

International Civil Aviation Organization

## Middle East Regional Monitoring Agency Board

Fourteenth Meeting (MIDRMA Board/14) (Khartoum, Sudan, 1 – 3 February 2016)

## 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/15 and ATM SG/2 meetings related to RVSM safety monitoring activity, and take follow-up action, as appropriate.

Action by the meeting is at paragraph 3.

#### REFERENCES

- ATM SG/2 Report
- MIDANPIRG/15 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.

#### 2. DISCUSSION

2.1 The meeting may wish to note that MIDANPIRG/15 was apprised of the outcome of the MIDRMA Board/13 as reviewed by the ATM SG/1, Cairo, Egypt, 9-12 June 2014 and the First Meeting of the Air Navigation Systems Implementation Group (ANSIG/1), Cairo, Egypt, 10-12 February 2015.

#### Revised Memorandum of Agreement (MOA)

2.2 The MIDANPIRG/15 meeting noted that in line with the AN-Conf/12, Recommendation 6/11, and further to the approval of the Proposals for Amendment (*Serial No: MID Basic ANP 13/04 and 13/05 – AOP/ATM/SAR*), by the President of the ICAO Council on 12 October 2013, Libya and Sudan have been transferred from the AFI Air Navigation Plan (ANP) to the MID ANP and hence, automatically became Members of MIDANPIRG. Accordingly, the ICAO MID Regional Office and the MIDRMA took necessary measures for the transfer of the membership of Libya and Sudan from the AFI RMA to the MIDRMA.

- 2.3 The MIDANPIRG/15 meeting recalled that Qatar had not been included in the membership of the MIDRMA Board since its establishment, considering that the membership was agreed upon based on the list of FIRs where RVSM was implemented. Nevertheless, considering the important number of Qatari registered aircraft and the associated MIDRMA activities related to RVSM height monitoring activity, which is directly related to the volume of fleet, the MIDRMA Board/13 meeting agreed to invite Qatar to join the MIDRMA. The ICAO MID Regional Office invited Qatar to join MIDRMA through State Letter Ref.: AN 6/5.10.15A 14/111 dated 17 Apr. 2014. The MIDANPIRG/15 meeting noted with appreciation that Qatar joined officially the MIDRMA Board by the signature of the MIDRMA MOA on 28 April 2015.
- 2.4 The MIDANPIRG/15 meeting recalled that the MIDRMA MOA had never been updated since 27 February 2006 and that many clauses of the Agreement became outdated, in particular those clauses related to the MIDRMA Board membership and funding mechanism. Accordingly, the meeting through MIDANPIRG/15 Conclusion 15/3 endorsed the revised version of the MIDRMA MOA dated 12 March 2015, updated by the MIDRMA Board/13 meeting, to replace and supersede the MIDRMA MOA dated 27 February 2006. The meeting requested the ICAO MID Regional Office to follow-up with concerned States the signature of the revised MIDRMA MOA.
- 2.5 The MIDANPIRG/15 meeting reviewed and updated the MIDRMA funding mechanism and agreed to MIDANPIRG/15 Conclusion 15/4, which replaces and supersedes the MIDANPIRG/12 Conclusion 12/12:

### Large Height Deviation (LHD) Reporting

- 2.6 The MIDANPIRG/15 meeting noted with appreciation that the MIDRMA developed an online LHD reporting tool to be used by States as the only mean for reporting of LHDs. The meeting re-iterated the necessity for the development of a simplified LHD Template containing the minimum data necessary to trigger the process of reporting LHDs by the Air Traffic Controllers (ATCOs). In this regard, the meeting noted with appreciation that Bahrain implemented a simplified automated LHD procedure/tool through the ATC system. Accordingly, the meeting encouraged States to implement a procedure within their ACCs to easily trigger the LHD reporting process and provide the ICAO MID Regional Office with an update on the action(s) undertaken.
- 2.7 Based on the above the MIDANPIRG/15 meeting agreed to the following Conclusions:

CONCLUSION 15/5: ONLINE REPORTING OF LARGE HEIGHT DEVIATION (LHD)

That, States:

- a) be urged to use only the online tool for reporting LHDs; and
- b) be encouraged to provide feedback to the MIDRMA for further improvement of the tool.

CONCLUSION 15/6: SIMPLIFIED LARGE HEIGHT DEVIATION (LHD)
REPORTING PROCEDURE

That, States be urged to implement a procedure within their ACCs to easily trigger the LHD reporting process and provide the ICAO MID Regional Office with an update on the action(s) undertaken.

- 2.8 It is to be highlighted that the ICAO MID Regional Office issued State Letter Ref.: AN 6/5.10.15A 15/190 dated 28 June 2015, as a follow-up action to the above MIDANPIRG/15 Conclusions. Bahrain, Egypt and Sudan provided their feedback on the actions undertaken.
- 2.9 The MIDANPIRG/15 meeting noted with concern that some States with high volume of traffic have been still reporting "NIL LHDs", and that the level of reporting of some States has been unsatisfactory, despite the implementation of the Online LHD Reporting Tool. Accordingly, the meeting agreed that Iran, Iraq and Yemen be included in the MIDANPIRG list of air navigation deficiencies.

### Height Keeping Monitoring Requirements

- 2.10 The MIDANPIRG/15 meeting noted with concern that some States are still not fully complying with Annex 6 provisions and MIDRMA Minimum Monitoring Requirements related to height keeping performance monitoring. The meeting noted that two air navigation deficiencies have been filed against Lebanon and Yemen for granting RVSM approvals to some aircraft without known height monitoring results. The meeting agreed that the MIDRMA continue their coordination with the concerned States in order to conduct necessary GMU missions for the identified aircraft.
- 2.11 The MIDANPIRG/15 meeting recalled that in accordance with the MID Region Height-Keeping Monitoring Strategy, for Medium and Long Term (2014 2020), the MIDRMA would continue to conduct GMU monitoring for identified operators' aircraft and the use of Height Monitoring Units (HMUs) as a means of conducting height-keeping monitoring; would be considered in due time.
- 2.12 The MIDANPIRG/15 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.
- 2.13 It was highlighted that the MIDRMA had been facing difficulties with some States related to the update of the RVSM approvals list and height monitoring requirements. Accordingly, the MIDANPIRG/15 meeting agreed that States, in addition to the ATC focal point, nominate a focal point from their Airworthiness/Flight Operations Authority responsible for the RVSM Certifications in order to improve the coordination process between the MIDRMA and the States. The meeting urged States to provide the ICAO MID Regional Office with their MIDRMA Board Member/Alternate and MIDRMA ATC and Airworthiness/Flight Operations Focal Points, if not yet done so.
- 2.14 The MIDANPIRG/15 meeting recognized that the MIDRMA was not able to comply with the increased demands for GMU monitoring, in a timely manner, with only one old GMU unit which might be subject to breakdown at any time. Taking into consideration the unsuccessful efforts that have been carried out to ease the conditions of the CSSI Sale and Services Agreement and the urgent need for GMU devices to be owned by the MIDRMA, the MIDRMA Board/13 meeting, through Draft Conclusion 13/11, granted authorization for the MIDRMA to purchase two (2) Enhanced GMU devices from the CSSI Company with the imposed restrictions. The meeting noted with appreciation that the MIDRMA purchased and received two Enhanced GMUs, which will improve the monitoring capabilities in the MID Region.
- 2.15 The MIDANPIRG/15 meeting noted that the DGCA-MID/3 meeting was apprised of 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 supported the MIDANPIRG/14 Conclusion 14/37, and urged States to take necessary measures to implement its provisions.
- 2.16 The MIDANPIRG/15 meeting recalled that MIDANPIRG/14 requested the MIDRMA to circulate the List of RVSM approved aircraft without known height-keeping monitoring results, to all MID States and other RMAs for appropriate action. Accordingly, the meeting agreed that the consolidated Table of the MID States RVSM Aircraft Minimum Monitoring Requirements (MMR) be posted on the MIDRMA website and kept regularly up to date.
- 2.17 The MIDANPIRG/15 meeting noted that Iran requested the monitoring of 66 aircraft instead of the 30 aircraft that require height keeping monitoring. However, due to the imposed restrictions on the use of the GMU Units, the MIDRMA was not able to respond to Iran request.

#### Training on RVSM Safety Assessment

- 2.18 The MIDANPIRG/15 meeting recalled that in order to increase the awareness about the MIDRMA activities and RVSM safety assessment requirements, MIDANPIRG/14 requested the MIDRMA 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. In the same vein, MIDANPIRG/14 agreed that such briefings could be provided in the MIDRMA premises in Bahrain, or during the MIDRMA monitoring missions to the States.
- 2.19 In connection with the above, the MIDANPIRG/15 meeting highly appreciated the training session on RVSM Safety Assessment organized during the course of the MIDRMA Board/13 meeting. In this regard, the meeting encouraged the MIDRMA to organize additional training sessions on RVSM Safety Assessment, as appropriate.

## Development of the MID RVSM Safety Monitoring Report (SMR) 2014

- 2.20 The MIDANPIRG/15 meeting noted that in accordance with MIDANPIRG/14 Decision 14/34–*Scrutiny Group Work Programme*, the MIDRMA Board/13 meeting reviewed, analyzed and validated the Large Height Deviation (LHD) Reports provided to the MIDRMA for the period 1 September 2013 to 8 March 2014.
- 2.21 It was highlighted that, in accordance with MIDANPIRG/14 Conclusion 14/38 States were requested to send their FPL/Traffic data for the period 15 January–15 February 2014, to the MIDRMA by 30 April 2014, for the development of the MID RVSM Safety Monitoring Report (SMR) 2014.
- 2.22 The MIDANPIRG/15 meeting noted that the initial results of the MID RVSM SMR 2014 were presented to the ATM SG/1 and ANSIG/1 meetings by the MIDRMA. The meeting reviewed the final version of the MID RVSM SMR 2014 presented by the MIDRMA. The meeting noted that the results of the MID RVSM SMR 2014 were calculated for thirteen (13) FIRs in the Middle East Region. Tripoli FIR was excluded from the analysis due to the non-submission of the required traffic data.
- 2.23 The MID RVSM SMR 2014 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. The MIDANPIRG/15 meeting, through Conclusion 15/7, endorsed the MID RVSM SMR 2014, which is available on the MIDRMA website (<a href="https://www.midrma.com">www.midrma.com</a>).

# Conclusion and Decisions related to the MIDRMA project financial and managerial issues

2.24 The MIDANPIRG/15 meeting agreed that the MIDRMA Board Conclusion and Decisions related to the MIDRMA project financial and managerial issues should not be presented to MIDANPIRG and can be endorsed by the MIDRMA Board.

# Development of the MID RVSM SMR 2015

- 2.25 The ATM SG/2 meeting noted with concern that only Bahrain, Lebanon, Oman, Saudi Arabia, Sudan, Syria and UAE provided their traffic data to the MIDRMA in accordance with the MIDANPIRG Conclusion 15/8 related to the development of the MID RVSM SMR 2015. Accordingly, the meeting urged the remaining States to provide their "correct" traffic data to the MIDRMA before 31 December 2015, failing to do so will result in listing the State in the list of air navigation deficiencies.
- 2.26 Taking into consideration the situation in Libya and Yemen, the ATM SG/2 meeting agreed to exclude Tripoli and Sana'a FIRs temporary from the RVSM safety analysis for 2015.

2.27 The MIDANPIRG/15 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 airline operator under their responsibility and identify the aircraft that are non-compliant with the Annex 6 requirements for height-keeping performance. The Tool is available on the MIDRMA website. Accordingly, the meeting agreed to the following ATM SG/2 Draft Conclusion:

DRAFT CONCLUSION 2/3: AUTO ONLINE MMR TOOL

That, States be urged to:

- a) use the Auto Online Minimum Monitoring Requirements (MMR) Tool, available on the MIDRMA website; to ensure that all their operators/airframes are complying with Annex 6 requirements related to Height-Keeping Performance; and
- b) provide feedback to the MIDRMA for the enhancement of the Tool.
- 2.28 The ATM SG/2 meeting noted with concern that 191 Iranian aircraft have unknown Height Keeping Monitoring results, which constitutes a serious safety issue. In order to resolve this issue 51 out of the 191 aircraft should be monitored. However, due to the imposed restrictions by the CSSI company on the use of the GMUs (Sanctions imposed by the USA), the MIDRMA was unable to respond positively to the Iranian requests for GMU missions.
- 2.29 The ATM SG/2 meeting noted that ICAO and the MIDRMA tried all possible channels to resolve the issue (Waiver from USA) but without success. Nevertheless, taking into consideration the latest political developments, it was highlighted that ICAO and the MIDRMA will pursue the subject with relevant authorities. In this respect, the USA delegation attending the meeting assured that they will follow-up the subject with relevant authorities in the USA. It is to be highlighted that a waiver was issued by USA on 16 December 2015 relieving the restrictions on the use of the EGMUs.

#### **MIDRMA Hot-spots Software**

- 2.30 The ATM SG/2 meeting noted with appreciation that the MIDRMA developed the Airspace Collision Risk Hot-spot Analysis Software to identify bottlenecks/hot-spots in the MID Region, to ensure that the risk of collision is maintained at an acceptable level of safety under certain traffic conditions. The software could be used for pre and post implementation analysis for any airspace. Accordingly, the meeting encouraged States to approach the MIDRMA for more details on the Software, its use and the possible improvements. More details about the software will be presented in a separate WP.
- 2.31 The ATM SG/2 meeting recalled that the First MIDANPIRG/RASG-MID Coordination meeting (MRC/1) held in Bahrain on 10 June 2015 identified RVSM safety monitoring as one of the subjects of interest for both MIDANPIRG and RASG-MID and agreed that MIDANPIRG will be the leading group for this subject. In this respect, the meeting underlined that the MIDRMA's contribution to the work programme of the RASG-MID is essential, in order to further raise awareness about the safety issues related to RVSM operations and monitoring; especially those related to RVSM approvals and certification and address them with the airworthiness experts supporting the activities of the RASG-MID. Accordingly, the meeting agreed that the participation of the MIDRMA Team in the RASG-MID meetings/events should be addressed to the MIDRMA Board/14 for final decision.

### 3. ACTION BY THE MEETING

- 3.1 The meeting is invited to:
  - a) agree on the list of States to be included in the MIDANPIRG list of air navigation deficiencies for non provision of required data to the MIDRMA, on a regular basis and in a timely manner;

- b) encourage States to sign the revised MIDRMA MOA, if not yet done so;
- c) agree on necessary follow-up actions to the MIDANPIRG/15 Conclusions related to RVSM safety monitoring; and
- d) take appropriate action with respect to the proposal at para 2.30.