International Civil Aviation Organization

Middle East Air Navigation Planning and Implementation Regional Group

Fifteenth Meeting (MIDANPIRG/15)
(Bahrain, 8 - 11 June 2015)

Agenda Item 5.2.1: MID Region air navigation priorities and target (ASBU Implementation)

MET IMPLEMENTATION IN THE MID REGION (B0-AMET)

(Presented by the Secretariat)

SUMMARY

This paper presents the outcome of the Fifth Meeting of the MET Sub-Group of the MIDANPIRG (MET SG/5) related to implementation of WAFS, IAVW, SIGMET, QMS and OPMET data requirements as per MID FASID Tables MET.

Action by the meeting is at paragraph 3.

REFERENCES

- BMG/4 Report
- ICAO Annex 3 – *Meteorological Service for International Air Navigation*
- IOM: AN 10/2.2 – 14/314
- MID Air Navigation Plan (Doc 9708) Volume II (FASID) Part VI (MET)
- MIDANPIRG/14 Report
- MIDANPIRG MET SG/5 Report
- State Letters: AN 10/5A – 14/092, AN 10/5A – 14/103, AN 10/5A – 14/192, AN 10/5A – 14/263

1. INTRODUCTION

1.1 The Fifth Meeting of the Meteorology Sub-Group of the Middle East Planning and Implementation Regional Group (MET SG/5) was held in Jeddah, Saudi Arabia, from 2 to 4 September 2014. The meeting was attended by a total of twenty four (24) participants, from eight (8) States (Austria, Egypt, Kuwait, Oman, Qatar, Saudi Arabia, Sudan and United Kingdom). The meeting agreed on four (4) Draft Conclusions for consideration by the MIDANPIRG/15 meeting.

1.2 The meeting was chaired by Mr. Ali Almotawa, Chief of MET Aviation, Meteorology Department of Kuwait, supported by the vice-chair, Mr. Fahad A. Al-Malki, consultant of the Presidency of Meteorology and Environment (PME), Saudi Arabia. The Secretary of the meeting was Mr. Christopher Keohan, Air Navigation Systems Implementation (Meteorology), Europe and North Atlantic, supported by Mr. Mohamed Smaoui, Deputy Regional Director of the ICAO Middle East Office.

1.3 The meeting reviewed global developments related to MET, and in particular, outcomes of the Meteorology Divisional Meeting 2014 (MET/14) held in Montréal from 7 to 18 July 2014. The meeting reviewed the implementation of meteorological provisions for international civil aviation that includes: World Area Forecast System (WAFS) and SADIS; International Airways Volcano Watch (IAVW); SIGMET and requirements for OPMET data as per MID FASID Tables MET. In addition, the meeting reviewed the MET provisions in the MID Basic ANP and FASID, MET deficiencies, quality management system, and performance indicators.

2. DISCUSSION

Global developments

2.1 The meeting reviewed outcomes of MET/14 which included future provisions and guidance such as those relating to radioactive cloud, space weather, evolution of existing World Area Forecast System (WAFS) and International Airways Volcano Watch (IAVW), establishment of regional hazardous advisory centres (RHWACs) and meteorological services in the terminal area. The associated recommendations were reviewed by the Council and tasked to the MET Panel to oversee progress of these recommendations.

2.2 At the time of MID MET SG/5, it was premature to develop an action list relevant to the MID Region. The action list requested maybe developed for MET SG/6 depending on progress of the working groups of the MET Panel. One suggestion provided by the MET SG/5 in relation to RHWACs was to include sandstorm and dust storm to phenomenon produced by the RHWACs and to further clarify local centre needs that define exactly the responsibilities and priorities related to the above issue.

World Area Forecast System

2.3 The meeting reviewed a summary of World Area Forecast System (WAFS) developments that included outcomes of the Nineteenth Meeting of the SADIS Operations Group (SADISOPSG/19, London, United Kingdom from 27 to 29 May 2014) as well as the Eighth Meeting of the World Area Forecast System Operations Group (WAFSOPSG/8, Bangkok, Thailand, from 2 to 5 September 2013). The full reports of each meeting can be viewed at the following websites: www.icao.int/safety/meteorology/sadisopsg/Lists/Meetings/Allitems.aspx and www.icao.int/safety/meteorology/WAFSOPSG/Lists/Meetings/Allitems.aspx.

2.4 The meeting recalled MIDANPIRG Conclusion 12/68 that called for training of new WAFS forecasts in 2011 and 2012 for the MID Region on the use of the new gridded WAFS forecasts for convective clouds, icing and turbulence. The World Area Forecast Centre (WAFC) Provider States, in coordination with the WAFSOPSG Secretary, proceeded with the development of computer-based (including voice over) initial training material for WAFS gridded global forecasts for CB clouds, icing and turbulence. The training material was made available on the WAFSOPSG website www.icao.int/safety/meteorology/WAFSOPSG/Pages/GuidanceMaterial.aspx. The meeting noted that the training material was posted in six different ICAO languages, which included Arabic.

2.5 With reference to WAFC London SIGWX forecasts, the meeting noted that in response to feedback from Bahrain, WAFC London had investigated forecast CB bases in the MID Region as they were reportedly too high. WAFC London was in agreement with this observation and since has lowered the CB bases and when appropriate listed as FLxxx for those CB bases that are below FL100. The SADIS Provider State reiterated the importance of obtaining such feedback as a positive contribution to providing improved products.

MIDANPIRG SADIS Cost Recovery Administrative Group (SCRAG) Member

2.6 The meeting noted that the SCRAG Member from Egypt, Mr. Mohamed Desouky, had not been able to correspond with the SCRAG and attend the annual meetings, as a result a new nomination was necessary. The ICAO MID Regional Office received a nomination from Egypt and one from the United Arab Emirates to represent the MID Region on the SCRAG.

2.7 The MET SG/5 meeting agreed that based on cost shares related to payment for the SADIS service, the United Arab Emirates, who has the greatest cost share in the MID Region, should represent the MID Region on the SCRAG. The UAE nominated Mr. Ahmed Alobadli as member of the SCRAG for consideration by MIDANPIRG.

2.8 The associated MET SG draft Conclusion 5/1 was reviewed by the Fourth Meeting of the MIDANPIRG Steering Group (MSG/4) held in Cairo, Egypt, from 24 to 26 November 2014, which agreed to this proposal (MSG Conclusion 4/20 refers). The ICAO MID Regional Office sent an inter-office memorandum (AN 10/2.2 – 14/314 dated 01 December 2014) to the Director Air Transport Bureau (D/ATB) of ICAO requesting to update the list of SCRAG Members accordingly. Therefore, **MET SG draft Conclusion 5/1** has been withdrawn.

International Airways Volcano Watch

2.9 The meeting noted developments related to the IAVWOPSG/8 (17 to 20 February 2014, Melbourne) meeting for which detailed information may be found at the following website: http://www.icao.int/safety/meteorology/iavwopsg/Pages/default.aspx.

2.10 With reference to IAVW, the meeting recalled the Global Database of Area Control Centre (ACC) AFTN 8-Letter Addresses for the Notification by VAAC London Concerning the Release of Radioactive Material into the Atmosphere noting entries were missing from Iraq (Baghdad and Basrah ACCs), Iran (Tehran ACC, FIC, FIR), Lebanon (Beirut ACC) and Syria (Damascus ACC). These States were encouraged to provide their ACC AFTN addresses to receive notification on the release of radioactive material into the atmosphere.

SIGMET

2.11 The meeting recalled MIDANPIRG/13 Conclusion 13/52 that invited States' MID SIGMET Test focal points to participate in the bi-annual SIGMET tests conducted by the EUR Region and report any deficiencies at each MET SG meeting. With reference WS SIGMET test conducted on 5 February 2014, three test bulletins from Kuwait, Jeddah and Cairo were received at Regional OPMET Centre (ROC) Vienna. For the volcanic ash (WV) SIGMET test conducted on 6 February 2014, four test bulletins from Bahrain, Amman, Abu Dhabi and Jeddah were received at ROC Vienna. With reference to the tropical cyclone (WC) SIGMET test conducted on 12 November 2013, one test bulletin from Bahrain was received at ROC Vienna; however, the series number was missing.

2.12 Since the MET SG/5 meeting, the EUR Data Management Group provided results of the WC SIGMET test conducted on 5 November 2014 where three tropical cyclone (WC) SIGMET test messages from Bahrain, Kuwait and the United Arab Emirates were received at ROC Vienna via ROC Jeddah (as well as directly from Bahrain and Kuwait).

2.13 The MET SG/5 meeting requested to have 3 SIGMET tests (WS and WV repeated three times) conducted each year due to low participation. However, the EUR METG agreed to reduce the number of SIGMET tests from twice to once per year as participation in EUR was considered high and no longer necessary to conduct tests twice a year (EUR METG Decision 24/7 refers). Therefore, the MID BMG may consider conducting SIGMET tests as frequently as deemed necessary.

2.14 With reference to SIGMET contact points, the MET SG/5 meeting agreed to update the SIGMET points of contact by 1 December 2014 in order to continue to increase SIGMET test participation (MET SG draft Conclusion 5/2 refers). A State letter (reference AN 10/12 – 14/263 dated 9 October 2014) was sent to States in this regard. Replies have been received from Bahrain, Iran, Iraq, Jordan, Libya and the United Arab Emirates. States that have not yet replied (Egypt, Kuwait, Lebanon, Oman, Saudi Arabia, Sudan, Syria and Yemen) are encouraged to reply. Therefore, **MET SG draft Conclusion 5/2** has been withdrawn.

2.15 The meeting recalled MIDANPIRG/13 Conclusion 13/53 that invited States with meteorological watch office responsibilities, and that have not already done so, to provide by 1 July 2012, the World Meteorological Organization (WMO) Abbreviated Header Lines (AHL) used for the issuance of SIGMET for flight information regions (FIRs) under their area of responsibility for inclusion in the MID Regional SIGMET Guide (https://portal.icao.int/RO_MID/Pages/default.aspx). The meeting noted that entries for Iraq, Lebanon, and Syria were still needed to be verified in order to complete Appendix D of the MID Regional SIGMET Guide.

2.16 The meeting recalled SADISOPSG Conclusion 17/15, Inventory of WMO AHLs used by States to promulgate special air-reports, which were to be in accordance with WMO Publication No. 386, *Manual on the Global Telecommunications System*. Appendix E of the referenced MID Regional SIGMET Guide contains a list of headings in this regard to be used by States. Confirmation and/or updates to the entries in the MID Regional SIGMET Guide have been received by Egypt, Kuwait, Libya, Oman, Qatar, Saudi Arabia and Sudan. Therefore, WMO AHL for special air-reports is needed for Bahrain, Iran, Iraq, Jordan, Lebanon, Syria, United Arab Emirates and Yemen.

2.17 The meeting discussed the method of correcting SIGMET and noted that the use of COR SIGMET is not referenced in Annex 3 and not allowed in the ICAO Meteorological Information Exchange Model (IWXXM). If a conversion from Traditional Alphanumeric Character (TAC) to IWXXM is needed, COR SIGMET would not currently be accepted. The EUR Data Management Group agreed to review draft guidance on the method of correcting SIGMET in June 2015. This guidance material can be considered by the MID Region when it becomes available (expected endorsement in the EUR Region by the end of 2015).

OPMET Exchange

2.18 A separate working paper (WP/34) addresses the implementation of Regional OPMET Centre (ROC) Jeddah and back-up ROC Bahrain.

2.19 The meeting agreed no changes were necessary to the terms of reference of the MID OPMET Bulletin Management Group (BMG).

Quality Management System (QMS)

2.20 The meeting recalled that Annex 3, paragraph 2.2.3 requires States to ensure that the designated meteorological authority establish and implement a properly organized quality system comprising procedures, processes and resources necessary to provide for the quality management of the meteorological information to be supplied to the users listed in Annex 3, paragraph 2.1.2.

2.21 The meeting recalled that implementation of QMS was a performance indicator expressed in percentage of States in the MID Region that meet QMS provisions in Annex 3. Currently, eight (8) (Bahrain, Egypt, Jordan, Kuwait, Qatar, Saudi Arabia, Sudan and the United Arab Emirates) out of fifteen (15) States have been certified ISO 9001. The status of implementation is provided at **Appendix A**. An updated status of implementation would be expected from Iran, Iraq, Lebanon, Libya, Oman, Syria and Yemen.

2.22 The meeting noted that a new ISO 9001:2015 was coming in 2015 with some fundamental changes in the organization of leadership and risk management. All the States would have to prepare themselves to respond to these challenges. These developments would also require adequate funding for States to implement.

Regional Air Navigation Plan

2.23 The meeting recalled that the amendment proposals for the MID Basic ANP (Serial No. MID BASIC 14/01-MET) and MID FASID (Serial No. MID-FASID 14/02-MET) were approved on 14 April 2014 (AN 10/5A – 14/103) and 7 April 2014 (AN 10/5A – 14/092) respectively. These amendment proposals were based on States' inputs as well as outcomes from the Seventh Meeting of the World Area Forecast System Operations Group (WAFSOPSG/7) and Seventh Meeting of the International Airways Volcano Watch Operations Group (IAVWOPSG/7). Furthermore, the meeting recalled the proposal for amendment for the MID FASID (Serial No. MID-FASID 14/05-MET) was approved on 16 July 2014 (AN 10/5A-14/192). This proposal was based on the outcome of the Eighth Meeting of the International Airways Volcano Watch Operations Group (IAVWOPSG/8).

2.24 The meeting agreed that the FASID Table MET 2C, "Exchange of Operational Meteorological Information during the Pilgrimage Season", was still necessary and would be placed in the specific regional requirements of Volume II of the electronic Air Navigation Plan.

2.25 The meeting was apprised of the progress achieved in the development of the electronic Air Navigation Plan (eANP) and agreed that the Secretariat populate the MID eANP – MET Volumes I and II by 30 September 2014 and distribute to States for comments/inputs to the ICAO MID Regional Office by 31 October 2014 and the relevant Parts of the MID eANP be presented to MSG/4 for review and consideration (MET SG/5 draft Conclusion 5/4 refers).

2.26 MSG/4 agreed that ANP WG/2 finalize the MID eANP for endorsement by MIDANPIRG/15 and that States be urged to review the MID eANP Volumes I, II and III available on the ICAO MID website, and provide updates/inputs to ANP WG/2 meeting (MSG Conclusion 4/4 refers).

2.27 ANP WG/2 agreed that States be urged to assign a focal point to facilitate the coordination of all issues related to the MID eANP and provide the ICAO MID Regional Office with their inputs/updates related to the Tables of the MID eANP Volumes I, II and III, available on the ICAO MID website, before 15 March 2015 (ANP WG Conclusion 2/1 refers).

2.28 Since MET SG/5 draft Conclusion 5/4 has been superseded by MSG Conclusion 4/4 and ANP WG Conclusion 2/1, **MET SG draft Conclusion 5/4** has been withdrawn.

Future work programme of MET SG

2.29 The meeting reviewed the terms of reference (ToRs) of the MET Sub-Group and agreed that they are still current and do not need to be updated.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

a) provide inputs to the ACC AFTN 8-letter addresses for Iraq, Iran and Syria concerning notification of a release of radioactive material into the atmosphere by VAAC London;

b) provide WMO AHL for SIGMET for Iraq, Lebanon and Syria;

c) provide WMO AHL for special air-reports and special air-reports on volcanic ash for Bahrain, Iran, Iraq, Jordan, Lebanon, Syria, United Arab Emirates and Yemen;

d) provide SIGMET contact points for Egypt, Kuwait, Lebanon, Oman, Saudi Arabia, Sudan, Syria and Yemen; and

e) review and update the status on QMS implementation especially for Iran, Iraq, Lebanon, Libya, Oman, Syria and Yemen.

APPENDIX A

STATUS OF QUALITY MANAGEMENT SYSTEM IMPLEMENTATION IN MID REGION

State	Status	Implementation/Certification Date	Planned Implementation Date
MID Region			
Bahrain	QMS implemented	2008	
Egypt	QMS implemented	23 May 2012	
Iran, Islamic Republic of	Near completion		Expected Feb 2014
Iraq			Implementation plan not received
Jordan	QMS implemented	2 Apr 2014	
Kuwait	QMS implemented	23 Aug 2013	
Lebanon			Implementation plan not received
Libya			Implementation plan not received
Oman	New organizational structure, expects to make progress by end of year – possibly 80% completed by end of 2014		TBD
Qatar	QMS implemented	Dec 2011	
Saudi Arabia	QMS implemented	Aug 2014	
Sudan	QMS implemented	5 June 2014	
Syrian Arab Republic			Implementation plan not received
United Arab Emirates	QMS implemented	19 Dec 2012	
Yemen			Implementation plan not received

- END -