



*International Civil Aviation Organization*

**Middle East Regional Monitoring Agency Board**

**Fifteenth Meeting (MIDRMA Board/15)**  
*(Muscat, Oman, 29 – 31 January 2018)*

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**Agenda Item 4: RVSM Monitoring and related Technical Issues**

**MID RVSM SAFETY MONITORING ACTIVITY**

*(Presented by the Secretariat)*

**SUMMARY**

The aim of this paper is to review the outcome of MIDANPIRG/16 meetings and ATM SG/3 meetings related to RVSM safety monitoring activity, and take follow-up action, as appropriate.

Action by the meeting is at paragraph 3.

**REFERENCES**

- ANSIG/2 Report
- ATM SG/3 Report
- MIDANPIRG/16 Report
- MIDRMA Board/14 Report

**1. INTRODUCTION**

1.1 The meeting may wish to recall that the duties and responsibilities of the MIDRMA include the development of RVSM Safety Monitoring Reports, with a view to verify that the defined safety levels as set out by MIDANPIRG continue to be met. In this regard, States are requested to provide required data on a regular basis and in a timely manner to the MIDRMA for the achievement of this task.

1.2 The MIDANPIRG/16 meeting was apprised of the outcome of the MIDRMA Board/14 meeting (Khartoum, Sudan, 1-3 February 2016) as reviewed by the Second meeting of the Air Navigation Systems Implementation Group (ANSIG/2, Cairo, Egypt, 6-8 December 2016).

1.3 The meeting may wish to note that an overview of the MIDRMA activities since MIDRMA Board/14 meeting was presented to the RASG-MID/5 (Doha, Qatar, 22-24 May 2016), Third MID Region Safety Summit (Doha, Qatar, 24-25 May 2016), RASG Steering Committee (RSC/5, Amman, Jordan, 23-25 January 2017), RASG-MID/6 (Bahrain, 26-28 September 2017) and DGCA-MID/4 (Muscat, Oman, 17-19 October 2017) meetings.

**2. DISCUSSION**

***Revised Memorandum of Agreement (MOA)***

2.1 The MIDANPIRG/16 meeting noted that the revised version of the MIDRMA MOA

was signed by eleven (11) States and the ICAO MID Office will coordinate with Iraq, Libya, Syria and Yemen for the signature of the revised MIDRMA MOA.

### ***Large Height Deviation (LHD) Reporting***

2.2 The MIDANPIRG/16 meeting underlined that several FIRs with high volume of traffic continue to report NIL LHDs, which have a negative effect on the computed Targets Level of Safety (i.e.: not representative/realistic). It was highlighted that the level of reporting of LHDs is still far below expectation compared to the traffic volume, which is mainly due to the reporting culture of the air traffic controllers. In this respect, the meeting urged States to take necessary measures to ensure effective reporting of LHDs by air traffic controllers.

2.3 The MIDANPIRG/16 meeting reiterated MIDANPIRG/15 Conclusion 15/6, and encouraged States to develop a simplified LHD Template containing the minimum data necessary to trigger the process of reporting LHDs by the air traffic controllers.

2.4 It was to be highlighted that most of the LHDs are related to coordination failures between adjacent ACCs. Accordingly, States were encouraged to implement AIDC/OLDI, which would improve significantly the coordination process and would reduce the amount of coordination failures, thus enhancing safety.

2.5 The MIDANPIRG/16 meeting noted with appreciation that the MIDRMA LHD Online Reporting Tool is being used for the exchange and coordination of LHDs at the interface between the ICAO Asia Pacific and MID Regions.

### ***Height Keeping Monitoring Requirements***

2.6 The MIDANPIRG/16 meeting noted with appreciation that the MIDRMA managed to conduct GMU monitoring for 124 aircraft registered in the Middle East Region since MIDANPIRG/15. Thanks to the MIDRMA, the MID Region achieved the highest percentage of monitored aircraft worldwide (94% of aircraft have known Height-Keeping Performance monitoring results).

2.7 The MIDANPIRG/16 meeting raised concern related to the status of the Libyan aircraft granted RVSM approval (based on the data received from the AFI RMA) without information or feedback from the State on the status of their height-keeping performance results. It was highlighted that the ICAO MID Office is communicating with Libya for the provision of information on the status of the Libyan aircraft and the process in place for granting RVSM approvals. Accordingly, the meeting agreed that, in case the information received from Libya indicates that the process in place is not complying with the ICAO provisions for granting RVSM approvals, the MIDRMA would issue a warning to States and other RMAs regarding the status of the Libyan aircraft.

2.8 The MIDANPIRG/16 meeting noted with concern that some State aircraft were filing "W" in their flight plans while they were not RVSM approved. Accordingly, the meeting urged States to implement necessary measures for granting RVSM approvals to their State aircraft.

2.9 The MIDANPIRG/16 meeting noted with concern the difficulties facing the MIDRMA when conducting GMU missions especially with the Customs (i.e. in some cases the Customs did not authorize the MIDRMA staff to enter the Country with the GMU Units). Accordingly, the meeting reiterated the MIDANPIRG/14 Conclusion 14/37, and urged States to take necessary measures to implement its provisions and that the MIDRMA Board Members ensure that all authorizations/approvals are in place before the conduct of the GMU Missions by the MIDRMA Team.

2.10 The MIDANPIRG/16 meeting recalled that the RASG-MID/5 meeting was apprised of the MIDRMA activities related to the Minimum Monitoring Requirements (MMR). The meeting noted with appreciation that the MIDRMA developed an Auto Online MMR Tool to enable the Civil

Aviation Authorities in the MID Region to check their MMR for each air operator under their responsibility and identify the aircraft that are non-compliant with the Annex 6 requirements for height-keeping performance. Accordingly, the meeting urged States to use the Auto Online Minimum Monitoring Requirements (MMR) Tool, available on the MIDRMA website.

2.11 The ATM SG/3 (Cairo, Egypt, 22-25 May 2017) meeting recalled that the MIDRMA was instructed to issue a warning regarding the status of the Libyan aircraft. However, the issuance of the warning was pending to give the Libyan CAA chance to rectify the approvals status, before banning the Libyan registered aircraft from operating within the RVSM airspace. The meeting agreed that a warning should be sent first to Libya in order to take necessary measures to resolve the issue.

2.12 The ATM SG/3 (Cairo, Egypt, 22-25 May 2017) meeting noted with appreciation that the Office of Foreign Assets Control (OFAC) of the US Department of Treasury granted the MIDRMA a waiver to use the EGMU to monitor the RVSM approved aircraft registered by Sudan. The MIDRMA will start coordinating with the concerned authorities in Sudan to monitor their aircraft as per their MMR.

2.13 It is to be highlighted, that the renewal of the license to use the EGMU to monitor the Iranian aircraft that expired in January 2017 is still in progress. The MIDRMA and ICAO MID are following-up closely the issue with FAA.

#### ***MIDRMA's Tools***

2.14 The MIDANPIRG/16 meeting noted with appreciation that the MIDRMA has currently the following tools used to monitor and support RVSM implementation:

- Collision Risk Analysis Software (MIDRAS);
- Large Height Deviation (LHD) Online Reporting Tool;
- Online Auto Minimum Monitoring Tool;
- Airspace Collision Risk Hot-Spot Analysis Software; and
- EGMU Altimetry System Error (ASE) Software.

2.15 The MIDANPIRG/16 meeting agreed that the assessments conducted using the MIDRMA tools might be used by States as guidance to support their airspace management activities; however, they should not be considered as the only element influencing the decision-making process for the implementation of changes, since in the majority of the cases, the introduction of changes necessitates further analyses and studies.

2.16 It was highlighted that the MIDRMA tools would support the ATFM implementation in the Region and the development process of ATS routes, as well as the implementation of ATM contingency measures/routes.

#### ***Development of the MID RVSM Safety Monitoring Report (SMR) 2015***

2.17 The MIDANPIRG/16 meeting recalled that the initial results of the MID RVSM SMR 2015 were presented to the ANSIG/2 meeting by the MIDRMA. The meeting reviewed the final version of the MID RVSM SMR 2015. The meeting noted that the results of the MID RVSM SMR 2015 were calculated for twelve (12) FIRs in the Middle East Region. Tripoli and Sanaa FIRs were excluded from the analysis due to the non-submission of the required traffic data.

2.18 The MID RVSM SMR 2015 presents evidence that, according to the data and methods used, the key safety objectives as set out by MIDANPIRG, through Conclusion 12/16, continue to be met.

**Recommendations**

- 2.19 The MIDANPIRG/16 meeting agreed that the MIDRMA should:
- a) review the content and structure of its aircraft monitoring groups;
  - b) keep the methods of calculating the technical CRM parameters and the risk due to technical height keeping errors under review;
  - c) carry out continuous survey and investigation on the number and causes of non-approved aircraft operating in RVSM airspace;
  - d) purchase/develop a tool to help the Member States to extract automatically the traffic data from their flight data processing systems to overcome the difficulties facing some of the Member States in the provisions of the necessary traffic data to the MIDRMA;
  - e) continue to enhance the (MIDRAS) Software (phase 3 of the upgrade project) to add visualization features in 4D;
  - f) continue to include in its work programme regular missions to the Member States, during which briefings on the MIDRMA activities and RVSM safety assessment requirements be provided to concerned personnel; and
  - g) continue to carry out continuous survey and investigation on the number and causes of non-approved aircraft operating in the MID RVSM airspace

2.20 The MIDANPIRG/16 meeting through Conclusion 16/1 endorsed the MID RVSM SMR 2015.

**Development of the MID RVSM Safety Monitoring Report (SMR) 2016**

2.21 The MIDANPIRG/16 meeting noted that the MIDRMA has been collecting the Flight Plan/Traffic data for the period 1 – 30 September 2016, for the development of the MID RVSM SMR 2016. The initial version was presented to the ATM SG/3 meeting (22-25 May 2017) and the final version would be endorsed by MIDANPIRG/17. The meeting urged States, if not yet done so, to provide the required data to the MIDRMA, as soon as possible.

6.1 The ATM SG/3 (Cairo, Egypt, 22-25 May 2017) meeting noted with concern that the MIDRMA was not able to develop the draft RVSM Safety Monitoring Report (SMR 2016) due to non-provision of the required traffic data by Iraq, Kuwait, Lebanon, and Saudi Arabia. The meeting highlighted that, in case the required data, in particular from Saudi Arabia, is not received before 30 June 2017, the SMR 2016 would not be developed and the MID Region would fail to complete the safety analysis for 2016 and demonstrate that the Target Level of Safety (TLS) continue to be met. Accordingly, the meeting agreed to the following Draft Conclusion:

*DRAFT CONCLUSION 3/9: MID RVSM SMR 2016*

*That, Iraq, Kuwait, Lebanon, and Saudi Arabia be urged to provide the FPL/traffic data for the period 1 – 30 September 2016 to the MIDRMA by 30 June 2017 using the Flight Data form available on the MIDRMA website ([www.midrma.com](http://www.midrma.com))*

6.2 Taking into consideration the situation in Libya, the meeting agreed to exclude Tripoli temporary from the RVSM safety analysis for 2016.

***Development of the MID RVSM Safety Monitoring Report (SMR) 2017***

2.22 The MIDANPIRG/16 meeting agreed that for the development of the MID RVSM SMR 2017, the Flight Plan/Traffic Data will be collected for the period 1 – 30 September 2017.

2.23 It was reiterated that the required data must be submitted in the right format using the excel sheet designed for this purpose which is the only format recognized by the MID Risk Analysis Software (MIDRAS). Any data received in a different format, or in an excel sheet different from the one available on the MIDRMA website ([www.midrma.com](http://www.midrma.com)) will not be acceptable.

2.24 Based on the above, the MIDANPIRG/16 meeting agreed to the following Draft Conclusion:

*CONCLUSION 16/2: MID RVSM SMR 2017*

*That,*

- a) the FPL/traffic data for the period 1 – 30 September 2017 be used for the development of the MID RVSM Safety Monitoring Report (SMR 2017);*
- b) only the appropriate Flight Data form available on the MIDRMA website ([www.midrma.com](http://www.midrma.com)) should be used for the provision of FPL/traffic data to the MIDRMA; and*
- c) the final version of the MID RVSM SMR 2017 be ready for presentation to and endorsement by MIDANPIRG/17.*

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