the MIDRMA to sustain the momentum achieved in the AHMS implementation program

2.7 Building upon the above, the MIDRMA proposes that the Board adopt a Draft Conclusion 21/XX – Use of Archived ADS-B Data for RVSM Height Monitoring. This conclusion formalizes the acceptance of MIDRMA's use of archived ADS-B data strictly for RVSM height monitoring, safety and risk analysis purposes, under the same data-handling and confidentiality provisions currently applied to RVSM Traffic Data Samples (TDS). Its adoption will ensure a unified regional approach, strengthen MIDRMA's analytical capability, and reinforce trust between the MIDRMA and Member States regarding data protection and use.

DRAFT CONCLUSION 21/XX: USE OF ARCHIVED ADS-B DATA FOR RVSM HEIGHT MONITORING

That,

- a) *MIDRMA Member States agree that archived ADS-B data provided to the MIDRMA may be used under the same terms and conditions applicable to the RVSM Traffic Data Samples (TDS) for the purpose of RVSM risk and safety analysis; and*

- b) *such data shall be used exclusively for MIDRMA analytical purposes and shall not be shared with any third party unless prior written approval is granted by the concerned Civil Aviation Authority (CAA).*

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) acknowledge the challenges faced by the MIDRMA concerning the acquisition and authorized use of archived ADS-B data; and
- b) discuss and agree the Draft Conclusion in para 2.7 above.

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