

**MIDAD TF/5 & AIM SG/4-REPORT**



**INTERNATIONAL CIVIL AVIATION ORGANIZATION**

**REPORT OF THE FIFTH MEETING OF THE MIDAD TASKFORCE  
(MIDAD TF/5)**

**AND**

**FOURTH MEETING OF AIM SUB-GROUP  
(AIM SG/4)**

*(Cairo, Egypt, 13 – 15 February 2018)*

The views expressed in this Report should be taken as those of the MIDANPIRG AIM Sub-Group and the MIDAD Task Force and not of the Organization. This Report will, however, be submitted to the MIDANPIRG and any formal action taken will be published in due course as a Supplement to the Report.

Approved by the Meeting  
and published by authority of the Secretary General

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## **PART I – HISTORY OF THE MEETING**

### **1. PLACE AND DURATION**

1.1 The Fifth meeting of the MIDAD Task Force (MIDAD TF/5) and the Fourth Meeting of the MIDANPIRG AIM Sub-Group (AIM SG/4) were successfully held at the Meeting Room of the ICAO Middle East Regional Office in Cairo, Egypt, from 13 to 15 February 2018.

### **2. OPENING**

2.1 The meeting was opened by Mr. Mohamed Smaoui, the ICAO Deputy Regional Director, Middle East Office, who welcomed the participants to Cairo.

2.2 Mr. Smaoui highlighted that, as a follow-up action to the DGCA-MID/4 Conclusion 4/4, the MIDAD Task Force should review the progress achieved with regard to Phase A of the project (Individual migration of MID States to EAD) in order to prepare for the development of a detailed action plan for the implementation of Phase B (Set-up of MIDAD Manager), as and when appropriate.

2.3 Mr. Smaoui indicated that, in accordance with its Terms of Reference, the AIM Sub-Group should, inter-alia, monitor the status of AIM implementation, identify the associated difficulties and deficiencies and provide a progress report/input to the second edition of the MID Air Navigation Report 2017-18.

2.4 In closing, Mr. Smaoui thanked the participants for their presence and wished the meeting every success in its deliberations.

### **3. ATTENDANCE**

3.1 The meetings were attended by a total of twenty seven (27) participants from seven (7) States (Egypt, Iran, Iraq, Lebanon, Saudi Arabia, Sudan and United Arab Emirates) and two (2) International Organizations/Industries (IFAIMA and Jeppesen). The list of participants is at **Attachment A** to the Report.

### **4. OFFICERS AND SECRETARIAT**

4.1 The MIDAD TF/5 meeting was chaired by Mr. Imed Hassan Ben Saad, AIS/AIM Expert, GACA, Saudi Arabia, and the AIM SG/4 meeting was chaired by Mr. Abdalla Al Rashidi, Director AIM, GCAA, UAE. Mr. Abbas Niknejad, Regional Officer Aeronautical Information Management/Air Traffic Management (RO/AIM/ATM) was the Secretary of the meetings, supported by Mr. Mohamed Smaoui, Deputy Regional Director (DEPRD).

### **5. LANGUAGE**

5.1 Discussions were conducted in English and documentation was issued in English.

### **6. AGENDA**

6.1 The following Agenda was adopted:

Agenda Item 1: Adoption of the Provisional Agenda

Agenda Item 2: Follow-up on DGCA-MID/4 and MIDANPIRG/16 Conclusions and Decisions relevant to AIM and MIDAD

- Agenda Item 3: MID Region AIM Database (MIDAD) Project
- Agenda Item 4: Global/Regional developments related to AIM and SWIM
- Agenda Item 5: AIM Planning and Implementation in the MID Region
- Agenda Item 6: Review of Air Navigation Deficiencies in the AIM Field
- Agenda Item 7: Future Work Programme
- Agenda Item 8: Any other business

## 7. CONCLUSIONS AND DECISIONS – DEFINITION

7.1 All MIDANPIRG Sub-Groups and Task Forces record their actions in the form of Conclusions and Decisions with the following significance:

- a) **Conclusions** deal with the matters which, in accordance with the Group's terms of reference, merit directly the attention of States on which further action will be initiated by ICAO in accordance with established procedures; and
- b) **Decisions** deal with matters of concern only to the MIDANPIRG and its contributory bodies

## 8. LIST OF DRAFT CONCLUSIONS AND DRAFT DECISIONS

- DRAFT CONCLUSION 4/1: MID REGION AIM DATABASE (MIDAD)*
  - DRAFT CONCLUSION 4/2: UPDATED GUIDANCE FOR AIM PLANNING AND IMPLEMENTATION IN THE MID REGION (MID DOC 008)*
  - DRAFT CONCLUSION 4/3: B0-DATM ELEMENTS AND TARGETS*
  - DRAFT DECISION 4/4: TERMS OF REFERENCE OF THE AIM SUB-GROUP*
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**PART II: REPORT ON AGENDA ITEMS**

**REPORT ON AGENDA ITEM 1: ADOPTION OF THE PROVISIONAL AGENDA**

1.1           The subject was addressed in WP/1 presented by the Secretariat. The meeting reviewed and adopted the Agenda as at Para.6 of the History of the Meeting.

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**REPORT ON AGENDA ITEM 2: FOLLOW-UP ON DGCA-MID/4 AND MIDANPIRG/16  
CONCLUSIONS AND DECISIONS RELEVANT TO AIM AND MIDAD**

2.1 The subject was addressed in WP/2 presented by the Secretariat. The meeting noted the status of the DGCA-MID/4 and MIDANPIRG/16 Conclusions and Decisions relevant to AIM and MIDAD and the follow-up actions taken by concerned parties as at **Appendices 2A** and **2B**, respectively.

2.2 The meeting highlighted the DGCA-MID/4 Conclusion 4/1 related to the MID Region NCLB Declaration (Muscat Declaration). The meeting encouraged States and Stakeholders to coordinate with the ICAO MID Office for the provision of required assistance in the AIM field, in support to the MID Region NCLB Strategy.

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**REPORT ON AGENDA ITEM 3: MID REGION AIM DATA BASE (MIDAD) PROJECT**

3.1 The subject was addressed in WP/3 and PPT/8 presented by the Secretariat.

3.2 The meeting was apprised of the outcome of the EAD-MIDAD Workshop hosted by EUROCONTROL in Brussels, Belgium from 5 to 6 October 2017. The meeting noted that the Workshop agreed on the following way forward:

Implementation phases	Phase Description	Responsible
Phase A	Individual migration of MID States to EAD	MID States
Phase B	Set-up of MIDAD Manager	MIDAD States, ICAO MID, EUROCONTROL (as advisor)
Phase C	Implementation of MIDAD system and service	MID States

3.3 The meeting recalled that the DGCA-MID/4 meeting was provided with a progress report related to the MIDAD project and agreed on the way forward proposed by the EAD-MIDAD Workshop. The DGCA-MID/4 meeting agreed to the following Conclusion:

*DGCA-MID/4 CONCLUSION 4/4 – MID REGION AIM DATABASE (MIDAD)*

*That:*

- a) States are encouraged to engage with EUROCONTROL to migrate to the European AIS Database (EAD);*
- b) a detailed action plan for the implementation of Phase B: “Set-up of MIDAD Manager” be developed by the MIDAD Task Force; and*
- c) a progress report be presented to the DGCA-MID/5 meeting.*

3.4 The meeting reviewed and updated the status of State’s plan and progress related to the MIDAD Project Phase A, as at **Appendix 3A**. The meeting noted that the number of States that initiated the process of migration to EAD is too low. Accordingly, the meeting agreed that the development of a detailed action plan for the implementation of Phase B should be initiated when at least 7 States complete their migration to EAD.

3.5 The meeting noted that UAE has decided to reconsider its role in the MIDAD project. UAE will continuously monitor the progress of the MIDAD project and is planning to start the process of individual migration to EAD.

3.6 The meeting discussed the different types of EAD service agreements (B2B and B2C), which could be implemented, based on States’ needs and decisions.

3.7 The meeting noted that some States considered the cost for migration to EAD too high.

3.8 Based on the above, the meeting agreed to the following Draft Conclusion:

***DRAFT CONCLUSION 4/1: MID REGION AIM DATABASE (MIDAD)***

*That:*

- a) the status of individual migration by MID States to EAD (MIDAD Project Phase A) be monitored by the AIM Sub-Group; and*
  - b) the development of a detailed action plan for the implementation of the MIDAD Project Phase B (set-up of MIDAD Manager) be initiated when at least 7 States complete their migration to EAD.*
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**REPORT ON AGENDA ITEM 4: GLOBAL/REGIONAL DEVELOPMENTS RELATED TO AIM AND SWIM*****Outcome of the Interregional SWIM Workshop***

4.1 The subject was addressed in PPT/2 presented by the Secretariat. The meeting was apprised of the outcome of the Interregional APAC/EUR/MID Workshop on Service Improvement through integration of AIM, MET and ATM Information Services (SWIM Workshop), which was successfully held at the EUROCONTROL Premises in Brussels, Belgium, from 2 to 4 October 2017.

4.2 The meeting noted that the Workshop addressed planning and implementation issues of the Performance Improvement Area 2 ASBU Modules related to AIM, ATM, MET, FICE and SWIM, including the pre-requisites for an efficient and timely implementation of the Block 1 Modules. The Workshop provided a forum to share experience and best practices, and addressed the challenges and lessons learned associated with the PIA2 Block 0 and Block 1 implementation.

4.3 The Workshop Presentations and Summary of Discussion are available on the ICAO MID website at: <https://www.icao.int/MID/Pages/2017/SWIM%20Interr.aspx>

***Interregional Workshop on PANS AIM***

4.4 The subject was addressed in WP/4 presented by the Secretariat. The meeting noted that an Interregional EUR/MID Workshop on PANS AIM is tentatively planned to be held at the ICAO EUR/NAT premises (Paris, France) from 10 to 12 July 2018. The objective of the Workshop is to introduce the new PANS AIM and amendment to Annex 15 (restructured Annex 15); and develop Regional Action Plan(s) for their harmonized and coordinated implementation.

4.5 The meeting noted with appreciation that States and Jeppesen expressed their support to the Workshop. Accordingly, the meeting encouraged States and Stakeholders to actively participate in the Workshop.

***Outcome of the MID Region NCLB AIM Workshop***

4.6 The subject was addressed in PPT/1 presented by the Secretariat. The meeting was apprised of the outcome of the MID Region NCLB AIM Workshop, which was successfully held in Cairo, Egypt, from 11 to 13 September 2017.

4.7 The meeting noted that the Workshop addressed issues related to transition from AIS to AIM and associated challenges/lessons learnt. The Workshop provided a forum to share experience and best practices, through presentations and panel discussions.

4.8 The Workshop Presentations and Main Outcome are available on the ICAO MID website at: <https://www.icao.int/MID/Pages/2017/NCLB-AIM%20Workshop.aspx>

***ICARD Issues***

4.9 The subject was addressed in PPT/4 presented by the Secretariat. The meeting was apprised of the latest developments related to ICARD. The meeting addressed the following issues related to ICARD/5LNCs:

- 5LNCs duplicates (5LNCs used in more than one State);

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- Publication in National AIPs of 5LNCs, which have not been registered in ICARD;
  - 5LNCs registered in ICARD but not used;
  - Sound-like proximity;
  - Increasing demand of 5LNCs for terminal use (SIDs, STARs, IAPs); and
  - Coordination of 5LNCs used as FIR BDRY with the neighboring States.

4.10 The meeting recalled that through State Letter Ref.: AN 11/45.5-17/101 dated 11 August 2017 issued by the ICAO HQ, States were invited to take necessary actions for the resolution of 5LNCs duplicates and clean-up of the 5LNCs registered in ICARD, but not used in AIP. The meeting reviewed the analysis of the 5LNCs and the identified duplicates of the six (6) States that have taken action on the State Letter (Lebanon, Egypt, Oman, Qatar, Saudi Arabia and UAE); and urged those States, that have not yet done so, to provide the ICAO MID Office with their 5LNCs published in AIP in excel format, for further analysis by ICAO.

4.11 The meeting was apprised of the outcome of the ATM SG/3 meeting (Cairo, Egypt, 22-25 May 2017) on the subject and supported the following Draft Conclusion 3/3, emanating from the ATM SG/3 meeting:

*DRAFT CONCLUSION 3/3: ICARD ISSUES*

*That,*

- a) *States be urged to take necessary actions on the resolution of the issues related to ICARD/5LNCs, including:*
  - i. *registration of all 5LNCs published in AIP into ICARD;*
  - ii. *5LNCs duplicates;*
  - iii. *Non-ICAO codes;*
  - iv. *sound-like proximity;*
  - v. *release of unused registered 5LNCs; and*
  - vi. *use of Alphanumeric codes for terminal airspace, in accordance with PANS-OPS (Doc 8168) provisions.*
- b) *Users (IATA, IFALPA, Jeppesen, etc.) are invited to report issues related to ICARD/5LNCs in the MID Region to the ICAO MID Office; and*
- c) *an air navigation deficiency be filed against those States that are not complying with Annex 11 and Doc 8168 provisions related to 5LNCs.*

***IFAIMA Update***

4.12 The subject was addressed in PPT/3 presented by IFAIMA. The meeting noted the update presented by IFAIMA, including the outcome of the last IFAIMA Global AIM Conference in Kampala. The meeting noted that the next Global IFAIMA 2018 will be held in San Domenico, 22-24 May 2018.

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**REPORT ON AGENDA ITEM 5: AIM PLANNING AND IMPLEMENTATION IN THE MID REGION*****MID Air Navigation Report-2017***

5.1 The subject was addressed in WP/5 and PPT/5 presented by the Secretariat. The meeting noted that the MIDANPIRG/16 meeting (Kuwait, 13-16 February 2017) endorsed the MID Air Navigation Report-2016, which is available on the ICAO MID Office website at: [www.icao.int/mid](http://www.icao.int/mid)

5.2 The meeting recalled that the MIDANPIRG/16 meeting, through Conclusion 16/8, agreed that States should provide the ICAO MID Office, with relevant data necessary for the development of the MID Region Air Navigation Report-2017.

5.3 The meeting reviewed the draft version of the second edition of the MID Region Air Navigation Report-2017, and urged States, that have not yet done so, to provide the ICAO MID Office with their inputs before **30 April 2018**.

***MID Region AIM Implementation Roadmap***

5.4 The subject was addressed in WP/6 presented by the Secretariat. The meeting reviewed the MID Region AIM Implementation Roadmap, updated by AIM SG/3. The meeting noted the status of National AIM Roadmaps provided by States; and urged States to provide the ICAO MID Office with their updated National AIM Implementation Roadmap on an annual basis.

***Guidance for AIM Planning and Implementation in the MID Region (MID Doc 008)***

5.5 The subject was addressed in WP/7 presented by the Secretariat. The meeting recalled that the MIDANPIRG/16 meeting, through MIDANPIRG Conclusion 16/10, endorsed the “*Guidance for AIM Planning and implementation in the MID Region*” as the MID Doc 008.

5.6 The meeting recalled that the AIM SG/3 meeting agreed that additional guidance related to the eANP Volume III Tables and in particular B0-DATM 3-1 “*Provision of AIS/AIM products and services based on the Integrated Aeronautical Information Database (IAID)*” should be included in the Guidance for a better and harmonized understanding.

5.7 The meeting reviewed and updated the MID Doc 008 as at **Appendix 5A**; and agreed to the following Draft Conclusion:

***DRAFT CONCLUSION 4/2: UPDATED GUIDANCE FOR AIM PLANNING AND  
IMPLEMENTATION IN THE MID REGION  
(MID DOC 008)***

*That:*

- a) *States be urged to review the MID Doc 008 at **Appendix 5A** and inform the ICAO MID Office of any need for additional guidance that needs to be included in the document; and*
- b) *the ICAO MID Office invite States to contribute to the development of the required additional guidance based on their best practices; and*
- c) *the revised version of MID Doc 008 be presented to MIDANPIRG/17 for endorsement.*

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***Posting of AIS Products on the Web***

5.8 The subject was addressed in WP/8 presented by the Secretariat. The meeting recalled that the AIM SG/3 meeting recognized the need for guidance related to the posting of aeronautical information products on the web.

5.9 The meeting noted that the ICAO MID Office initiated consultation with Jeppesen and EUROCONTROL regarding their experience on the subject. The meeting encouraged States to use the guidance related to posting of aeronautical information on the internet, included in the “*EUROCONTROL Guidelines for AIP distribution on the internet*”. The meeting invited States to provide their feedback related to the EUROCONTROL Guidelines to the ICAO MID Office, for presentation to the AIM SG/5 meeting.

5.10 The meeting recognized that Disclaimers related to the use of aeronautical information available on the AIS websites prevent the Users to make use of it. The meeting underlined that the aeronautical information published on the AIS websites should be consistent, quality-assured and maintained up-to-date.

***AIRAC adherence***

5.11 The subject was addressed in WP/11 presented by the Secretariat and PPT/7 presented by Jeppesen. The meeting recalled that MIDANPIRG/16 through Conclusion 16/11, urged States to implement a system for AIRAC adherence monitoring; and report on annual basis (by 31 March) to the ICAO MID Office the case(s) of late publication of aeronautical information of operational significance and non-adherence to the AIRAC provisions, using the AIRAC Adherence Monitoring Template.

5.12 The meeting reviewed the status of AIRAC adherence in 2017 and noted that there was a slight improvement compared to previous years. Nevertheless, some cases of late publication or non-adherence to AIRAC were observed. The meeting urged States to implement the MIDANPIRG Conclusion 16/11 and invited IATA and Jeppesen to report to the concerned State(s) and the ICAO MID Office any case of non-adherence.

5.13 Jeppesen underlined the importance of quality and timeliness of the aeronautical information received by the Users.

***RNAV to RNP Instrument Approach Chart Depiction***

5.14 The meeting recalled that the Amendment 6 to the *Procedures for Air Navigation Services — Aircraft Operations* (PANS-OPS, DOC 8168) introduced a change to the approach charts by introducing the “PBN Requirements Box” and a change in chart identifications for performance-based navigation (PBN) approaches (transition from RNAV to RNP approach chart identification). It was noted that, as part of PBN procedures naming convention, only the term RNP will be permitted as the Procedure identification instead of RNAV (GNSS) and/or RNAV (GPS); and RNP (AR) instead of RNAV (RNP), as of 1 December 2022.

5.15 The meeting noted that ICAO Circular 336, *Area Navigation (RNAV) to Required Navigation Performance (RNP) Instrument Approach Chart Depiction*, was issued in support of Amendment 6 to provide guidance on the change, in particular managing the risks involved during the transition period. However, after the adoption of Amendment 6, some concerns have been raised regarding the implementation of this change. The attention of the 39th Session of the Assembly was

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drawn to these concerns, and ICAO was encouraged to update the guidance available and develop a regionally coordinated transition plan to support the effective rollout of the change.

5.16 It was noted that, in order to address concerns related particularly to transition arrangements and potential confusion for operators being faced with variations in chart titling during the transition period, Circular 336 was withdrawn and the new material has been developed by the IFPP and will be published soon.

5.17 Based on the above, the meeting agreed with the following procedure developed by the PBN SG/3 meeting (Cairo, Egypt, 11-13 February 2018), to be included in the MID Region PBN Implementation Plan (MID Doc 007) as the MID Region Transition Plan for the RNAV to RNP Charting Depiction:

- MID States, that have not yet done so, should implement RNAV to RNP Chart naming convention for their current PBN Approach Procedures published in their AIPs, starting from **29 March 2019** up to 8 September 2022.
- New PBN Approach Procedures, planned to be published before 29 March 2019, should be published using the new naming convention, if practicable.
- If a PBN Approach Procedure published in the National AIP is amended and re-published before 29 March 2019 (for any reason), the new naming convention should be used, if practicable.

5.18 The meeting urged States to provide the ICAO MID Office with their action plan for the implementation of RNAV to RNP Chart naming convention and keep the MID Office apprised of the status of implementation. The meeting highlighted that AIS should be involved in the development of the above-mentioned action plan.

#### ***MID Air Navigation Strategy – B0-DATM***

5.19 The subject was addressed in WP/9 presented by the Secretariat. The meeting recalled that MIDANPIRG/16 endorsed an updated version of the MID Air Navigation Strategy.

5.20 The meeting recalled that the AIM SG/3 meeting agreed to propose the deletion of the element “National AIM implementation plan/roadmap” from the list of Elements of B0-DATM in the MID Air Navigation Strategy.

5.21 The meeting reviewed B0-DATM elements and agreed that, for a simplified performance monitoring of the AIM implementation (B0-DATM), eTOD and Digital NOTAM should also be deleted from the list of Elements of B0-DATM. It was noted that eTOD will still be monitored through the MID eANP Volume III (Tables B0-DATM 3-4-1, 3-4-2 and 3-4-3).

5.22 The meeting agreed that the agreements with data originators is an important Step of the ICAO Roadmap for the transition from AIS to AIM. Accordingly, the meeting agreed to include this element in the MID Air Navigation Strategy (B0-DATM) as at **Appendix 5B**.

5.23 Based on the above, the meeting agreed to the following Draft Conclusion:

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**DRAFT CONCLUSION 4/3: B0-DATM ELEMENTS AND TARGETS**

*That,*

- a) *the B0-DATM Elements and Targets be updated as at **Appendix 5B**; and*
- b) *the updated B0-DATM table be included in the MID Air Navigation Strategy (MID Doc 002).*

**MID eANP**

5.24 The subject was addressed in WP/10 presented by the Secretariat.

5.25 The meeting reviewed and updated the B0-DATM Tables of the MID eANP Volume III as at **Appendix 5C**.

***Lebanon Experience related to Digital Integrated Briefing***

5.26 The subject was addressed in PPT/9 presented by Lebanon. The meeting was apprised of Lebanon's experience pertaining to the development of an interface/platform related to digital integrated briefing developed in-house.

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**REPORT ON AGENDA ITEM 6: REVIEW OF AIR NAVIGATION DEFICIENCIES IN THE AIM FIELD**

6.1 The subject was addressed in WP/12 presented by the Secretariat. The meeting recalled that, the MIDANPIRG/15, through Conclusion 15/35, urged States to use the MID Air Navigation Deficiency Database (MANDDD) for the submission of requests for addition, update, and elimination of Air Navigation Deficiencies. It was underlined that specific Corrective Action Plan (CAP) should be submitted for each deficiency; and the elimination of deficiency(ies) should be supported by a Formal Letter to the ICAO MID Office containing the evidence(s) that mitigation measures have been implemented.

6.2 The meeting urged States to implement the provisions of MIDANPIRG Conclusion 15/35 related to the elimination of Air Navigation Deficiencies, in particular, the submission of a specific Corrective Action Plan (CAP) for each deficiency.

6.3 The meeting reviewed and updated the list of deficiencies in the AIM field as at **Appendix 6A**.

6.4 The meeting agreed that the elimination of the Deficiencies related to QMS implementation is a high priority and collaboration of States in this respect was strongly encouraged. Accordingly, in support of the NCLB initiative, the meeting noted with appreciation that Saudi Arabia, Sudan and UAE offered their support by inviting interested States to visit their AIS and share their experience, documentation and best practices.

6.5 In connection with the above, the meeting encouraged States to extend the invitation of training courses and workshops organized at National level to experts from other States/AISs, in close coordination with the ICAO MID Office.

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**REPORT ON AGENDA ITEM 7: FUTURE WORK PROGRAMME**

- 7.1 The subject was addressed in WP/13 presented by the Secretariat.
- 7.2 The meeting recalled that the AIM SG/2 meeting agreed that some SWIM-related tasks should be included in the Terms of Reference (TORs) of the AIM SG to support the planning framework on information management.
- 7.3 The meeting noted the Recommendation of the Interregional APAC/EUR/MID SWIM Workshop related to the need for the development of a Regional SWIM Roadmap. It was noted that APAC Region has already developed a Regional SWIM Roadmap and EUR Region has initiated the development of the Regional SWIM Roadmap in the European Region.
- 7.4 The meeting recalled the Recommendation of the NCLB AIM Workshop (Cairo, Egypt, 11-13 September 2017), which encouraged collaboration between States for an expeditious transition from AIS to AIM, in support of the ICAO NCLB initiative.
- 7.5 Based on the above, the meeting agreed to include in the TORs of the AIM SG include SWIM and NCLB-related tasks as at **Appendix 7A**. Accordingly, the meeting agreed to the following Draft Decision:

***DRAFT DECISION 4/4: TERMS OF REFERENCE OF THE AIM SUB-GROUP***

*That, the Terms of Reference of the AIM Sub-Group be updated as at **Appendix 7A**.*

- 7.6 The meeting agreed that the AIM SG/5 meeting be held back-to-back with the PBN SG/4 meeting during the second half of 2019. The venue will be Cairo, unless a State is willing to host the meetings.
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**REPORT ON AGENDA ITEM 8: ANY OTHER BUSINESS**

8.1 Nothing has been discussed under this agenda item.

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# *APPENDICES*

**APPENDIX 2A**

**FOLLOW-UP ACTION PLAN ON DGCA-MID/4 CONCLUSIONS AND DECISIONS**

CONCLUSIONS AND DECISIONS	TO BE INITIATED BY	DELIVERABLE	TARGET DATE	STATUS/REMARKS
<p><b>DGCA-MID/4 CONCLUSION 4/1 – MID REGION NCLB DECLARATION (MUSCAT DECLARATION)</b></p> <p>That:</p> <p>a) the MID Region NCLB Declaration (Muscat Declaration) at <b>Appendix 3B</b>, is endorsed; and</p> <p>b) States and Stakeholders are invited to support the implementation of the MID Region NCLB Strategy.</p>	<p>DGCA-MID/4</p> <p>States and Stakeholders</p>	<p>Muscat Declaration</p> <p>Feedback</p>	<p>Oct. 2017</p>	<p><b>Ongoing</b></p>
<p><b>DGCA-MID/4 CONCLUSION 4/2 – MID IMPLEMENTATION PLAN (MIDIP)</b></p> <p>That:</p> <p>a) the establishment of MIDIP is supported;</p> <p>b) States and stakeholders from within and outside the Region are encouraged to provide voluntary financial contributions to expedite the establishment of MIDIP; and</p> <p>c) a kick-off meeting of the MIDIP Steering Committee composed of the DGCA's of MID States be organized upon the availability of necessary resources to implement the identified projects and capacity building initiatives.</p>	<p>DGCA-MID/4</p> <p>States and Stakeholders</p> <p>ICAO</p>	<p>Feedback</p> <p>MIDIP kick-off meeting</p>	<p>Oct. 2017</p>	<p><b>Ongoing</b></p>

CONCLUSIONS AND DECISIONS	TO BE INITIATED BY	DELIVERABLE	TARGET DATE	STATUS/REMARKS
<p><b>DGCA-MID/4 CONCLUSION 4/3 – MID FLIGHT PROCEDURE PROGRAMME</b></p> <p>That:</p> <p>a) States are urged to sign the MID FPP Project Document with ICAO TCB;</p> <p>b) till the recruitment of a MID FPP Manager/Coordinator, the ICAO MID Office provide full support to run the programme, in close coordination with the Host State;</p> <p>c) a Kick-off meeting of the MID FPP be held in January 2018; and</p> <p>d) States and Stakeholders are urged to participate in the Kick-off meeting of the MID FPP.</p>	<p>States</p> <p>ICAO</p> <p>ICAO</p> <p>States and Stakeholders</p>	<p>MID FPP ProDoc signed</p> <p>Support to the MID FPP</p> <p>Kick-off meeting</p> <p>Participation in the Kick-off meeting</p>	<p></p> <p>Jan. 2018</p> <p>Jan. 2018</p>	<p><b>Actioned/Ongoing</b></p> <p>Ongoing</p> <p>Actioned</p> <p>SL Ref.: AN 6/33.1-17/343 dated 7 Dec 2017 Kick-off meeting conducted</p>
<p><b>DGCA-MID/4 CONCLUSION 4/4 – MID REGION AIM DATABASE (MIDAD)</b></p> <p>That:</p> <p>a) States are encouraged to engage with EUROCONTROL to migrate to the European AIS Database (EAD);</p> <p>b) a detailed action plan for the implementation of Phase B: “Set-up of MIDAD Manager” be developed by the MIDAD Task Force; and</p> <p>c) a progress report be presented to the DGCA-MID/5 meeting.</p>	<p>States</p> <p>MIDAD Task Force</p> <p>ICAO</p>	<p>Feedback</p> <p>Action Plan</p> <p>Report</p>	<p></p> <p>February 2018</p> <p>2019</p>	<p><b>Ongoing</b></p>

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APPENDIX 2B

FOLLOW-UP ACTION PLAN ON MIDANPIRG/16 CONCLUSIONS AND DECISIONS

CONCLUSIONS AND DECISIONS	TO BE INITIATED BY	DELIVERABLE	TARGET DATE	STATUS/REMARKS
<p><b>CONCLUSION 16/3: MID REGION AIR NAVIGATION STRATEGY</b></p> <p>That, the revised MID Region Air Navigation Strategy (MID Doc 002, Edition February 2017) at Appendix 5.1A is endorsed.</p>	MIDANPIRG/16	MID AN Strategy (MID Doc 002)	Feb. 2017	<b>Completed</b>
<p><b>CONCLUSION 16/4: APPROVAL OF THE AMENDMENT TO THE MID eANP VOLUME III</b></p> <p>That, the amendment to the MID eANP Volume III at Appendix 5.1B is approved.</p>	MIDANPIRG/16 ICAO	Amendment Notification of amendment	Feb. 2017 May 2017	<b>Completed</b> Amendment was approved by MIDANPIRG/16 Notification of amendment issued on 18 June 2017
<p><b>CONCLUSION 16/7: MID REGION AIR NAVIGATION REPORT-2016</b></p> <p>That, the MID Region Air Navigation Report-2016 is endorsed.</p>	MIDANPIRG/16	MID AN Report	Feb. 2017	<b>Completed</b>
<p><b>CONCLUSION 16/8: MID REGION AIR NAVIGATION REPORT-2017</b></p> <p>That, MID States be urged to:</p> <p>a) develop/update their National ASBU Implementation Plan, ensuring the alignment with and support to the MID Region Air Navigation Strategy (MID Doc 002); and</p> <p>b) provide the ICAO MID Office, with relevant data necessary for the development of the MID Region Air Navigation Report-2017, by 1 November 2017.</p>	ICAO States States	State Letter National ASBU Implementation Plan Data for AN Report 2017	Sep. 2017 Nov. 2017 Nov. 2017	<b>Actioned/Ongoing</b> SL Ref.: AN 1/7 – 17/188 dated 2 July 2017  (Bahrain, Egypt, Jordan, Qatar, Sudan and UAE)
<p><b>CONCLUSION 16/10: GUIDANCE FOR AIM PLANNING AND IMPLEMENTATION IN THE MID REGION</b></p> <p>That,</p> <p>a) the Guidance for AIM Planning and Implementation in the MID Region is endorsed as MID Doc 008; and</p> <p>b) States be encouraged to use the MID Doc 008 in their AIM planning and implementation.</p>	MIDANPIRG/16 ICAO States	MID Doc 008 State Letter Updated National AIM Roadmaps	Feb. 2017 May 2017 Nov. 2017	<b>Completed</b> SL Ref: AN 8/4-17/133 dated 30 April 2017 (UAE)

CONCLUSIONS AND DECISIONS	TO BE INITIATED BY	DELIVERABLE	TARGET DATE	STATUS/REMARKS
<p><b>CONCLUSION 16/11: AIRAC ADHERENCE MONITORING</b></p> <p>That,</p> <p>a) States be urged to:</p> <p>i. implement a system for AIRAC adherence monitoring; and</p> <p>ii. report on annual basis (by 31 March) to the ICAO MID Office the case(s) of late publication of aeronautical information of operational significance and non-adherence to the AIRAC provisions, using the AIRAC Adherence Monitoring Questionnaire at Appendix 5.2.2D.</p> <p>b) IATA report to the concerned State(s) and the ICAO MID Office any case of late publication of aeronautical information of operational significance and non-adherence to the AIRAC provisions.</p>	<p>States</p> <p>ICAO</p> <p>States</p> <p>IATA</p>	<p>AIRAC adherence monitoring system</p> <p>State Letter</p> <p>Filled Questionnaire</p>	<p>Nov. 2017</p> <p>Mar. 2017/ continuous</p> <p>Apr. 2017/ continuous</p> <p>Nov. 2017/ continuous</p>	<p><b>Actioned/Ongoing</b></p> <p>- SL Ref.: AN 8/4 – 17/087 dated 23 Mar 2017 13 States Replied (Bahrain, Egypt, Iran, Iraq, Jordan, Kuwait, Lebanon, Libya, Oman, Qatar, Saudi Arabia, Sudan and UAE)</p> <p>- SL Ref.: AN 8/4 – 18/020 dated 21 Jan 2018 11 States Replied (Egypt, Iran, Iraq, Jordan, Lebanon, Libya, Oman, Qatar, Saudi Arabia, Sudan and UAE)</p>
<p><b>CONCLUSION 16/12: INTERREGIONAL SEMINAR ON “SERVICE IMPROVEMENT THROUGH INTEGRATION OF DIGITAL AIM, MET AND ATM INFORMATION”</b></p> <p>That, States, Organizations and Industry be invited to actively participate in the Interregional Seminar on “Service Improvement through Integration of Digital AIM, MET and ATM Information Services” (Brussels, Belgium, 2-5 October 2017).</p>	<p>ICAO</p> <p>States, Organizations and Industry</p>	<p>State Letter</p> <p>Actively participate in the Seminar</p>	<p>Jun. 2017</p> <p>Oct. 2017</p>	<p><b>Completed</b></p> <p>SL Ref.: AN 8/28.1-17/175 dated 14 June 2017 Only 6 MID States participated</p>
<p><b>DECISION 16/26: ATM DATA SECURITY ACTION GROUP</b></p> <p>That, the ATM Data Security Action Group (ADSAG) be:</p> <p>a) established to develop the MID Region ATM Data Security Plan, to be presented to the CNS SG/8.</p> <p>b) composed of members from Bahrain, Iran, Kuwait, Oman, Saudi Arabia, UAE (Rapporteur), ICAO and IFAIMA.</p>	<p>ICAO</p> <p>ADSAG members</p>	<p>State Letter</p> <p>MID Region ATM Data Security Plan</p>	<p>Jun. 2017</p> <p>Q1-2018</p>	<p><b>Ongoing</b></p> <p>SL Ref: AN 6/38 – 17/334 dated 29 Nov. 2017</p>





**INTERNATIONAL CIVIL AVIATION ORGANIZATION**

**MIDDLE EAST AIR NAVIGATION PLANNING  
AND IMPLEMENTATION REGIONAL GROUP  
(MIDANPIRG)**

**GUIDANCE FOR AIM PLANNING AND IMPLEMENTATION  
IN THE MID REGION**

**EDITION FEBRUARY, ~~2017~~2018**

**(Version ~~1.01~~)**

The designations employed and the presentation of material in this publication do not imply the expression of any opinion whatsoever on the part of ICAO concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontier or boundaries.

## RECORD OF AMENDMENTS

Edition Number	Edition Date	Description	Pages Affected
0.1	1 September 2015	Initial draft version	All
0.2	7 October 2015	Inputs incorporated by AIM SG/2	All
0.3	April 2016	Change in Doc title; improving order and content of chapters; States comments considered; Reviewed by MSG/5	All
0.4	November 2016	Review by ANSIG/2	All
1.0	February 2017	Endorsed by MIDANPIRG/16	All
<u>1.1</u>	<u>February 2018</u>	<u>AIM SG/4</u>	<u>All</u>

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## FOREWARD

The “Guidance for AIM Planning and Implementation in the MID Region” has been developed to harmonize transition from AIS to AIM in the MID Region and to addresses Global and Regional issues related to planning and implementation of Aeronautical Information Management. This Regional AIM Guidance material explains concept and operational elements of AIM; outlines the Regional and National AIM Roadmaps; and provides guidance and tools for their implementation at the Regional and National levels.

This Document consolidates updates and supersedes all previous guidance materials on the AIM implementation in the MID Region (National AIM Roadmap Template, Regional AIM Roadmap, etc.). The “Guidance for AIM Planning and Implementation in the MID Region” will be reviewed and updated, whenever deemed necessary, by the AIM Sub-Group.

First edition of the Document, developed by the ICAO MID Regional Office, was endorsed by MIDAPIRG/16 (Kuwait, 13-16 February 2017).

The Document was prepared in accordance with ICAO provisions related to AIM, including: Global ATM Operational Concept, the Global Air Navigation Plan, Aviation System Block Upgrades (ASBU) methodology, MID Region Air Navigation Plan and the MID Region Air Navigation Strategy, in addition to the twelfth Air Navigation Conference (AN-Conf/12) Recommendation 3/8 related to AIM. States are invited-recommended to take necessary measures to implement provisions of use this document and notify their experiences and practices related to transition from AIS to AIM.

Note - Provisions of this document are recommended practices and do not – under any circumstances – substitute/replace any of the ICAO SARPS related to AIS/AIM (e.g. Annex 15).

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## ABBREVIATIONS AND ACRONYMS

The abbreviations and acronyms used in this document along with their expansions are given in the following List:

AI	Aeronautical Information
AICM	Aeronautical Information Conceptual Model
AIP	Aeronautical Information Publication
AIRAC	Aeronautical Information Regulation and Control
AIS	Aeronautical Information Services
AIS-AIM SG	AIS to AIM Study Group
AIM	Aeronautical Information Management
AIM SG	Aeronautical Information Management Sub-Group
AIXM	Aeronautical Information Exchange Model
AN-Conf/11	Eleventh Air Navigation Conference
AN-Conf/12	Twelfth Air Navigation Conference
ANP	Air Navigation Plan
ANSP	Air Navigations Services Provider
ASBU	Aviation System Block Upgrade
ATM	Air Traffic management
eAIP	electronic Aeronautical Information Publication
eANP	electronic Air Navigation Plan
eTOD	electronic Terrain and Obstacle Data
GANP	Global Air Navigation Plan
GANR	Global Air Navigation Report
GIS	Geographic Information System
GML	Geography Markup Language
IM	Information Management
IMP	Information Management Panel
ISO	International Organization for Standardization
MET	Meteorology
MIDAD	MID Region AIM Database

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MIDANPIRG	Middle East Air Navigation Planning and Implementation Regional Group
MIL	Military
MSG	MIDANPIRG Steering Group
PBN	Performance-Based Navigation
QMS	Quality Management System
RWY	Runway
SARPs	Standards and Recommended Practices
SMART	Specific, Measurable, Achievable, Relevant and Timely
SWIM	System Wide Information Management
TORs	Terms of Reference
UML	Unified Modeling Language
WGS-84	World Geodetic System-1984
XML	Extensible Markup Language

## CHAPTER 1: ICAO AIM CONCEPT

### INTRODUCTION

1.1 The Eleventh Air Navigation Conference (AN-Conf/11) held in Montréal, 22 September to 3 October 2003, endorsed the Global ATM Operational Concept (Doc 9854) and recognized that, in the global air traffic management (ATM) system environment envisioned by the operational concept, aeronautical information service (AIS) would become one of the most valuable and important enabling services. As the global ATM system foreseen in the operational concept was based on a collaborative decision-making environment, the timely availability of high-quality and reliable electronic aeronautical, meteorological, airspace and flow management information would be necessary. Some recommendations of AN-Conf/11 addressed the importance of aeronautical information in particular.

1.2 Information management provides accredited, quality-assured and timely information used to support ATM operations. Information management will also monitor and control the quality of the shared information and provide information-sharing mechanisms that support the ATM community (ICAO DOC 9854 – Global ATM Operational Concept).

1.2.1.3 Aeronautical Information Management (AIM) ~~during its evolution has been defined as~~ the provision of the right Aeronautical Information (quality assured), at the right place (through digital exchange), and at the right time (timeliness). ICAO Annex 15 defines AIM as the *dynamic, integrated management of aeronautical information through the provision and exchange of quality-assured digital aeronautical data in collaboration with all parties.*

1.3.1.4 The Twelfth Air Navigation Conference (AN-Conf/12) held in Montréal, 19 to 30 November 2012, through Recommendations 3/7 and 3/8, supported and pushed:

- Transition from AIS to AIM by implementing a fully automated digital aeronautical data chain;
- Implementing necessary processes to ensure the quality of aeronautical data; and
- Engage in intraregional and interregional cooperation for an expeditious transition from AIS to AIM in a harmonized manner and to using digital data exchange and consider regional or ~~subregional~~ sub regional AIS databases as an enabler for the transition from AIS to AIM information from the origin to the end users

### TRANSITION FROM AIS TO AIM

#### *ICAO Roadmap for the transition from AIS to AIM*

1.4.1.5 The aeronautical information/data based on paper and telex-based text messages can not satisfy anymore the requirements of the ATM integrated and interoperable system. AIS is required to evolve from the paper product-centric service to the data-centric aeronautical information management (AIM) with a different method of information provision and management.

1.5.1.6 ICAO published in 2009 the “*Roadmap for the transition from AIS to AIM*”. The changes foreseen are such that this development is being referred to as the transition from aeronautical information services (AIS) to aeronautical information management (AIM). It identifies the major milestones recommended for a uniform evolution across all regions of the world and specific steps that need to be achieved for implementation.

*Note – Development of a Global AIM Implementation Strategy by ICAO is in progress.*

4.6.1.7 The Roadmap envisaged the transition into three phases and twenty one steps. Three phases of action are envisaged for States and ICAO to complete the transition to AIM:

– *Phase 1 — Consolidation*

Phase 1 is the pre-requisite for the transition from AIS to AIM (implementation of the current SARPs). In Phase 1, QMS implementation is still a challenge for some States.

– *Phase 2 — Going digital*

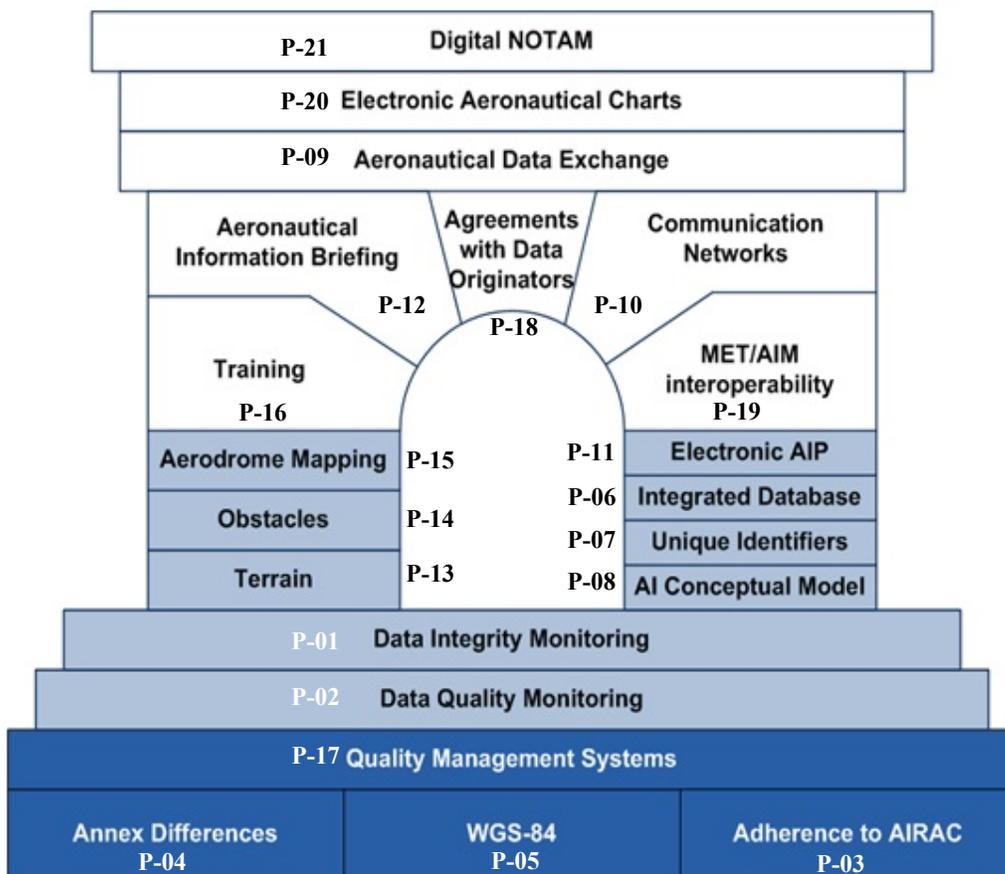
Main components of the Phase 2 are:

- Data-driven processes for the production of the current products;
- Introduction of structured digital data from databases into AIS/AIM processes;
- Introduction of highly structured databases and tools such as GIS;
- Electronic Terrain and Obstacle Datasets; and
- Implementation of aeronautical information conceptual model (AICM).

– *Phase 3 — Information management*

Main components of the Phase 3 are:

- Enabling AIM functions to address the new requirements of the Global ATM Operational Concept in a net-centric information environment;
- Transfer of information in the form of digital data based on the established databases; and
- Aeronautical data exchange model ensuring interoperability between all systems.



**Positioning of the 21 steps of the roadmap in the three phases**

### *AIS-AIM Study Group*

[1.7.1.8](#) The Air Navigation Commission in 2008 agreed to the establishment of AIS-AIM SG in order to assist with the development of:

- A global strategy/roadmap for the transition from AIS to AIM;
- SARPs and guidance material related to the provision of a standard AICM and standard AIXM to enable the global exchange of data in digital format; and
- Other SARPs, guidance material and training material necessary to support AIM implementation.

[1.8.1.9](#) Some achievements of the AIS-AIM Study Group have been as follows:

- ICAO Roadmap for transition from AIS to AIM;
- Amendments to Annex 15:
  - Amendment 36: New provisions related to the operational use of the public Internet; volcanic ash deposition; QMS; use of automation enabling digital data exchange; eAIP; NOTAM Format; and eTOD.

- Amendment 37: Annex 15 restructuring; Chapter 1 (General), Chapter 2 (Responsibilities and functions) and Chapter 3 (Aeronautical Information Management) introduced in Nov 2014;
- Amendment 40: Chapters 4 (Scope of AI and data), Chapter 5 (AI Products and services) and Chapter 6 (AI updates) instead of current Chapters 4-11 (in progress, applicability date would be November 2018).

- ~~Development of n~~New PANS AIM (~~in progress, applicability date would be~~Applicability date November 2018)
- Development of Aeronautical Data Catalogue (~~in progress;~~ Appendix A to the new PANS AIM)
- Development of Training Manual, Quality Manual, update of AIS Manual (Doc 8126) (in progress)

~~1.9~~1.10 AIS-AIMSG/12 was the last AIS-AIMSG held in Montreal, Canada from 19 to 23 October 2015. Materials related to the AIS-AIM SG including the meetings' Study Notes, Information Papers and Summary of Discussions are available on the ICAO AIM website at:

<http://www.icao.int/safety/ais-aimsg/Pages/default.aspx>

### ***Information Management Panel (IMP)***

~~1.10~~1.11 The Air Navigation Commission in 2014 agreed to the establishment of the Information Management Panel (IMP) to elaborate on necessary concepts and develop a global and interoperable approach to ensure effective management of information within the global air navigation system. The IMP will undertake tasks relating to the global transition from AIS to AIM, based upon Recommendations 3/1, 3/2, 3/3 and 3/9 of the Twelfth Air Navigation Conference in 2012 (AN-Conf/12).

~~1.11~~1.12 Four (4) Working Groups were established to undertake tasks of the Panel:

- Information Services and NOTAM
- Information Architecture & Management
- SWIM Awareness & Communication
- SWIM Governance

~~1.12~~1.13 Materials related to the IMP including the meetings' Working/Information Papers and Reports are available on the ICAO AIM website at:

<http://www.icao.int/airnavigation/IMP/Pages/default.aspx>

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## CHAPTER 2

### REGIONAL AIM PLANNING

#### REGIONAL ROADMAP FOR AIM IMPLEMENTATION

2.1 Having Phase I of the transition from AIS to AIM mostly completed in the MID Region, the ~~current~~ focus should be on the implementation of phase II and III of the Roadmap for the transition from AIS to AIM ~~to prepare further transition to Phase III in a timely manner~~. Accordingly, States should take into consideration the “MID Region AIM Implementation Roadmap” in planning for the transition from AIS to AIM in a prioritized manner.

### MID REGION AIM IMPLEMENTATION ROADMAP

	Related Steps	2016		2017		2018		2019		2020		2021		2022		Priority	Remarks
		1	2	1	2	1	2	1	2	1	2	1	2	1	2		
AIXM	P07, P08															1	Target: 80% by 2018
eAIP	P11															1	Target: 80% by 2020
Integrated Aeronautical Information Database	P06															2	
Aeronautical Data Exchange	P09															2	
Interoperability with MET	P19															3	
Aeronautical Information Briefing	P12															3	
Agreement with data originators	P18															1	
Data Quality Monitoring	P01															1	
Data Integrity Monitoring	P02															1	
Terrain A-1	P13															2	Target: 70% by 2018
Obstacle A-1	P14															2	Target: 60% by 2018
Terrain A-4	P13															2	Target: 100% by 2018
Obstacle A-4	P14															2	Target: 100% by 2018
Terrain A-2a	P13															2	
Obstacle A-2a	P14															2	
Training	P16															1	Continuous
Communication networks	P10															3	
Digital NOTAM	P21															3	
Electronic Aeronautical Charts	P20															3	
Terrain and Obstacle for Areas 2b, 2c, 2d and 3	P13, P14															3	Optional based on the States' decision to be reflected in the States' national Regulations and AIM National Plans, in accordance with operational needs
Aerodrome Mapping	P15															3	Optional based on the States' decision to be reflected in the States' national Regulations and AIM National Plans, in accordance with operational needs

*White: Planning*

*Light Green: Initial/On-going Implementation*

*Dark Green: Implemented (Performance Target achieved)*

## CHAPTER 3

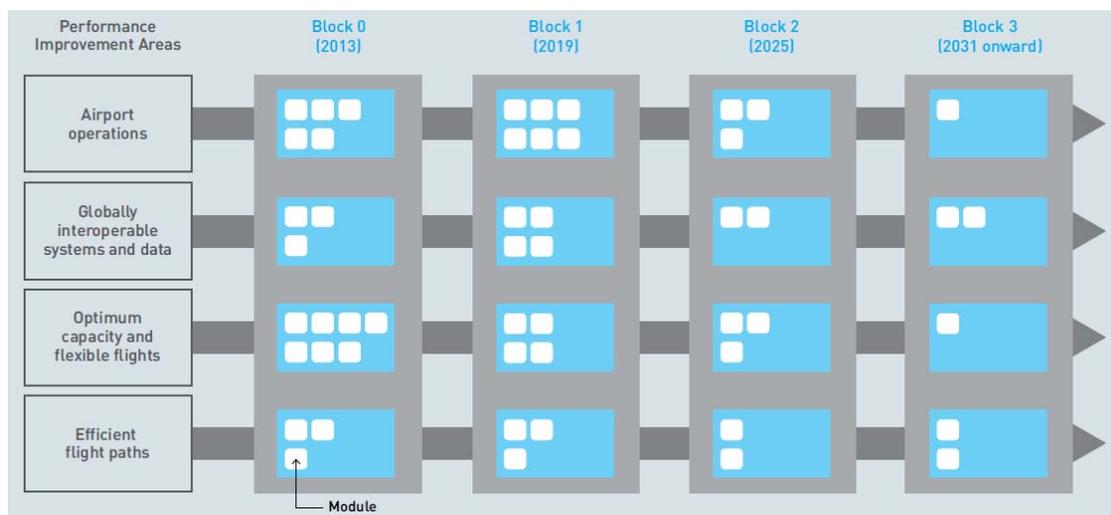
### ASBU METHODOLOGY AND THE MID AIR NAVIGATION STRATEGY (AIM/SWIM RELATED ASBU MODULES)

#### ASBU METHODOLOGY

3.1 ICAO introduced the Aviation System Block Upgrades (ASBU) methodology in the fourth edition of the Doc 9750 (Global Air Navigation Plan), endorsed by the ICAO Assembly in 2013 (further revised by Assembly 39 in 2016), as a systemic manner to achieve a harmonized implementation of the air navigation services. An ASBU designates a set of improvements that can be implemented globally from a defined point in time to enhance the performance of the ATM system.

3.2 The GANP represents a rolling, 15-year strategic methodology which leverages existing technologies and anticipates future developments based on State/industry agreed operational objectives. The Block Upgrades are organized in six-year time increments starting in 2013 and continuing through 2031 and beyond.

3.3 ASBU methodology defines improvements, through modules, over four blocks in four performance improvements areas:



#### MID REGION AIR NAVIGATION STRATEGY

3.4 Revised MID Region Air Navigation Strategy (MID Doc 002) was endorsed by the MIDANPIRG/16 meeting to introduce Block 0 ASBU Modules implementation priorities, elements, indicators and targets for the MID Region. It recognizes ~~4~~12 (out of 18) Block 0 Modules as priority 1 in the MID Region (for more information refer to the MID Doc 002 in the ICAO Secure Portal at: [https://portal.icao.int/RO\\_MID/Pages/MIDDocs.aspx](https://portal.icao.int/RO_MID/Pages/MIDDocs.aspx)).

## **BLOCK 0 AIM RELATED MODULE**

### **B0-DATM IMPLEMENTATION**

3.5 Block 0 contains 18 Modules and serves as the enabler and foundation for the envisioned future aviation systems. B0-DATM is a priority 1 ASBU Module in accordance with the MID Region Air Navigation Strategy (MID Doc 002). MID Doc 002 defines the B0-DATM as follows:

*Note – detailed monitoring Tables of the B0-DATM is included in the MID eANP Volume III.*

#### **Description and purpose**

The initial introduction of digital processing and management of information, through aeronautical information service (AIS)/aeronautical information management (AIM) implementation, use of aeronautical information exchange model (AIXM), migration to electronic aeronautical information publication (AIP) and better quality and availability of data.

#### **Main performance impact:**

KPA- 01 – Access and Equity	KPA-02 – Capacity	KPA-04 – Efficiency	KPA-05 – Environment	KPA-10 – Safety
N	N	Y	Y	Y

#### **Applicability consideration:**

Applicable at State level, with increased benefits as more States participate

<b>B0 – DATM: Service Improvement through Digital Aeronautical Information Management</b>			
<b>Elements</b>	<b>Applicability</b>	<b>Performance Indicators/Supporting Metrics</b>	<b>Targets</b>
<del>National AIM Implementation Plan/Roadmap</del>	<del>All States</del>	<del>Indicator: % of States that have National AIM Implementation Plan/Roadmap</del> <del>Supporting Metric: Number of States that have National AIM Implementation Plan/Roadmap</del>	<del>90% by Dec. 2018</del>
AIXM	All States	Indicator: % of States that have implemented an AIXM-based AIS database Supporting Metric: Number of States that have implemented an AIXM-based AIS database	80% by Dec. 2018
eAIP	All States	Indicator: % of States that have implemented an IAID driven AIP Production (eAIP) Supporting Metric: Number of States that have implemented an IAID driven AIP Production (eAIP)	80% by Dec. 2020
QMS	All States	Indicator: % of States that have implemented QMS for AIS/AIM Supporting Metric: Number of States that have implemented QMS for AIS/AIM	90% by Dec. 2018

WGS-84	All States	<p>Indicator: % of States that have implemented WGS-84 for horizontal <b>plane</b> (ENR, Terminal, AD)</p> <p>Supporting Metric: Number of States that have implemented WGS-84 for horizontal <b>plane</b> (ENR, Terminal, AD)</p> <p>Indicator: % of States that have implemented WGS-84 Geoid Undulation</p> <p>Supporting Metric: Number of States that have implemented WGS-84 Geoid Undulation</p>	<p>Horizontal: 100% by Dec. 2018</p> <p>Vertical: 90% by Dec. 2018</p>
Agreement with data originators	All States	<p>Indicator: % of States that have signed agreement with data originators</p> <p>Supporting Metric: Number of States that have signed agreement with data originators</p>	50% by Dec. 2018
eTOD	All States	<p><del>Indicator: % of States that have implemented required Terrain datasets</del></p> <p><del>Supporting Metric: Number of States that have implemented required Terrain datasets</del></p> <p><del>Indicator: % of States that have implemented required Obstacle datasets</del></p> <p><del>Supporting Metric: Number of States that have implemented required Obstacle datasets</del></p>	<p><del>Area 1: Terrain: 70% by Dec. 2018 Obstacles: 60% by Dec. 2018</del></p> <p><del>Area 4: Terrain: 100% by Dec. 2018 Obstacles: 100% by Dec. 2018</del></p>
Digital NOTAM*	All States	<p><del>Indicator: % of States that have included the implementation of Digital NOTAM into their National Plan for the transition from AIS to AIM</del></p> <p><del>Supporting Metric: Number of States that have included the implementation of Digital NOTAM into their National Plan for the transition from AIS to AIM</del></p>	90% by Dec. 2018

## ***Aeronautical Information Exchange Model (AIXM)***

3.6 The objective of the Aeronautical Information Exchange Model (AIXM) is to enable the provision in digital format of the aeronautical information that is in the scope of Aeronautical Information Services (AIS)~~The aeronautical information exchange model (AIXM) is designed to enable the management and distribution of aeronautical information services data in digital format. AIXM takes advantages of established information engineering standards and supports current and future aeronautical information system requirements. The following main information areas are in the scope of AIXM:~~The major tenets are:

- Aerodrome/Heliport including movement areas, services, facilities, etc.
- Airspace structures
- Organisations and units, including services
- Points and Nav aids
- Procedures
- Routes
- Flying restrictions

a) ~~an exhaustive temporality model, including support for the temporary information contained in NOTAM;~~

b) ~~alignment with ISO standards for geospatial information, including the use of the geography markup language (GML);~~

c) ~~support for the latest ICAO and user requirements for aeronautical data including obstacles, terminal procedures and airport mapping databases; and~~

d) ~~modularity and extensibility.~~

3.7 ~~AIXM covers the ICAO requirements for the “data necessary for the safety, regularity and efficiency of international air navigation”, existing industry standards (e.g. ARINC 424) and emerging data needs. It has constructs for: aerodromes, navigation aids, terminal procedures, airspace and route structures, ATM and related services, air traffic restrictions and other data.~~

3.8 ~~AIXM has two components:~~

a) ~~The AIXM UML Model provides a formal description of the information.~~

b) ~~The AIXM XML Schemas are an encoding format for aeronautical data.~~

3.7 ~~AIXM-5~~ takes advantages of established information engineering standards and supports current and future aeronautical information system requirements.

*Note - more information on AIXM could be found at: [www.aixm.aero](http://www.aixm.aero)*

### ***electronic AIP (eAIP)***

3.7.3.8 The AIP, AIP Amendment, AIP Supplement and AIC should also be published in a format that allows for displaying on a computer screen and printing on paper. When provided, the eAIP should be available on a physical distribution medium (CD, DVD, etc.) and/or online on the Internet. When provided, the information content of the eAIP and the structure of chapters, sections



and content requirement for AIP Pages, AIP SUP, AIP Amendment and AIC should be in accordance with Annex15, Doc 8126 and other related SARPs.

*Note 3 – More guidance material on the specifications of eAIP could be found in the EUROCONTROL Specifications for the electronic Aeronautical Information Publication (eAIP).*

### **Quality Management System (QMS)**

~~3.103.11~~ Quality management systems shall be implemented and maintained encompassing all functions of an aeronautical information service. The execution of such quality management systems shall be made demonstrable for each function stage.

*Note 1 - An ISO 9000 certificate issued by an accredited certification body would be considered an acceptable means of compliance.*

~~*Note 2 – Guidance material is contained in the Manual on the Quality Management System for Aeronautical Information Services (Doc 9839).*~~

~~*Note 32 - Necessary measures should be taken for the signature of formal arrangements concerning data quality between AIS/AIM and the data originators, commensurate with the Aerodrome operators, Air Navigation Service Providers (ANSPs) and the Military Authority.*~~

~~3.12 QMS implementation is still a challenge for some States. The challenges may include: Lack of adequate guidance material, lack of necessary competency (need for training), financial resources, etc.~~

~~*Note 3 - Manual on the Quality Management System for Aeronautical Information Services (Doc 9839) – Draft provides guidance on QMS implementation based on a stepwise approach (project-based).*~~

### **World Geodetic System-1984 (WGS-84)**

~~3.113.13~~ World Geodetic System — 1984 (WGS-84) shall be used as the horizontal (geodetic) reference system for international air navigation. Consequently, published aeronautical geographical coordinates (indicating latitude and longitude) shall be expressed in terms of the WGS-84 geodetic reference datum.

~~3.12 ——— WGS-84 for Enroute and Terminal areas as well as aerodromes and Geoid Undulation shall be introduced in the published coordinates in AIP in the following sections:~~

~~a) ——— Horizontal:~~

~~○ ——— Enroute~~

~~○ ——— Terminal~~

~~○ ——— Aerodrome~~

~~b) ——— Vertical:~~

~~○ ——— Geoid Undulation~~

*Note - Comprehensive guidance material concerning WGS-84 is contained in the World Geodetic System - 1984 (WGS-84) Manual (Doc 9674).*

### ***electronic Terrain and Obstacle Dataset (eTOD)***

3.133.14 eTOD is an electronic set(s) of terrain and/or obstacle data for the defined coverage areas and with the defined data specifications to fulfill the needs of electronic air navigation applications for digital data. The coverage areas for sets of electronic terrain and obstacle data shall be specified as:

- Area 1: the entire territory of a State;
- Area 2: within the vicinity of an aerodrome, subdivided as follows;
  - Area 2a: a rectangular area around a runway that comprises the runway strip plus any clearway that exists.
  - Area 2b: an area extending from the ends of Area 2a in the direction of departure, with a length of 10 km and a splay of 15 per cent to each side;
  - Area 2c: an area extending outside Area 2a and Area 2b at a distance of not more than 10 km from the boundary of Area 2a; and
  - Area 2d: an area outside the Areas 2a, 2b and 2c up to a distance of 45 km from the aerodrome reference point, or to an existing TMA boundary, whichever is nearest;
- Area 3: the area bordering an aerodrome movement area that extends horizontally from the edge of a runway to 90 m from the runway centre line and 50 m from the edge of all other parts of the aerodrome movement area.
- Area 4: The area extending 900 m prior to the runway threshold and 60 m each side of the extended runway centre line in the direction of the approach on a precision approach runway, Category II or III.

3.143.15 Electronic terrain data shall be provided for Area 1 and 4. The obstacle data shall be provided for obstacles in Area 1 higher than 100 m above ground.

*Note 1 - Comprehensive guidance material concerning eTOD is contained in Annex 15; the Guidelines for electronic terrain, obstacle and aerodrome mapping information (Doc 9881) and the EUROCONTROL Terrain and Obstacle Data Manual.*

*Note 2 – Description and method of obtaining of the eTOD should be defined in AIP GEN 3.1.6.*

*Note 3 - eTOD area 2b, 2c, 2d and 3 are recommendations, and States should take it into their National AIS/AIM Regulations.*

### **AIM/SWIM RELATED MODULES**

3.16 Performance Improvement Area 2 (Globally Interoperable Systems and Data – Through Globally Interoperable System Wide Information Management) focuses on ASBU Modules which mainly support Collaborative Decision Making (CDM) through Information Management (i.e. Aeronautical Information, MET, Flight and Flow, etc.) in a SWIM environment. PIA 2 includes 11 Modules over 4 blocks as follows.

*Note – Information on SWIM could be found in the ICAO Manual on System Wide Information Management (SWIM) Concept (DOC 10039).÷*

<b>PERFORMANCE IMPROVEMENT AREA 2: GLOBALLY INTEROPERABLE SYSTEMS AND DATA – THROUGH GLOBALLY INTEROPERABLE SYSTEM WIDE INFORMATION MANAGEMENT</b>			
<b>BLOCK 0 (2013)</b>	<b>BLOCK 1 (2018)</b>	<b>BLOCK 2 (2023)</b>	<b>BLOCK 3 (2028)</b>
<b>B0-FICE</b> Increased Interoperability, Efficiency and Capacity through Ground-Ground Integration	<b>B1-FICE</b> Increased Interoperability, Efficiency and Capacity through FF-ICE, Step 1 application before Departure	<b>B2-FICE</b> Improved Coordination through multi-centre Ground-Ground Integration: (FF-ICE/1 and Flight Object, SWIM)	<b>B3-FICE</b> Improved Operational Performance through the introduction of Full FF-ICE
<b>B0-DATM</b> Service Improvement through Digital Aeronautical Information Management	<b>B1-DATM</b> Service Improvement through Integration of all Digital ATM Information		
	<b>B1-SWIM</b> Performance Improvement through the application of System-Wide Information Management (SWIM)	<b>B2-SWIM</b> Enabling Airborne Participation in collaborative ATM through SWIM	
<b>B0-AMET</b> Meteorological information supporting enhanced operational efficiency and safety	<b>B1-AMET</b> Enhanced Operational Decisions through Integrated Meteorological Information (Planning and Near-term Service)		<b>B3-AMET</b> Enhanced Operational Decisions through Integrated Meteorological Information (Near-term and Immediate Service)

## CHAPTER 4

### AIM NATIONAL PLANNING AND IMPLEMENTATION

#### AIM NATIONAL PLANNING

4.1 States should focus on the implementation of phase II and III of the ICAO Roadmap for the transition from AIS to AIM and take into consideration the “MID Region AIM implementation Roadmap” in planning for the transition from AIS to AIM in a prioritized manner

4.2 States are required to develop/update their National AIM Implementation Roadmap on an annual basis (by end of December), using the Template at **Appendix A** (National AIM Implementation Roadmap Template) and provide their feedback, lessons learned and difficulties to the ICAO MID Office for further assistance, as necessary.

#### IMPLEMENTATION OF A SYSTEM FOR AIRAC ADHERENCE MONITORING

4.3 Operationally significant changes to the AIP, listed in Annex 15, Appendix 4 shall be published in accordance with AIRAC procedures and shall be clearly identified by the acronym — AIRAC.

4.4 When an AIP Amendment or an AIP Supplement is published in accordance with AIRAC procedures, a NOTAM called “Trigger NOTAM” shall be originated giving a brief description of the contents, the effective date and time, and the reference number of the amendment or supplement.

4.5 The Trigger NOTAM shall be issued as soon as possible, preferably at the publication date of the AIRAC AIP Amendment or the AIP Supplement. This NOTAM shall come into force on the same effective date and time as the amendment or supplement and shall remain valid for a period of fourteen days.

4.6 The text in Item E) should start with the words ‘TRIGGER NOTAM’ (followed only in the case of an AIP Amendment by the abbreviation PERM), the reference number of the published AIP Amendment or AIP Supplement concerned, the effective date and a brief description of its contents.

4.7 Trigger NOTAM shall be issued in the appropriate NOTAM series, according to the information to be promulgated and shall follow the normal NOTAM procedures.

Example:

Q) HECA/QARTT/I/BO/000/999

A) HECC B) 1704270000 C) 1705102359

E) TRIGGER NOTAM – PERM AIRAC AIP AMDT 4/17 WEF 27 APR 2017.  
IMPLEMENTATION OF NEW ATS ROUTE UL111.

*Note – the term ‘PERM’ is inserted in Item E) to stress that Item C) contains an artificial end-date and that the information is of a permanent nature.*

4.8 When information has not been submitted by the AIRAC date, a NIL notification

shall be originated and distributed by NOTAM or other suitable means, not later than one cycle before the AIRAC effective date concerned.

4.9 Implementation dates other than AIRAC effective dates shall not be used for pre-planned operationally significant changes requiring cartographic work and/or for updating of navigation databases.

4.10 Information provided under the AIRAC system in paper copy form shall be distributed by the AIS unit at least 42 days in advance of the effective date with the objective of reaching recipients at least 28 days in advance of the effective date. Information provided as electronic media, concerning the circumstances listed in Annex 15, Appendix 4 shall be distributed/made available by the AIS unit so as to reach recipients at least 28 days in advance of the AIRAC effective date.

**Recommendation** – *Whenever major changes are planned and where advance notice is desirable and practicable, information provided as electronic media should be distributed/made available at least 56 days in advance of the effective date. This should be applied to the establishment of, and premeditated major changes in, the circumstances listed in Appendix 4, Part 3, and other major changes if deemed necessary.*

4.11 AIS/AIM units should:

- 1) raise the awareness of the Data Originators regarding the AIRAC provisions; and
- 2) include necessary procedures related to AIRAC adherence in the arrangement with the Data Originators.

4.12 States should implement a system for AIRAC adherence monitoring and report on annual basis (by 31 December) to the ICAO MID Regional Office the case(s) of late publication of aeronautical information of operational significance and non-adherence to the AIRAC provisions. **Appendix B** could be used as a monitoring and reporting tool in the AIRAC adherence.

4.13 List of AIRAC effective dates for 2017~~8~~ to 2021 is as follows:

<del>2017</del>	2018	2019	2020	2021
<del>05 January</del>	04 January	03 January	02 January	28 January
<del>02 February</del>	01 February	31 January	30 January	25 February
<del>02 March</del>	01 March	28 February	27 February	25 March
<del>30 March</del>	29 March	28 March	26 March	22 April
<del>27 April</del>	26 April	25 April	23 April	20 May
<del>25 May</del>	24 May	23 May	21 May	17 June
<del>22 June</del>	21 June	20 June	18 June	15 July
<del>20 July</del>	19 July	18 July	16 July	12 August
<del>17 August</del>	16 August	15 August	13 August	09 September
<del>14 September</del>	13 September	12 September	10 September	07 October
<del>12 October</del>	11 October	10 October	08 October	04 November
<del>09 November</del>	08 November	07 November	05 November	02 December
<del>07 December</del>	06 December	05 December	03 December	30 December
			31 December	

## AIR NAVIGATION DEFICIENCIES

4.14 A deficiency is a situation where a facility, service or procedure does not comply with a regional air navigation plan approved by the Council, or with related ICAO Standards and Recommended Practices, and which situation has a negative impact on the safety, regularity and/or efficiency of international civil aviation.

4.15 Priority for action to remedy a deficiency is based on the following safety assessments:

**'U' priority** = Urgent requirements having a direct impact on safety and requiring immediate corrective actions. Urgent requirement consisting of any physical, configuration, material, performance, personnel or procedures specification, the application of which is urgently required for air navigation safety.

**'A' priority** = Top priority requirements necessary for air navigation safety. Top priority requirement consisting of any physical, configuration, material, performance, personnel or procedures specification, the application of which is considered necessary for air navigation safety.

**'B' priority** = Intermediate requirements necessary for air navigation regularity and efficiency. Intermediate priority requirement consisting of any physical, configuration, material, performance, personnel or procedures specification, the application of which is considered necessary for air navigation regularity and efficiency.

4.16 MIDANPIRG is responsible to identify and address specific deficiencies in the air navigation field and to facilitate the development and implementation of an action plan by States to resolve identified deficiencies, where necessary.

4.17 States are required to use the MID Air Navigation Deficiency Database (MANDD) for the submission of requests for addition, update, and elimination of Air Navigation Deficiencies, including the submission of a specific Corrective Action Plan (CAP) for each deficiency. Each State MANDD Focal Point is given the required credential and MANDD is accessible at: <http://www.icao.int/mid>

4.18 A Sample State's Corrective Action Plan (CAP) is provided as Appendix C for assistance to States in developing their CAPs for the Air Navigation Deficiencies.

4.19 States are required to submit a Formal Letter to the ICAO MID Regional Office containing the evidence(s) that mitigation measures have been implemented for the elimination of deficiency(ies) when requesting the elimination of deficiency(ies) from the MANDD.

## HUMAN RESOURCE AND TRAINING

4.20 Within the context of the established quality management system, the competencies and the associated knowledge, skills and abilities required for each function shall be identified, and personnel assigned to perform those functions shall be appropriately trained. Processes shall be in place to ensure that personnel possess the competencies required to perform specific assigned functions. Appropriate records shall be maintained so that the qualifications of personnel can be confirmed. Initial and periodic assessments shall be established that require personnel to demonstrate the required competencies. Periodic assessments of personnel shall be used as a means to detect and correct shortfalls.

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*Note - Guidance material concerning training methodology to ensure the competency of personnel is contained in the Aeronautical Information Management Training Development Manual (Doc 9991).*

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## CHAPTER 5

### REPORTING AND MONITORING

#### MID eANP VOLUME III

5.1 The status of implementation is reported and monitored by the AIM Sub-Group and through the B0-DATM Tables contained in the MID eANP Volume III. the MID eANP is available on the ICAO MID website at: <http://www.icao.int/MID/Pages/MIDeANP.aspx>

#### REGIONAL PERFORMANCE DASHBOARD

5.2 The 38th Assembly approved the Regional Performance Dashboards. The Dashboards aim to provide a glance of both Safety and Air Navigation Capacity and Efficiency strategic objectives, using a set of indicators and targets based on the regional implementation of the Global Aviation Safety Plan (GASP) and the Global Air Navigation Plan (GANP).

5.3 ICAO introduced the Regional Performance Dashboards as a framework of nested reporting of results with an increased focus on implementation. The initial version of the dashboard shows the globally agreed targeted performance at the regional level and contains graphics and maps with a planned expansion to include regionally agreed targets and the Aviation System Block upgrades (ASBU) Block 0 Modules (i.e. AIM National Plan/Roadmap, AIXM, eAIP, eTOD, WGS-84 and QMS).

5.4 For the first edition of the Regional Performance Dashboards, the implementation of 3 steps from Phase I of the ICAO Roadmap for transition from AIS to AIM (AIRAC, QMS and WGS-84) is monitored. The dashboard can be accessed on the ICAO website at: <http://www.icao.int/safety/Pages/Regional-Targets.aspx>.

5.5 It is agreed that in the expansion of the MID Regional Performance Dashboard, AIM National Roadmap, AIXM 5+, eAIP, eTOD Area 1 and 4 should be added to the MID Region Dashboard.

#### MID REGION AIR NAVIGATION REPORT

5.6 ~~MIDANPIRG/16 endorsed the first MID Region Air Navigation Report 2016.~~ The objective of the MID Region Air navigation Report is to monitor the status of implementation of the priority 1 ASBU Block 0 Modules in the MID Region as well as the outlook of ASBU implementation in 2020. The MID Region Air Navigation Report will be an annual document for reporting and monitoring the ASBU implementation in the MID Region. The Report is available on the ICAO MID Office website at: <http://www2010.icao.int/MID/Pages/default.aspx>

#### ~~DEVELOPING A~~ METHODOLOGY FOR REPORTING THE PROGRESS OF AIM IMPLEMENTATION

5.7 “*Methodology for assessing and reporting the progress of transition from AIS to AIM*” (endorsed by MIDANPIRG/15) aims to develop a uniform method and plan for the reporting by the States on the progress achieved for the AIM transition, based on the ICAO Roadmap for

Transition from AIS to AIM. The ICAO air navigation planning and implementation performance framework requires that reporting, monitoring, analysis and review activities be conducted on a cyclical, annual basis (ICAO DOC 9750). The Methodology is used while collecting data for monitoring the progress achieved in the transition from AIS to AIM and for the purpose of Regional Performance Dashboard, MID eANP, etc.

~~5.8 ————— MIDANPIRG/15 meeting (Bahrain, 8-11 June 2015) reviewed the draft Methodology for reporting and assessing the progress related to the transition from AIS to AIM, as an initial MID Regional framework for monitoring the progress achieved for the AIM transition.~~

**METHODOLOGY FOR REPORTING AND ASSESSING THE PROGRESS RELATED TO THE TRANSITION FROM AIS TO AIM**

Element (Phase/Step/Step No.)		Metric/ Indicator	Finalization/Compliance Criteria	Link to ASBU Block	Remarks	
1		2	3	4	5	
<b>Phase 1</b>						
AIRAC adherence		P-03	FC/NC	- Implementation of a system for AIRAC adherence monitoring (compliance with annex 15 AIRAC provisions) (TBD)  - AIRAC adherence monitoring questionnaire (???)	Block 0	
WGS-84 implementation		P-05	FC/PC/NC	National AIP GEN 2.1.3 'Geodetic reference datum' provides information about the implementation of WGS-84 in ENR, Terminal and AD	Block 0	
QMS		P-17	FC/NC	ISO 9001 Certification	Block 0	
<b>Phase 2</b>						
Data quality monitoring		P-01	FI/NI	QMS (P-17) and Agreement with data originators (P-18) is implemented (TBD)	Block 0	
Data integrity monitoring		P-02				Linked to P-01
Integrated aeronautical information database	AIXM-based AIS Database	P-06	FI/NI	National aeronautical data and information is stored and maintained in AIXM-based AIS database	Block 0	Structured AI Database with digital exchange capabilities (AIXM 5.1)
	Implementation of IAID		FI/PI/NI	Implementation of a database providing eAIP (text, tables and charts) and NOTAM, linked to the terrain/obstacles and aerodrome mapping datasets (TBD)	Block 1	
Unique identifiers		P-07				Linked to P-06
Aeronautical information conceptual model		P-08				Linked to P-06
Electronic AIP		P-11	FI/NI	National AIP GEN 3.1.3 'Aeronautical publications' provides information about the availability of the National AIP in electronic format (eAIP)	Block 0	
Terrain	Area 1	P-13	FC/NC	National AIP GEN 3.1.6 'Electronic terrain and obstacle data' provides information on how the dataset can be obtained	Block 0	
	Area 4	P-13	FC/PC/NC or N/A	National AIP GEN 3.1.6 'Electronic terrain and obstacle data' provides information on how the dataset for specific CAT II/III RWY can be obtained. States should indicate in remarks the number of existing CAT II/III RWY. N/A	Block 0	In case of PC, list name of CAT II/III ADs having the dataset

Element (Phase/Step/Step No.)		Metric/ Indicator	Finalization/Compliance Criteria	Link to ASBU Block	Remarks
1		2	3	4	5
	Area 2a	P-13 FC/PC/NC	for States with no CAT II/III RWY. National AIP GEN 3.1.6 ‘Electronic terrain and obstacle data’ provides information on how the dataset can be obtained. States should indicate in remarks the number of AD eligible for provision of Area 2 data. <del>This number should come from the Regional(ref MID eANP Table AOP II-1) for aerodromes with one of the following designation: —RS: international scheduled air transport, regular use —RNS: international non-scheduled air transport, regular use —RG: international general aviation, regular use.</del>	Block 0	<i>In case of PC, list name of ADs having the dataset</i>
	Take-off flight path area	P-13 FC/PC/NC	Same as Terrain Area 2a	Block 0	<i>In case of PC, list name of ADs having the dataset</i>
	An area bounded by the lateral extent of the aerodrome obstacle limitation surfaces	P-13 FC/PC/NC	Same as Terrain Area 2a	Block 0	<i>In case of PC, list name of ADs having the dataset</i>
Obstacles	Area 1	P-14 FC/NC	National AIP GEN 3.1.6 ‘Electronic terrain and obstacle data’ provides information on how the dataset can be obtained	Block 0	
	Area 4	P-14 FC/PC/NC or N/A	National AIP GEN 3.1.6 ‘Electronic terrain and obstacle data’ provides information on how the dataset for specific CAT II/III RWY can be obtained. States should indicate in remarks the number of existing CAT II/III RWY. N/A for States with no CAT II/III RWY.	Block 0	<i>In case of PC, list name of CAT II/III ADs having the dataset</i>
	Area 2a	P-14 FC/PC/NC	National AIP GEN 3.1.6 ‘Electronic terrain and obstacle data’ provides information on how the dataset can be obtained. States should indicate in remarks the number of AD eligible for provision of Area 2 data. <del>This number should come from the Regional(ref MID eANP Table AOP II-1) for aerodromes with one of the following designation:</del>	Block 0	<i>In case of PC, list name of ADs having the dataset</i>

Element (Phase/Step/Step No.)	Metric/ Indicator	Finalization/Compliance Criteria	Link to ASBU Block	Remarks
1	2	3	4	5
	P-14	<del>—RS: international scheduled air transport, regular use</del> <del>—RNS: international non-scheduled air transport, regular use</del> <del>—RG: international general aviation, regular use.</del> Same as Obstacles Area 2a	Block 0	<i>In case of PC, list name of ADs having the dataset</i>
Aerodrome mapping	P-15	<del>FI/PI/NI</del> National AIP GEN 3.1-6 'Electronic terrain and obstacle data' provides information on how the dataset can be obtained	Block 1	<i>In case of PC, list name of ADs having the dataset</i>
<b>Phase 3</b>				
Aeronautical data exchange	P-09	<del>FI/PI/NI</del> Direct data exchange between AIS and data originators/users (TBD)	Block 1	<i>In case of PC, list name of Units (Data Originators/Users)</i>
Communication networks	P-10			
Aeronautical information briefing	P-12	<del>FI/PI/NI</del> Provision of preflight aeronautical information briefing at the international aerodromes (TBD) Mandatory for international aerodromes contained in the <del>Regional-MID eANP</del> Table AOP II-1 <del>for aerodromes with one of the following designation:</del> <del>—RS: international scheduled air transport, regular use</del> <del>—RNS: international non-scheduled air transport, regular use</del> <del>—RG: international general aviation, regular use.</del>	Block 1	<i>In case of PC, list name of ADs providing AI briefing</i>

Element (Phase/Step/Step No.)	Metric/ Indicator	Finalization/Compliance Criteria		Link to ASBU Block	Remarks
1	2	3		4	5
Training	P-16				
Agreement with data originators	P-18	FI/PI/NI	Signed agreements between AIS and ANSPs (ATM, CNS, etc.), Aerodromes and Military	Block 0	<i>In case of PC, list name of Data Originator(s)</i>
Interoperability with meteorological products	P-19				<i>Linked to P-12</i>
Electronic aeronautical charts	P-20	FI/NI	National AIP GEN 3.2 'Aeronautical Charts provides information about the availability of the e-Aeronautical Charts	Block 1	
Digital NOTAM	P-21	FI/NI	TBD	Block 1	

*FC: Fully Compliant; PC: Partially Compliant; NC: Not Compliant; FI: Fully Implemented; PI: Partially Implemented; NI: Not Implemented; N/A: Not Applicable*

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## APPENDICES





## APPENDIX B: AIRAC ADHERENCE MONITORING

YEAR: .....2016			STATE: .....		
AIRAC EFF Date	AIRAC AMDT Serial Number; or NIL Notification	AIRAC AMDT PUB/Distribution Date	Trigger NOTAM (Serial Number)	No change until 28 days after EFF Date? (Yes / No)	Remarks
<del>7 JAN 16</del>	- AIRAC <del>xx/16xx</del> ; or - NIL notification issued on .....				
<del>4 FEB 16</del>	- AIRAC <del>xx/xx</del> ; or - NIL notification issued on .....				
<del>3 MAR 16</del>	- AIRAC <del>xx/xx</del> ; or - NIL notification issued on .....				
<del>31 MAR 16</del>	- AIRAC <del>xx/xx</del> ; or - NIL notification issued on .....				
<del>28 APR 16</del>	- AIRAC <del>xx/xx</del> ; or - NIL notification issued on .....				
<del>26 MAY 16</del>	- AIRAC <del>xx/xx</del> ; or - NIL notification issued on .....				
<del>23 JUN 16</del>	- AIRAC <del>xx/xx</del> ; or - NIL notification issued on .....				
<del>21 JUL 16</del>	- AIRAC <del>xx/xx</del> ; or - NIL notification issued on .....				
<del>18 AUG 16</del>	- AIRAC <del>xx/xx</del> ; or - NIL notification issued on .....				
<del>15 SEP 16</del>	- AIRAC <del>xx/xx</del> ; or - NIL notification issued on .....				
<del>13 OCT 16</del>	- AIRAC <del>xx/xx</del> ; or - NIL notification issued on .....				
<del>10 NOV 16</del>	- AIRAC <del>xx/xx</del> ; or - NIL notification issued on .....				
<del>8 DEC 16</del>	- AIRAC <del>xx/xx</del> ; or - NIL notification issued on .....				

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**APPENDIX C: SAMPLE STATE'S CORRECTIVE ACTION PLAN**

<b>DEFICIENCY DESCRIPTION</b>		<b>PRIORITY</b> <i>(U/A/B)</i>
		<b>RATIONALE</b> <i>F:Financial, H:HR, S:State, O:Other</i>
<b>STATE'S COMMENTS/OBSERVATION</b>		
<b>CORRECTIVE ACTION(S) PROPOSED</b>	<b>ACTION OFFICE/BODY</b>	<b>DATE OF COMPLETION</b>

## REFERENCES

- ICAO Annex 15 – *Aeronautical Information Services*
- ~~ICAO Doc~~ DOC 9750 – *Global Air Navigation Plan*
- ICAO DOC 9854 – *Global ATM Operational Concept*
- ICAO DOC 10039 – *Manual on System Wide Information Management (SWIM) Concept*
- ICAO Roadmap for the transition from AIS to AIM
- EUROCONTROL Guidelines – Operating procedures for AIS Dynamic Data (OPADD)
- EUROCONTROL Specifications for the electronic Aeronautical Information Publication (eAIP)
- EUROCONTROL Terrain and Obstacle Data Manual
- MIDANPIRG/15 Report
- MID Doc 002 – MID Region Air Navigation Strategy
- MSG/4 Report
- <http://www.aixm.aero>
- [http://www.icao.int/airnavigation/Documents/ICAO\\_AN%20Report\\_EN\\_final\\_30042014.pdf](http://www.icao.int/airnavigation/Documents/ICAO_AN%20Report_EN_final_30042014.pdf)
- <http://www.icao.int/airnavigation/IMP/Pages/default.aspx>
- <http://www.icao.int/safety/ais-aimsg/Pages/default.aspx>
- <http://www.icao.int/safety/Pages/Regional-Targets.aspx>
- [https://portal.icao.int/RO\\_MID/Pages/MIDDocs.aspx](https://portal.icao.int/RO_MID/Pages/MIDDocs.aspx)
- <https://portal.icao.int/space/anp/Pages/Home.aspx>

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APPENDIX 5B

***B0 – DATM: Service Improvement through Digital Aeronautical Information Management***

**Description and purpose:**

The initial introduction of digital processing and management of information, through aeronautical information service (AIS)/aeronautical information management (AIM) implementation, use of aeronautical information exchange model (AIXM), migration to electronic aeronautical information publication (AIP) and better quality and availability of data

**Main performance impact:**

KPA- 01 – Access and Equity	KPA-02 – Capacity	KPA-04 – Efficiency	KPA-05 – Environment	KPA-10 – Safety
N	N	Y	Y	Y

**Applicability consideration:**

Applicable at State level, with increased benefits as more States participate

<b><i>B0 – DATM: Service Improvement through Digital Aeronautical Information Management</i></b>			
<b>Elements</b>	<b>Applicability</b>	<b>Performance Indicators/Supporting Metrics</b>	<b>Targets</b>
<b>National AIM Implementation Plan/Roadmap</b>	<b>All States</b>	<b>Indicator: % of States that have National AIM Implementation Plan/Roadmap</b>  <b>Supporting Metric: Number of States that have National AIM Implementation Plan/Roadmap</b>	<b>90% by Dec. 2018</b>
AIXM	All States	Indicator: % of States that have implemented an AIXM-based AIS database  Supporting Metric: Number of States that have implemented an AIXM-based AIS database	80% by Dec. 2018
eAIP	All States	Indicator: % of States that have implemented an IAID driven AIP Production (eAIP)  Supporting Metric: Number of States that have implemented an IAID driven AIP Production (eAIP)	80% by Dec. 2020
QMS	All States	Indicator: % of States that have implemented QMS for AIS/AIM  Supporting Metric: Number of States that have implemented QMS for AIS/AIM	90% by Dec. 2018
WGS-84	All States	Indicator: % of States that have implemented WGS-84 for horizontal plan (ENR, Terminal, AD)  Supporting Metric: Number of States that have implemented WGS-84 for horizontal plan (ENR, Terminal, AD)  Indicator: % of States that have implemented WGS-84 Geoid Undulation  Supporting Metric: Number of States that have implemented WGS-84 Geoid Undulation	Horizontal: 100% by Dec. 2018  Vertical: 90% by Dec. 2018

<p>Agreement with data originators</p>	<p>All States</p>	<p>Indicator: % of States that have signed Service Level Agreements (SLA) with at least 50% of their AIS data originators</p> <p>Supporting Metric: Number of States that have signed Service Level Agreements (SLA) with at least 50% of their AIS data originators</p>	<p>60% by Dec. 2020</p>
<p><del>eTOD</del></p>	<p><del>All States</del></p>	<p><del>Indicator: % of States that have implemented required Terrain datasets</del></p> <p><del>Supporting Metric: Number of States that have implemented required Terrain datasets</del></p> <p><del>Indicator: % of States that have implemented required Obstacle datasets</del></p> <p><del>Supporting Metric: Number of States that have implemented required Obstacle datasets</del></p>	<p><del>Area 1: Terrain: 70% by Dec. 2018</del></p> <p><del>Obstacles: 60% by Dec. 2018</del></p> <p><del>Area 4: Terrain: 100% by Dec. 2018</del></p> <p><del>Obstacles: 100% by Dec. 2018</del></p>
<p>Digital NOTAM*</p>	<p>All States</p>	<p>Indicator: % of States that have included the implementation of Digital NOTAM into their National Plan for the transition from AIS to AIM</p> <p>Supporting Metric: Number of States that have included the implementation of Digital NOTAM into their National Plan for the transition from AIS to AIM</p>	<p>90% by Dec. 2020</p>

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**B0-DATM Enablers/Tables**

In order to assist States in the planning for the transition from AIS to AIM in an expeditious manner, the following Tables, which provide more details than the standard ANRF, should be used:

- 1- **Table B0-DATM 3-1** sets out the requirements for the Provision of AIS/AIM products and services based on the Integrated Aeronautical Information Database (IAID). It reflects the transition from the current product centric AIS to data centric AIM. For the future digital environment it is important that the authoritative databases are clearly designated and such designation must be published for the users. This is achieved with the concept of the Integrated Aeronautical Information Database (IAID), a single access point for one or more authoritative databases ([AIS/AIP](#), Terrain, Obstacles, AMDB, etc) for which the State is responsible. This Table will be used for the monitoring of the Key Performance Indicators (KPIs) related to elements Nr. 1 and 2 of the Module B0-DATM.
- 2- **Table B0-DATM 3-2** sets out the requirements for aeronautical data quality. It will be used for the monitoring of the Key Performance Indicators (KPIs) related to the element Nr. 3 of the Module B0-DATM.
- 3- **Table B0-DATM 3-3** sets out the requirements for the implementation of the World Geodetic System – 1984 (WGS-84).The requirement to use a common geodetic system remains essential to facilitate the exchange of data between different systems. The expression of all coordinates in the AIP and charts using WGS-84 is an important first step for the transition to AIM. This Table will be used for the monitoring of the Key Performance Indicators (KPIs) related to the element Nr. 4 of the Module B0-DATM.
- 4- **Table B0-DATM 3-4-1** sets out the requirements for the provision of Terrain and Obstacle data sets for Area 1 and Area 4. It will be used for the monitoring of the Key Performance Indicators (KPIs) related to the element Nr. 5 of the Module B0-DATM.
- 5- **Table B0-DATM 3-4-2** sets out the requirements for the provision of Terrain and Obstacle data sets for Area 2. It will be used for the monitoring of the Key Performance Indicators (KPIs) related to the element Nr. 5 of the Module B0-DATM.
- 6- **Table B0-DATM 3-4-3** sets out the requirements for the provision of Terrain and Obstacle data sets for Area 3 and implementation of Airport Mapping Databases (AMDB). It will be used for the monitoring of the Key Performance Indicators (KPIs) related to the element Nr. 5 of the Module B0-DATM.

## Table B0-DATM 3-1

### Provision of AIS/AIM products and services based on the Integrated Aeronautical Information Database (IAID)

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#### EXPLANATION OF THE TABLE

Column:

- 1 Name of the State or territory for which the provision of AIS/AIM products and services based on the IAID is required.
- 2 Requirement for the implementation and designation of the authoritative IAID, shown by:
  - FI – Fully Implemented
  - ~~PI – Partially Implemented~~
  - NI – Not Implemented

*Note 1 – The IAID of a State is a single access point for one or more databases (AIS/AIP, Terrain, Obstacles, AMDB, etc). The minimum set of databases which should be integrated is defined in Annex 15.*

~~*Note 2 – Information providing detail of “PI” should be given in the Remarks column (the implemented components of the IAID).*~~

~~*Note 3-2 – The information related to the designation of the authoritative IAID should be published in the AIP (GEN 3.1)*~~
- 3 Requirement for an IAID driven AIP production, shown by:
  - FI – Fully Implemented (eAIP: Text, Tables and Charts)
  - PI – Partially Implemented
  - NI – Not Implemented

~~*Note 4-3 – AIP production includes, production of AIP, AIP Amendments and AIP Supplements*~~

~~*Note 4 – Charts’ GIS-based database should be interoperable with AIP database*~~
- 4 Requirement for an IAID driven NOTAM production, shown by:
  - FC – Fully Compliant
  - NC – Not Compliant
- 5 Requirement for an IAID driven SNOWTAM ~~production~~processing, shown by:
  - ~~FC-FI~~ – Fully Implemented~~Compliant~~
  - ~~NC-NI~~ – Not Implemented~~compliant~~
- 6 Requirement for an IAID driven PIB production, shown by:
  - FC – Fully Compliant
  - PC – Partially Compliant
  - NC – Not Compliant
- ~~7 – Requirement for Charting systems to be interoperable with the IAID, shown by:
  - ~~FC~~ – Fully compliant
  - ~~PC~~ – Partially compliant
  - ~~NC~~ – Not compliant~~
- 87 Requirement for Procedure design systems to be interoperable with the IAID, shown by:
  - FI – Fully Implemented

PI – Partially Implemented

NI – Not Implemented

*Note 5 — full implementation includes the use of the IAID for the design of the procedures and for the storage of the encoded procedures in the IAID*

98 Requirement for ATS systems to be interoperable with the IAID, shown by:

FI – Fully Implemented

PI – Partially Implemented

NI – Not Implemented

109 Action Plan — short description of the State’s Action Plan with regard to the provision of AIM products and services based on the IAID, especially for items with a “PC”, “PI”, “NC” or “NI” status, including planned date(s) of full compliance, as appropriate.

110 Remarks — additional information, including detail of “PC”, “NC”, “PI” and “NI”, as appropriate.

**TABLE B0-DATM-3-1**

**Provision of AIS/AIM products and services based on the Integrated Aeronautical Information Database (IAID)**

State	IAID	AIP	NOTAM	SNOWTAM	PIB	<del>Charting</del>	Procedure Design	ATS	Action Plan	Remarks
<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>7</i>	<i>87</i>	<i>98</i>	<i>109</i>	<i>110</i>
BAHARAIN	<del>PFI</del>	FI	FC	<del>FCFI</del>	FC	<del>FC</del>	PI	FI	National AIM Roadmap- <del>2015</del> 2016	AIXM: 4.5-5.1 by <del>end 2015</del>
EGYPT	FI	PI	<del>NCFC</del>	<del>NCFI</del>	FC	<del>NC</del>	NI	PI	National AIM Roadmap- <del>2015</del> 2017	AIXM: 5.1 3 and 7 by 2015, 4-9 by 2016/2018
IRAN, ISLAMIC REPUBLIC OF	NI	NI	NC	<del>NI</del>	NC	<del>NC</del>	NI	NI	National AIM Roadmap- <del>2015</del> 2016	AIXM: NI Separate semi-automated NOTAM/SNOWTAM system is operative
IRAQ	NI	NI	NC	<del>NCNI</del>	NC	<del>NC</del>	NI	NI	National AIM Roadmap- <del>2014</del> 2015	AIXM: NI
JORDAN	<del>PNI</del>	NI	FC	<del>FCNI</del>	FC	<del>PC</del>	NI	NI	National AIM Roadmap- <del>2014</del> 2017	AIXM: database through EAD
KUWAIT	<del>PNI</del>	NI	FC	<del>NCNI</del>	PC	<del>NC</del>	NI	NI	National AIM Roadmap- <del>2015</del> 2016	AIXM: NI (5.1 in progress)
LEBANON	NI	<del>FI</del> NI	NC	<del>NCNI</del>	NC	<del>NC</del>	NI	NI	National AIM Roadmap- <del>2014</del> 2016	AIXM: 4.5
LIBYA	NI	NI	NC	<del>NCNI</del>	NC	<del>NC</del>	NI	NI	No Action Plan	AIXM: NI
OMAN	NI	NI	NC	<del>NCNI</del>	NC	<del>NC</del>	NI	NI	National AIM Roadmap- <del>2014</del> 2016	AIXM: NI (5.1 in progress)
QATAR	<del>PNI</del>	PI	FC	<del>PCNI</del>	FC	<del>PC</del>	PI	NI	National AIM Roadmap- <del>2015</del> 2016	AIXM: 5.1 Q4/2017 – Data Integration (AIP, Terrain, Obstacle, Procedure Design and AMDB datasets)
SAUDI ARABIA	FI	FI	<del>FCNC</del>	<del>FCNI</del>	<del>FCP</del> C	<del>FC</del>	FI	FI	National AIM Roadmap- <del>2014</del> 2017	AIXM: 4.5
SUDAN	<del>PNI</del>	NI	FC	<del>NINC</del>	FC	<del>PC</del>	PI	PI	National AIM Roadmap- <del>2015</del> 2017	1-AIS DB integrated with MET & ATM 2- Contract Signed for eAIP, AIXM connected with Charting SYS. 7- Contract signed. 8- Ongoing project AIXM: NI (5.1 in progress) AIS Automation Project is

State	IAID	AIP	NOTAM	SNOWTAM	PIB	<del>Charting</del>	Procedure Design	ATS	Action Plan	Remarks
<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>7</i>	<i>87</i>	<i>98</i>	<i>109</i>	<i>110</i>
										ongoing
SYRIAN ARAB REPUBLIC	NI	NI	NC	<del>NCNI</del>	NC	<del>NC</del>	NI	NI	No Action Plan	<u>AIXM: NI</u>
UNITED ARAB EMIRATES	<del>PI</del> NI	FI	NC	<del>NCNI</del>	PC	<del>PC</del>	NI	PI	National AIM Roadmap- <del>2014</del> 2017	<u>AIXM: 5.1</u> <u>AMDB: 2016-2021</u> ; <u>PIB: AVBL at OMAA, OMDW, OMDW, OMFJ, other ADs 2020</u> ; <u>Charting system upgrade is planned for 2017</u> ; <u>Procedure Design 2020</u> ; <u>ATS: ACC AVBL, ADs 2020</u> <u>Digital NOTAM: 2016-2021</u> <del>AMDB: 2016-2021</del> <del>eTOD integration: 2016</del> <del>PIB: AVBL at OMAA, OMDW, OMDW; other ADs 2020</del> <del>Charting: 2016</del> <del>Procedure Design 2020</del> <del>ATS: ACC AVBL, ADs 2020</del> <del>Digital NOTAM 2016-2021</del>
YEMEN	NI	NI	NC	<del>NCNI</del>	NC	<del>NC</del>	NI	NI	No Action Plan	<u>AIXM: NI</u>

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## Table B0-DATM-3-2 Aeronautical Data Quality

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### EXPLANATION OF THE TABLE

Column:

- 1 Name of the State or territory.
- 2 Compliance with the requirement for implementation of QMS for Aeronautical Information Services including safety and security objectives, shown by:
  - FC – Fully compliant
  - NC – Not compliant
- 3 Compliance with the requirement for the establishment of formal arrangements with approved data originators concerning aeronautical data quality, shown by:
  - FC – Fully compliant
  - PC – Partially compliant
  - NC – Not compliant
- 4 Implementation of digital data exchange with originators, shown by:
  - FI – Implemented
  - PI – Partially Implemented
  - NI – Not implemented

*Note 1 — Information providing detail of “PI” and “NI” should be given in the Remarks column (percentage of implementation).*
- 5 Compliance with the requirement for metadata, shown by:
  - FC – Fully compliant
  - PC – Partially compliant
  - NC – Not compliant
- 6 Compliance with the requirements related to aeronautical data quality monitoring (accuracy, resolution, timeliness, completeness), shown by:
  - FC – Fully compliant
  - PC – Partially compliant
  - NC – Not compliant
- 7 Compliance with the requirements related to aeronautical data integrity monitoring, shown by:
  - FC – Fully compliant
  - PC – Partially compliant
  - NC – Not compliant
- 8 Compliance with the requirements related to the AIRAC adherence, shown by:
  - FC – Fully compliant
  - NC – Not compliant
- 9 Action Plan — short description of the State’s Action Plan with regard to aeronautical data quality requirements implementation, especially for items with a “PC”, “PI”, “NC” or “NI” status, including planned date(s) of full compliance, as appropriate.
- 10 Remarks — additional information, including detail of “PC”, “NC”, “PI” and “NI”, as appropriate.

**TABLE B0-DATM-3-2**  
**Aeronautical Data Quality**

State	QMS	Establishment of formal agreements	Digital data exchange with originators	Metadata	Data quality monitoring	Data integrity monitoring	AIRAC adherence	Action Plan	Remarks
1	2	3	4	5	6	7	8	9	10
BAHARAIN	FC	<del>FCPC</del>	PI	<del>PCFC</del>	<del>PCFC</del>	<del>PCFC</del>	FC	National AIM Roadmap- <del>20152016</del>	
EGYPT	FC	PC	PI	FC	PC	PC	FC	National AIM Roadmap- <del>20152017</del>	3, 4, 6 and 7 by <del>20162018</del>
IRAN, ISLAMIC REPUBLIC OF	FC	PC	NI	NC	<del>NCFC</del>	<del>NCFC</del>	FC	National AIM Roadmap- <del>20152016</del>	
IRAQ	NC	NC	NI	NC	NC	NC	FC	National AIM Roadmap- <del>20142015</del>	
JORDAN	FC	<del>NCPC</del>	NI	<del>PCFC</del>	FC	FC	FC	National AIM Roadmap- <del>20142017</del>	
KUWAIT	FC	PC	NI	NC	NC	NC	FC	National AIM Roadmap- <del>20152016</del>	
LEBANON	NC	<del>NCPC</del>	NI	<del>NCPC</del>	<del>NCPC</del>	<del>NCPC</del>	FC	National AIM Roadmap- <del>20142016</del>	
LIBYA	NC	NC	NI	NC	NC	NC	NC	No Action Plan	
OMAN	NC	NC	NI	NC	<del>NCFC</del>	<del>NCFC</del>	FC	National AIM Roadmap- <del>20142016</del>	
QATAR	FC	<del>FCPC</del>	PI	FC	PC	PC	FC	National AIM Roadmap- <del>20152016</del>	<del>SLA with MIL in progress</del>
SAUDI ARABIA	FC	<del>PCFC</del>	NI	FC	FC	FC	FC	National AIM Roadmap- <del>20142017</del>	<del>SLA will be completed end 2015</del>
SUDAN	FC	FC	NI	NC	FC	FC	FC	National AIM Roadmap- <del>20152017</del>	
SYRIAN ARAB REPUBLIC	NC	NC	NI	NC	NC	NC	NC	No Action Plan	
UNITED ARAB EMIRATES	FC	PC	<del>NIPI</del>	FC	FC	FC	FC	National AIM Roadmap- <del>20142017</del>	<del>SLA initiated with MIL-ongoing</del> Digital data exchange with originator: planned (2016-2021)

									CAAP 56 details of agreements
YEMEN	NC	NC	NI	PC	NC	NC	NC	No Action Plan	

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## Table B0-DATM-3-3

### World Geodetic System-1984 (WGS-84)

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#### EXPLANATION OF THE TABLE

Column:

- 1 Name of the State or territory for which implementation of WGS-84 is required.
- 2 Compliance with the requirements for implementation of WGS-84 for FIR and Enroute points, shown by:
  - FC – Fully compliant
  - PC – Partially compliant
  - NC – Not compliant
- 3 Compliance with the requirements for implementation of WGS-84 for Terminal Areas (arrival, departure and instrument approach procedures), shown by:
  - FC – Fully compliant
  - PC – Partially compliant
  - NC – Not compliant
- 4 Compliance with the requirements for implementation of WGS-84 for Aerodrome, shown by:
  - FC – Fully compliant
  - PC – Partially compliant
  - NC – Not compliant
- 5 Compliance with the requirements for implementation of Geoid Undulation, shown by:
  - FC – Fully compliant
  - PC – Partially compliant
  - NC – Not compliant
- 6 Action Plan — short description of the State’s Action Plan with regard to WGS-84 implementation, especially for items with a “PC”, “PI”, “NC” or “NI” status, including planned date(s) of full compliance, as appropriate.
- 7 Remarks — additional information, including detail of “PC” and “NC”, as appropriate.

**TABLE B0-DATM-3-3**  
**World Geodetic System-1984 (WGS-84)**

State	FIR/ENR	Terminal	AD	GUND	Action Plan	Remarks
1	2	3	4	5	6	7
BAHARAIN	FC	FC	FC	FC		Plan to be updated by 2016
EGYPT	FC	FC	FC	FC		
IRAN, ISLAMIC REPUBLIC OF	FC	FC	FC	FC		
IRAQ	<del>PCFC</del>	<del>PCFC</del>	<del>PCFC</del>	NC	National AIM Roadmap <del>2014</del> 2015	
JORDAN	FC	FC	FC	FC		
KUWAIT	FC	FC	FC	FC		Last survey FEB 2015
LEBANON	FC	FC	FC	<del>NCFC</del>	National AIM Roadmap 2014	
LIBYA	PC	PC	NC	NC	No Action Plan	
OMAN	FC	FC	FC	FC		
QATAR	FC	FC	FC	FC		Annual Validation/Survey Updates planned up to 2017
SAUDI ARABIA	FC	FC	FC	FC		
SUDAN	FC	FC	FC	FC		
SYRIAN ARAB REPUBLIC	FC	FC	FC	NC	No Action Plan	
UNITED ARAB EMIRATES	FC	FC	FC	FC		
YEMEN	FC	FC	FC	FC		

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## Table B0-DATM-3-4-1

### Provision of Terrain and Obstacle data sets for Areas 1 and 4

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#### EXPLANATION OF THE TABLE

Column

- |   |  |
|---|--|
| 1 | Name of the State or territory for which Terrain and Obstacle data sets for Areas 1 and 4 are required.  |
| 2 | Compliance with requirement for the provision of Terrain data sets for Area 1, shown by:<br>FC – Fully Compliant<br>PC – Partially Compliant<br>NC – Not Compliant   |
| 3 | Compliance with requirement for the provision of Terrain data sets for Area 4, shown by:<br>FC – Fully Compliant<br>PC – Partially Compliant<br>NC – Not Compliant<br>N/A – Not Applicable   |
| 4 | Compliance with requirement for the provision of Obstacle data sets for Area 1, shown by:<br>FC – Fully Compliant<br>PC – Partially Compliant<br>NC – Not Compliant  |
| 5 | Compliance with requirement for the provision of Obstacle data sets for Area 4, shown by:<br>FC – Fully Compliant<br>PC – Partially Compliant<br>NC – Not Compliant<br>N/A – Not Applicable  |
| 6 | Action plan — short description of the State’s Action Plan with regard to compliance with the requirements for provision of Terrain and Obstacle data sets for Areas 1 and 4, especially for items with a “PC” or “NC” status, including planned date(s) of full compliance, as appropriate. |
| 7 | Remarks— additional information, including detail of “PC” and “NC”, as appropriate.  |

**TABLE B0-DATM-3-4-1**

**Provision of Terrain and Obstacle data sets for Areas 1 and 4**

State	Terrain data sets		Obstacle data sets		Action Plan	Remarks
	Area 1	Area 4	Area 1	Area 4		
1	2	3	4	5	6	7
BAHARAIN	FC	FC	FC	FC		
EGYPT	FC	FC	<u>PCNC</u>	<u>PCNC</u>	National AIM Roadmap- <del>2015</del> 2017	<u>4 and 5 (HECA &amp; HESH): 2019</u>
IRAN, ISLAMIC REPUBLIC OF	FC	FC	FC	FC		
IRAQ	NC	NC	NC	NC	National AIM Roadmap- <del>2014</del> 2015	
JORDAN	<u>NCPC</u>	<u>NCFC</u>	<u>NCPC</u>	<u>NCFC</u>	National AIM Roadmap- <del>2014</del> 2017	
KUWAIT	FC	FC	FC	FC		
LEBANON	NC	N/A	NC	N/A	National AIM Roadmap- <del>2014</del> 2016	
LIBYA	NC	N/A	NC	N/A	No Action Plan	
OMAN	NC	N/A	NC	N/A	National AIM Roadmap- <del>2014</del> 2016	
QATAR	FC	FC	FC	FC		
SAUDI ARABIA	FC	FC	FC	FC		
SUDAN	NC	N/A	NC	N/A	National AIM Roadmap- <del>2015</del> 2017	
SYRIAN ARAB REPUBLIC	NC	N/A	NC	N/A	No Action Plan	
UNITED ARAB EMIRATES	PC	FC	PC	FC	National AIM Roadmap- <del>2014</del> 2017	<u>A recurrent data acquisition eTOD Area 1 is planned</u>
YEMEN	NC	N/A	NC	N/A	No Action Plan	

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## Table B0-DATM-3-4-2

### Provision of Terrain and Obstacle data sets for Area 2

---

#### EXPLANATION OF THE TABLE

Column

- |   |  |
|---|--|
| 1 | Name of the State or territory for which Terrain and Obstacle data sets for Area 2 are required.   |
| 2 | Compliance with requirement for the provision of Terrain data sets for Area 2a, shown by:<br>FC – Fully Compliant<br>PC – Partially Compliant<br>NC – Not Compliant                                |
| 3 | Compliance with requirement for the provision of Terrain data sets for Area 2b, shown by:<br>FI – Fully Implemented<br>PI – Partially Implemented<br>NI – Not implemented<br>N/A – Not Applicable  |
| 4 | Compliance with requirement for the provision of Terrain data sets for Area 2c, shown by:<br>FI – Fully Implemented<br>PI – Partially Implemented<br>NI – Not Implemented<br>N/A – Not Applicable  |
| 5 | Compliance with requirement for the provision of Terrain data sets for Area 2d, shown by:<br>FI – Fully Implemented<br>PI – Partially Implemented<br>NI – Not Implemented<br>N/A – Not Applicable  |
| 6 | Compliance with requirement for the provision of Obstacle data sets for Area 2a, shown by:<br>FC – Fully Compliant<br>PC – Partially Compliant<br>NC – Not Compliant                               |
| 7 | Compliance with requirement for the provision of Obstacle data sets for Area 2b, shown by:<br>FI – Fully Implemented<br>PI – Partially Implemented<br>NI – Not implemented<br>N/A – Not Applicable |
| 8 | Compliance with requirement for the provision of Obstacle data sets for Area 2c, shown by:<br>FI – Fully Implemented   |

PI – Partially Implemented  
NI – Not Implemented  
N/A – Not Applicable

- 9 Compliance with requirement for the provision of Obstacle data sets for Area 2d, shown by:  
FI – Fully Implemented  
PI – Partially Implemented  
NI – Not Implemented  
N/A – Not Applicable
- 10 Action plan — short description of the State’s Action Plan with regard to compliance with the requirements for provision of Terrain and Obstacle data sets for Area 2, especially for items with a “PC”, “PI”, “NC” or “NI” status.
- 11 Remarks— additional information, including detail of “PC”, “PI” and “NC”, “NI”, as appropriate.

**TABLE B0-DATM-3-4-2**

**Provision of Terrain and Obstacle data sets for Area 2**

State	Terrain data sets				Obstacle data sets				Action Plan	Remarks
	Area 2a	Area 2b	Area 2c	Area 2d	Area 2a	Area 2b	Area 2c	Area 2d		
1	2	3	4	5	6	7	8	9	10	11
BAHARAIN	NC	NI	NI	NI	<del>NCFC</del>	<del>NFI</del>	<del>NFI</del>	<del>NFI</del>	National AIM Roadmap- <del>2015</del> 2016	
EGYPT	PC	PI	PI	PI	NC	NI	NI	NI	National AIM Roadmap- <del>2015</del> 2017	<u>To be completed by 2020</u>
IRAN, ISLAMIC REPUBLIC OF	<del>NCFC</del>	<del>NFI</del>	<del>NFI</del>	<del>NFI</del>	<del>NCFC</del>	<del>NFI</del>	<del>NFI</del>	<del>NFI</del>	<del>National AIM Roadmap-2015</del>	
IRAQ	NC	NI	NI	NI	NC	NI	NI	NI	National AIM Roadmap- <del>2014</del> 2015	
JORDAN	<del>NCPC</del>	<del>NIPI</del>	<del>NIPI</del>	NI	<del>NCPC</del>	<del>NIPI</del>	<del>NIPI</del>	NI	National AIM Roadmap- <del>2014</del> 2017	<u>Area 2a, 2b and 2c implemented for OJAI RWY 26R/08L</u>
KUWAIT	NC	NI	NI	NI	NC	NI	NI	NI	National AIM Roadmap- <del>2015</del> 2016	
LEBANON	NC	NI	NI	NI	NC	NI	NI	NI	National AIM Roadmap- <del>2014</del> 2016	
LIBYA	NC	NI	NI	NI	NC	NI	NI	NI	No Action Plan	
OMAN	NC	NI	NI	NI	NC	NI	NI	NI	National AIM Roadmap- <del>2014</del> 2016	
QATAR	FC	FI	FI	FI	FC	FI	FI	FI		
SAUDI ARABIA	NC	NI	NI	NI	NC	NI	NI	NI	National AIM Roadmap- <del>2014</del> 2017	
SUDAN	NC	NI	NI	NI	NC	NI	NI	NI	National AIM Roadmap- <del>2015</del> 2017	
SYRIAN ARAB REPUBLIC	NC	NI	NI	NI	NC	NI	NI	NI	No Action Plan	
UNITED ARAB EMIRATES	NC	NI	NI	<del>NI</del>	<del>NCFC</del>	<del>NFI</del>	<del>NFI</del>	<del>NIPI</del>	National AIM Roadmap- <del>2014</del> 2017	<u>eTOD Area 2 (all sub-areas) survey &amp; data acquisition through international airport service providers</u>
YEMEN	NC	NI	NI	NI	NC	NI	NI	NI	No Action Plan	

**Table B0-DATM-3-4-3**  
**Provision of Terrain and Obstacle data sets for Area 3 and Airport Mapping**  
**Databases (AMDB)**

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**EXPLANATION OF THE TABLE**

Column

- 1 Name of the State or territory for which Terrain and Obstacle data sets for Area 3 and AMDB are required.
- 2 Compliance with requirement for the provision of Terrain data sets for Area 3, shown by:
  - FI – Fully Implemented
  - PI – Partially Implemented
  - NI – Not Implemented
  - N/A – Not Applicable
- 3 Compliance with requirement for the provision of Obstacle data sets for Area 3, shown by:
  - FI – Fully Implemented
  - PI – Partially Implemented
  - NI – Not Implemented
  - N/A – Not Applicable
- 4 Implementation of AMDB, shown by:
  - FI – Fully Implemented
  - PI – Partially Implemented
  - NI – Not Implemented
  - N/A – Not Applicable
- 5 Action plan — short description of the State’s Action Plan with regard to compliance with the requirements for provision of Terrain and Obstacle data sets for Area 3 and AMDB implementation, especially for items with a “PC”, “PI”, “NC” or “NI” status.
- 6 Remarks— additional information, including detail of “PI” and “NI”, as appropriate.

TABLE B0-DATM-3-4-3

## Provision of Terrain and Obstacle data sets for Area 3 and Airport Mapping Databases (AMDB)

State	Terrain data sets (Area 3)	Obstacle data sets (Area 3)	AMDB	Action Plan	Remarks
1	2	3	4	5	6
BAHARAIN	NI	<del>NI</del>	NI	National AIM Roadmap- <del>2015</del> 2016	
EGYPT	NI	NI	NI	National AIM Roadmap- <del>2015</del> 2017	A3: 2019; AMDB: 2020
IRAN, ISLAMIC REPUBLIC OF	<del>NI</del>	<del>NI</del>	NI	National AIM Roadmap- <del>2015</del> 2016	
IRAQ	NI	NI	NI	National AIM Roadmap- <del>2014</del> 2015	
JORDAN	<del>NI</del>	<del>NI</del>	NI	National AIM Roadmap- <del>2014</del> 2017	Area 3 implemented for OJAI RWY 26R/08L
KUWAIT	FI	FI	NI	National AIM Roadmap- <del>2015</del> 2016	
LEBANON	NI	NI	NI	National AIM Roadmap- <del>2014</del> 2016	
LIBYA	NI	NI	NI	No Action Plan	
OMAN	NI	NI	NI	National AIM Roadmap- <del>2014</del> 2016	
QATAR	<del>NI</del>	<del>FI</del>	<del>NI</del>	National AIM Roadmap- <del>2015</del> 2016	Q4/2017 AMDB implementation AMDB to be implemented last quarter of 2015
SAUDI ARABIA	NI	NI	NI	National AIM Roadmap- <del>2014</del> 2017	
SUDAN	NI	NI	NI	National AIM Roadmap- <del>2015</del> 2017	
SYRIAN ARAB REPUBLIC	NI	NI	NI	No Action Plan	
UNITED ARAB EMIRATES	<del>NI</del>	<del>NI</del>	NI	National AIM Roadmap- <del>2014</del> 2017	AMDB technical infrastructure (metadata, model) implemented in IAID, pending compatibility analysis AIXM 5.1 with revised AMDB model (RTCA DO-272D) when released.
YEMEN	NI	NI	NI	No Action Plan	



**APPENDIX 6A**

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**Deficiencies in the AIM Field**

**BAHRAIN**

Item No	Identification		Deficiencies			Corrective Action			
	Requirement	Facilities/ Services	Description	Date First Reported	Remarks/ Rationale for Non-elimination	Description	Executing Body	Date of Completion	Priority for Action

No Deficiencies Reported

<sup>(1)</sup> Rationale for non-elimination: “F”= Financial

“H”= Human Resources

“S”= State (Military/political)

“O”= Other unknown causes

**Deficiencies in the AIM Field**

**EGYPT**

Item No	Identification		Deficiencies				Corrective Action			
	Requirement	Facilities/ Services	Description	Date First Reported	Remarks/ Rationale for Non-elimination		Description	Executing Body	Date of Completion	Priority for Action
1	ANNEX 15: Para. 10.1.3, Para. 10.1.9	-	Lack of the required Obstacle Datasets for eTOD Area 1 and Area 4	May, 2014	-	O	Corrective Action Plan has not been formally provided by the State	Egypt	Dec, 2018	A

<sup>(1)</sup> Rationale for non-elimination: “F”= Financial

“H”= Human Resources

“S”= State (Military/political)

“O”= Other unknown causes

**Deficiencies in the AIM Field**

**IRAN**

Item No	Identification		Deficiencies				Corrective Action			
	Requirement	Facilities/ Services	Description	Date First Reported	Remarks/ Rationale for Non-elimination		Description	Executing Body	Date of Completion	Priority for Action
1	ANNEX 15: Para. 3.6	-	Lack of AIXM-based AIS Database	Dec, 2007	-	O	Corrective Action Plan has not been formally provided by the State	Iran	Dec, 2018	A

<sup>(1)</sup> Rationale for non-elimination: “F”= Financial

“H”= Human Resources

“S”= State (Military/political)

“O”= Other unknown causes

**Deficiencies in the AIM Field**

**IRAQ**

Item No	Identification		Deficiencies				Corrective Action			
	Requirement	Facilities/ Services	Description	Date First Reported	Remarks/ Rationale for Non-elimination		Description	Executing Body	Date of Completion	Priority for Action
1	ANNEX 4: Para. 16.2	-	Non-production of World Aeronautical Chart – ICAO 1:1 000 000	May, 1995	-	F H S	Corrective Action Plan has not been formally provided by the State	Iraq	Dec, 2018	B
2	ANNEX 15: Para. 1.2.2	-	Implementation of geoid undulation referenced to the WGS-84 ellipsoid	Dec, 1997	-	F H O	Corrective Action Plan has not been formally provided by the State	Iraq	Dec, 2018	A
3	ANNEX 15: Para. 3.7	QMS Implementation	Lack of Implementation of QMS	Jan, 2003	-	F H O	Corrective Action Plan has not been formally provided by the State	Iraq	Dec, 2018	A
4	ANNEX 4: Para. 11.2	-	Non-production of Instrument Approach Chart-ICAO for Mousl Intl. Airport	Jan, 2003	-	F H O	Corrective Action Plan has not been formally provided by the State	Iraq	Dec, 2018	A
5	ANNEX 15: Para. 8.1	-	Non provision of pre-flight information service at international airports	Mar, 2004	-	F H O	Corrective Action Plan has not been formally provided by the State	Iraq	Dec, 2018	A
6	ANNEX 15: Para. 10.1.3 Para. 10.1.9	-	Lack of the required Terrain Datasets for eTOD Area 1 and Area 4	May, 2014	-	O	Corrective Action Plan has not been formally provided by the State	Iraq	Dec, 2018	A
7	ANNEX 15: Para. 10.1.3 Para. 10.1.9	-	Lack of the required Obstacle Datasets for eTOD Area 1 and Area 4	May, 2014	-	O	Corrective Action Plan has not been formally provided by the State	Iraq	Dec, 2018	A

<sup>(1)</sup> Rationale for non-elimination: “F”= Financial

“H”= Human Resources

“S”= State (Military/political)

“O”= Other unknown causes

**Deficiencies in the AIM Field**

**JORDAN**

Item No	Identification		Deficiencies				Corrective Action			
	Requirement	Facilities/ Services	Description	Date First Reported	Remarks/ Rationale for Non-elimination		Description	Executing Body	Date of Completion	Priority for Action
1	ANNEX 4: Para. 16.2	-	Non-production of World Aeronautical Chart – ICAO1:1 000 000	Feb, 2008	-	F H	Corrective Action Plan has not been formally provided by the State	Jordan	Dec, 2018	B
2	ANNEX 15: Para. 10.1.3 Para. 10.1.9	-	Lack of the required Terrain Datasets for eTOD Area 1 and Area 4	May, 2014	-	F H	Corrective Action Plan has not been formally provided by the State	Jordan	Dec, 2018	A
3	ANNEX 15: Para. 10.1.3 Para. 10.1.9	-	Lack of the required Obstacle Datasets for eTOD Area 1 and Area 4	May, 2014	-	F H	Corrective Action Plan has not been formally provided by the State	Jordan	Dec, 2018	A

<sup>(1)</sup> Rationale for non-elimination: “F”= Financial

“H”= Human Resources

“S”= State (Military/political)

“O”= Other unknown causes

**Deficiencies in the AIM Field**

**KUWAIT**

Item No	Identification		Deficiencies			Corrective Action			
	Requirement	Facilities/ Services	Description	Date First Reported	Remarks/ Rationale for Non-elimination	Description	Executing Body	Date of Completion	Priority for Action

No Deficiencies Reported

<sup>(1)</sup> Rationale for non-elimination: “F”= Financial

“H”= Human Resources

“S”= State (Military/political)

“O”= Other unknown causes

Deficiencies in the AIM Field

LEBANON

Item No	Identification		Deficiencies				Corrective Action			
	Requirement	Facilities/ Services	Description	Date First Reported	Remarks/ Rationale for Non-elimination		Description	Executing Body	Date of Completion	Priority for Action
1	ANNEX 4: Para. 16.2	-	Non-production of World Aeronautical Chart – ICAO1:1 000 000	May, 1995	-	H	Corrective Action Plan was provided in August 2016.	Lebanon	Dec, 2018	B
2	ANNEX 15:Para. 3.7	QMS Implementation	Lack of Implementation of QMS	Jan, 2003	(USOAP-CMA finding)	H	Corrective Action Plan was provided in August 2016.	Lebanon	Dec, 2018	A
3	ANNEX 15:Para. 1.2.2	-	Implementation of geoid undulation referenced to the WGS 84 ellipsoid.	Jan, 2003	-	H	Corrective Action Plan was provided in August 2016.	Lebanon	Dec, 2018	A
4	ANNEX 15: Para. 10.1.3	-	Lack of the required Terrain Datasets for eTOD Area 1	May, 2014	-	O	Corrective Action Plan was provided in August 2016.	Lebanon	Dec, 2018	A
5	ANNEX 15: Para. 10.1.3	-	Lack of the required Obstacle Datasets for eTOD Area 1	May, 2014	-	O	Corrective Action Plan was provided in August 2016.	Lebanon	Dec, 2018	A

<sup>(1)</sup> Rationale for non-elimination: “F”= Financial

“H”= Human Resources

“S”= State (Military/political)

“O”= Other unknown causes

**Deficiencies in the AIM Field**

**LIBYA**

Item No	Identification		Deficiencies				Corrective Action			
	Requirement	Facilities/ Services	Description	Date First Reported	Remarks/ Rationale for Non-elimination		Description	Executing Body	Date of Completion	Priority for Action
1	ANNEX 4: Para. 16.2	-	Non-production of World Aeronautical Chart – ICAO 1:1 000 000	May, 2014	-	O	Corrective Action Plan has not been formally provided by the State	Libya	Dec, 2018	B
2	ANNEX 15: Para. 3.7	QMS Implementation	Lack of Implementation of QMS	May, 2014	(USOAP-CMA finding)	O	Corrective Action Plan has not been formally provided by the State	Libya	Dec, 2018	A
3	ANNEX 15: Para 6.	-	Lack of a system for AIRAC adherence monitoring	May, 2014	-	O	Corrective Action Plan has not been formally provided by the State	Libya	Dec, 2018	A
4	ANNEX 15: Para. 3.6	-	Lack of AIXM-based AIS Database	May, 2014	-	O	Corrective Action Plan has not been formally provided by the State	Libya	Dec, 2018	A
5	ANNEX 15: Para. 10.1.3	-	Lack of the required Terrain Datasets for eTOD Area 1	May, 2014	-	O	Corrective Action Plan has not been formally provided by the State	Libya	Dec, 2018	A
6	ANNEX 15: Para. 10.1.3	-	Lack of the required Obstacle Datasets for eTOD Area 1	May, 2014	-	O	Corrective Action Plan has not been formally provided by the State	Libya	Dec, 2018	A

<sup>(1)</sup> Rationale for non-elimination: “F”= Financial

“H”= Human Resources

“S”= State (Military/political)

“O”= Other unknown causes

**Deficiencies in the AIM Field**

**OMAN**

Item No	Identification		Deficiencies				Corrective Action			
	Requirement	Facilities/ Services	Description	Date First Reported	Remarks/ Rationale for Non-elimination		Description	Executing Body	Date of Completion	Priority for Action
1	ANNEX 15:Para. 3.7	QMS Implementation	Lack of Implementation of QMS	Jan, 2003	(USOAP-CMA finding)	O	- An agreement with an international quality company is established to assist for progressive implementation of quality systems within DGAN AIS.  - QMS is expected to be fully implemented by December 2017.	Oman	Dec, 2017	A
2	ANNEX 15: Para. 3.6	-	Lack of AIXM-based AIS Database	Jul, 2005	-	O	A contract is going to be signed with a company specializing in this area for AIP Data Migration. AIM equipment installation will be completed by end of February 2017. The target is to have 70% of the data by June 2018	Oman	Dec, 2018	A
3	ANNEX 15: Para. 10.1.3	-	Lack of the required Terrain Datasets for eTOD Area 1	May, 2014	-	O	An agreement with National survey authority is going to be established to assist for progressive implementation of terrain datasets for eTOD area 1. The target is to have the required data by Dec 2018.	Oman	Dec, 2018	A

<sup>(1)</sup> Rationale for non-elimination: “F”= Financial

“H”= Human Resources

“S”= State (Military/political)

“O”= Other unknown causes

Item No	Identification		Deficiencies				Corrective Action			
	Requirement	Facilities/ Services	Description	Date First Reported	Remarks/ Rationale for Non-elimination		Description	Executing Body	Date of Completion	Priority for Action
4	ANNEX 15: Para. 10.1.3	-	Lack of the required Obstacle Datasets for eTOD Area 1	May, 2014	-	O	Area 1 obstacles are published in AIP Oman ENR 5.4 "Air Navigation (En-Route) Obstacles". Data originators for obstacles will be consulted for Area 1 obstacle completeness and update.	Oman	Dec, 2018	A

<sup>(1)</sup> Rationale for non-elimination: "F"= Financial

"H"= Human Resources

"S"= State (Military/political)

"O"= Other unknown causes

**Deficiencies in the AIM Field**

**QATAR**

Item No	Identification		Deficiencies			Corrective Action			
	Requirement	Facilities/ Services	Description	Date First Reported	Remarks/ Rationale for Non-elimination	Description	Executing Body	Date of Completion	Priority for Action

No Deficiencies Reported

<sup>(1)</sup> Rationale for non-elimination: “F”= Financial

“H”= Human Resources

“S”= State (Military/political)

“O”= Other unknown causes

**Deficiencies in the AIM Field**

**SAUDI ARABIA**

Item No	Identification		Deficiencies				Corrective Action			
	Requirement	Facilities/ Services	Description	Date First Reported	Remarks/ Rationale for Non-elimination		Description	Executing Body	Date of Completion	Priority for Action
1	ANNEX 15: Para. 8.1	-	Pre-flight information service not provided at International Airports	Nov, 2007	-	O	Corrective Action Plan has not been formally provided by the State	Saudi Arabia	<del>Dec, 2017</del> <u>Apr. 2018</u>	A

<sup>(1)</sup> Rationale for non-elimination: “F”= Financial

“H”= Human Resources

“S”= State (Military/political)

“O”= Other unknown causes

**Deficiencies in the AIM Field**

**SUDAN**

Item No	Identification		Deficiencies				Corrective Action			
	Requirement	Facilities/ Services	Description	Date First Reported	Remarks/ Rationale for Non-elimination		Description	Executing Body	Date of Completion	Priority for Action
1	ANNEX 15: Para. 3.6	-	Lack of AIXM-based AIS Database	May, 2014	-	O	Corrective Action Plan has not been formally provided by the State	Sudan	Dec, 2018	A
2	ANNEX 15: Para. 10.1.3	-	Lack of the required Terrain Datasets for eTOD Area 1	May, 2014	-	O	Corrective Action Plan has not been formally provided by the State	Sudan	Dec, 2018	A
3	ANNEX 15: Para. 10.1.3	-	Lack of the required Obstacle Datasets for eTOD Area 1	May, 2014	-	O	Corrective Action Plan has not been formally provided by the State	Sudan	Dec, 2018	A

<sup>(1)</sup> Rationale for non-elimination: “F”= Financial

“H”= Human Resources

“S”= State (Military/political)

“O”= Other unknown causes

**Deficiencies in the AIM Field**

**SYRIA**

Item No	Identification		Deficiencies				Corrective Action			
	Requirement	Facilities/ Services	Description	Date First Reported	Remarks/ Rationale for Non-elimination		Description	Executing Body	Date of Completion	Priority for Action
1	ANNEX 15: Para. 6.	-	Lack of a system for AIRAC adherence monitoring	May, 1995	-	F H	Corrective Action Plan has not been formally provided by the State	Syria	Dec, 2018	A
2	ANNEX 4: Para. 16.2	-	Non-production of World Aeronautical Chart – ICAO1:1 000 000	May, 1995	-	F H S	Corrective Action Plan has not been formally provided by the State	Syria	Dec, 2018	B
3	ANNEX 15: Para. 3.7	QMS Implementation	Lack of Implementation of QMS	Jan, 2003	(USOAP-CMA finding)	F H	Corrective Action Plan has not been formally provided by the State	Syria	Dec, 2018	A
4	ANNEX 15: Para. 1.2.2	-	Implementation of geoid undulation referenced to the WGS-84 ellipsoid.	Jan, 2003	-	F H	Corrective Action Plan has not been formally provided by the State	Syria	Dec, 2018	A
5	ANNEX 15 Para. 4.	-	Lack of consistency in AIP information and lack of regular and effective updating of the AIP.	Jul, 2005	-	H	Corrective Action Plan has not been formally provided by the State	Syria	Dec, 2018	A
6	ANNEX 15: Para. 3.6	-	Lack of AIXM-based AIS Database	Jul, 2005	-	F H	Corrective Action Plan has not been formally provided by the State	Syria	Dec, 2018	A
7	ANNEX 15: Para. 8.1	-	Non provision of pre-flight information service at international airports	Jul, 2005	-	F H	Corrective Action Plan has not been formally provided by the State	Syria	Dec, 2018	A

(1) Rationale for non-elimination: “F”= Financial

“H”= Human Resources

“S”= State (Military/political)

“O”= Other unknown causes

Item No	Identification		Deficiencies				Corrective Action			
	Requirement	Facilities/ Services	Description	Date First Reported	Remarks/ Rationale for Non-elimination		Description	Executing Body	Date of Completion	Priority for Action
8	ANNEX 15: Para. 10.1.3	-	Lack of the required Terrain Datasets for eTOD Area 1	May, 2014	-	O	Corrective Action Plan has not been formally provided by the State	Syria	Dec, 2018	A
9	ANNEX 15: Para. 10.1.3	-	Lack of the required Obstacle Datasets for eTOD Area 1	May, 2014	-	O	Corrective Action Plan has not been formally provided by the State	Syria	Dec, 2018	A

<sup>(1)</sup> Rationale for non-elimination: “F”= Financial

“H”= Human Resources

“S”= State (Military/political)

“O”= Other unknown causes

**Deficiencies in the AIM Field**

**UAE**

Item No	Identification		Deficiencies			Corrective Action			
	Requirement	Facilities/ Services	Description	Date First Reported	Remarks/ Rationale for Non-elimination	Description	Executing Body	Date of Completion	Priority for Action

No Deficiencies Reported

<sup>(1)</sup> Rationale for non-elimination: “F”= Financial

“H”= Human Resources

“S”= State (Military/political)

“O”= Other unknown causes

**Deficiencies in the AIM Field**

**YEMEN**

Item No	Identification		Deficiencies				Corrective Action			
	Requirement	Facilities/ Services	Description	Date First Reported	Remarks/ Rationale for Non-elimination		Description	Executing Body	Date of Completion	Priority for Action
1	ANNEX 15: Para 6.	-	Lack of a system for AIRAC adherence monitoring	May, 1995	-	H O	Corrective Action Plan has not been formally provided by the State	Yemen	Dec, 2018	A
2	ANNEX 4: Para. 16.2	-	Non-production of World Aeronautical Chart – ICAO1:1 000 000	May, 1995	-	F	Corrective Action Plan has not been formally provided by the State	Yemen	Dec, 2018	B
3	ANNEX 15: Para. 3.7	QMS Implementation	Lack of Implementation of QMS	Jan, 2003	-	F	Corrective Action Plan has not been formally provided by the State	Yemen	Dec, 2018	A
4	ANNEX 4: Para. 11.2	-	Non-production of Instrument Approach Chart-ICAO for TAIZ Intl. Airport	Jan, 2003	-	O	Corrective Action Plan has not been formally provided by the State	Yemen	Dec, 2018	A
5	ANNEX 15: Para. 8.1	-	Non provision of pre-flight information service at international airports	Mar, 2004	-	F H	Corrective Action Plan has not been formally provided by the State	Yemen	Dec, 2018	A
6	ANNEX 15: Para. 3.6	-	Lack of AIXM-based AIS Database	Jul, 2005	-	F	Corrective Action Plan has not been formally provided by the State	Yemen	Dec, 2018	A
7	ANNEX 15: Para. 10.1.3	-	Lack of the required Terrain Datasets for eTOD Area 1	May, 2014	-	O	Corrective Action Plan has not been formally provided by the State	Yemen	Dec, 2018	A

<sup>(1)</sup> Rationale for non-elimination: “F”= Financial

“H”= Human Resources

“S”= State (Military/political)

“O”= Other unknown causes

MIDAD TF/5 & AIM SG/4-REPORT  
**APPENDIX 6A**

Item No	Identification		Deficiencies				Corrective Action			
	Requirement	Facilities/ Services	Description	Date First Reported	Remarks/ Rationale for Non-elimination		Description	Executing Body	Date of Completion	Priority for Action
8	ANNEX 15: Para. 10.1.3	-	Lack of the required Obstacle Datasets for eTOD Area 1	May, 2014	-	O	Corrective Action Plan has not been formally provided by the State	Yemen	Dec, 2018	A

<sup>(1)</sup> Rationale for non-elimination: “F”= Financial

“H”= Human Resources

“S”= State (Military/political)

“O”= Other unknown causes

**Note:\* Priority for action to remedy a deficiency is based on the following safety assessments:**

**'U' priority = Urgent requirements having a direct impact on safety and requiring immediate corrective actions.**

**Urgent requirement consisting of any physical, configuration, material, performance, personnel or procedures specification, the application of which is urgently required for air navigation safety.**

**'A' priority = Top priority requirements necessary for air navigation safety.**

**Top priority requirement consisting of any physical, configuration, material, performance, personnel or procedures specification, the application of which is considered necessary for air navigation safety.**

**'B' priority = Intermediate requirements necessary for air navigation regularity and efficiency.**

**Intermediate priority requirement consisting of any physical, configuration, material, performance, personnel or procedures specification, the application of which is considered necessary for air navigation regularity and efficiency.**

**Definition:**

**A deficiency is a situation where a facility, service or procedure does not comply with a regional air navigation plan approved by the Council, or with related ICAO Standards and Recommended Practices, and which situation has a negative impact on the safety, regularity and/or efficiency of international civil aviation.**

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<sup>(1)</sup> Rationale for non-elimination: “F”= Financial

“H”= Human Resources

“S”= State (Military/political)

“O”= Other unknown causes

APPENDIX 7A

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**MIDANPIRG AERONAUTICAL INFORMATION MANAGEMENT  
SUB-GROUP (AIM SG)**

**1. TERMS OF REFERENCE**

1.1 The Terms of Reference of the AIM Sub-Group are:

- a) ensure that the implementation of AIM in the MID Region is coherent and compatible with developments in adjacent regions, and is in line with the Global Air Navigation Plan (GANP), the Aviation System Block Upgrades (ASBU) methodology and the MID Region Air Navigation Strategy;
- b) monitor the status of implementation of the MID Region AIM-related ASBU Modules included in the MID Region Air Navigation Strategy as well as other required AIM facilities and services, identify the associated difficulties and deficiencies and provide progress reports, as required;
- c) keep under review the MID Region AIM performance objectives/priorities, develop action plans to achieve the agreed performance targets and propose changes to the MID Region AIM plans/priorities, through the ANSIG;
- d) seek to achieve common understanding and support from all stakeholders involved in or affected by the AIM and SWIM developments/activities in the MID Region;
- e) provide a platform for harmonization of developments and deployments in the AIM-SWIM domain;
- f) monitor and review the latest developments in the area of AIM, SWIM and relevant procedure design issues associated to AIM;
- g) provide expert inputs for AIM-related issues; and propose solutions for meeting ATM operational requirements;
- h) support collaboration between States for an expeditious transition from AIS to AIM, in line with the ICAO NCLB initiative;
- i) provide regular progress reports to the ANSIG and MIDANPIRG concerning its work programme; and
- j) review periodically its Terms of Reference and propose amendments, as necessary.

1.2 In order to meet the Terms of Reference, the AIM Sub-Group shall:

- a) monitor the status of implementation of the required AIM facilities and services in the MID Region;
- b) assess and provide progress reports on the transition from AIS to AIM in the MID Region;
- c) provide necessary assistance and guidance to States to ensure harmonization and interoperability in line with the GANP, the MID ANP and ASBU methodology;

- d) provide necessary inputs to the MID Air Navigation Strategy through the monitoring of the agreed Key Performance Indicators related to AIM;
- e) identify and review those specific deficiencies and problems that constitute major obstacles to the provision of efficient AIM services, and recommend necessary remedial actions;
- f) keep under review the adequacy of ICAO SARPs requirements in the area of AIM, taking into account, inter alia, changes in user requirements, the evolution of operational requirements and technological developments;
- g) develop proposals for the updating of relevant ICAO documentation related to AIM, including the amendment of relevant parts of the MID ANP, as deemed necessary;
- h) initiate appropriate actions for the development of the MID Region SWIM Implementation Roadmap, in coordination with the ATM, CNS and MET Sub-Groups;
- i) monitor and review technical and operating developments in the area of AIM and SWIM and foster their implementation in the MID Region in a harmonized manner; and
- j) foster the integrated improvement of AIM services through proper training and qualification of the AIM personnel and facilitate the cooperation of States for the provision of training, in support of the ICAO NCLB initiative.

## 2. COMPOSITION

### 2.1 The Sub-Group will compose of:

- a) MIDANPIRG Member States;
  - b) concerned International and Regional Organizations as observers; and
  - c) other representatives from provider States and Industry may be invited on ad hoc basis, as observers, when required.
-

***ATTACHMENT***

**LIST OF PARTICIPANTS**

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