INTERNATIONAL CIVIL AVIATION ORGANIZATION

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

REPORT OF THE SIXTH MEETING OF AIS/MAP TASK FORCE (AIS/MAP TF/6)

(Cairo, Egypt, 6 - 8 June 2011)

The views expressed in this Report should be taken as those of the MIDANPIRG AIS/MAP 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

TABLE OF CONTENTS

Page

PART I - HISTORY OF THE MEETING

PART II - REPORT ON AGENDA ITEMS

PART I – HISTORY OF THE MEETING

1. PLACE AND DURATION

1.1 The Sixth Meeting of the MIDANPIRG AIS/MAP Task Force was held at the Meeting Room of the ICAO Middle East Regional Office in Cairo, Egypt, from 6 to 8 June 2011.

2. OPENING

2.1 Mr. Jehad Faqir, ICAO MID Regional Office Deputy Regional Director, on behalf of Mr. Mohamed R. M. Khonji, the Regional Director, welcomed the participants to Cairo and wished them a successful and fruitful meeting. He highlighted that the successful transition from Aeronautical Information Services (AIS) to Aeronautical Information Management (AIM) is a collective goal. The need for a strategic evolution towards AIM in a manner that will ensure the availability of aeronautical information to any ATM user in a globally interoperable and fully digital environment was underlined.

2.2 Mr. Faqir outlined some of the main accomplishments and plans for achieving a successful global transition from AIS to AIM and mentioned that ICAO is looking for global support in realizing that vision. In this respect, he highlighted that the AIS/MAP TF meetings represent a good opportunity to follow-up AIM implementation in the MID Region and plan for further developments, in a spirit of cooperation with all stakeholders.

2.3 At the end of his opening speech, Mr. Faqir highlighted that the AIS/MAP Task Force has an important role to play within the framework of the MIDANPIRG planning mechanism and noted that its work programme is ambitious and would necessitate active contribution of its members in order to achieve the expected results. In closing, he thanked the participants for their presence and wished the meeting every success in its deliberations.

3. ATTENDANCE

3.1 The meeting was attended by a total of thirty two (32) participants, including experts from Nine (9) States (Bahrain, Egypt, Jordan, Kuwait, Oman, Qatar, Saudi Arabia, United Arab Emirates, and Yemen.) and three (3) Companies from the Industry (Avitech, AG, Frequentis, & Jeppesen). The list of participants is at **Attachment A** to the Report.

4. OFFICERS AND SECRETARIAT

4.1 The meeting was chaired by Mrs. Hanan A. Qabartai, Chief AIS HQ, Civil Aviation Regulatory Commission (CARC), Jordan. Mr. Mohamed Smaoui, Regional Officer Air Navigation Services/Aeronautical Information Management (ANS/AIM) was the Secretary of the meeting, supported by Mr. Jehad Faqir, Deputy Regional Director, ICAO MID Regional Office.

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 and Election of Chairperson

Agenda Item 2: Follow-up on MIDANPIRG/12 Conclusions and Decisions relevant to the AIS/MAP Field

Agenda Item 3: Transition from AIS to AIM

3.1 Global developments related to AIM
3.2 Progress made towards AIM implementation in the MID Region

- Phase 1 — Consolidation
- Phase 2 — Going digital
- Phase 3 — Information management

Agenda Item 4: Review of air navigation deficiencies in the AIS/MAP Field

Agenda Item 5: Review of the AIS/AIM Parts of the MID Air Navigation Plan (ANP)

Agenda Item 6: MID Region AIM Performance Objectives

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 6/1: QUESTIONNAIRE ON THE TRANSITION FROM AIS TO AIM

DRAFT CONCLUSION 6/2: AVOIDANCE OF THE AIRAC DATE 15 NOVEMBER 2012

DRAFT DECISION 6/3: DISSOLUTION OF THE QMS ACTION GROUP

DRAFT CONCLUSION 6/4:	*QMS IMPLEMENTATION*
DRAFT CONCLUSION 6/5:	*CERTIFICATION OF THE AIM SERVICES*
DRAFT DECISION 6/6:	*DISSOLUTION OF THE AIS AUTOMATION ACTION GROUP*
DRAFT DECISION 6/7:	*ESTABLISHMENT OF THE MIDAD STUDY GROUP*
DRAFT DECISION 6/8:	*TERMS OF REFERENCE OF THE AIM TASK FORCE*

PART II: REPORT ON AGENDA ITEMS

REPORT ON AGENDA ITEM 1: ADOPTION OF PROVISIONAL AGENDA AND ELECTION OF CHAIRPERSON

1.1 The meeting reviewed and adopted the Provisional Agenda as at Para. 6 of the History of the Meeting.

1.2 The meeting was informed that Mr. Ramezanali Ziaeegravi, Deputy of General Director of ATM, Tehran Mehrabad International Airport, Iranian Airports Company, who has been acting as the Chairman of the AIS/MAP Task Force since its fourth meeting held in Cairo, from 19 to 21 February 2008, was unable to attend the meeting because he was not granted an entry visa to Egypt. The meeting further noted that no Vice Chairperson has been elected for the AIS/MAP Task Force. Accordingly, it was agreed to proceed to the election of a Vice Chairperson who would be requested to chair the AIS/MAP TF/6 meeting.

1.3 Based on the above, the meeting unanimously elected Mrs. Hanan A. Qabartai, Chief AIS HQ, Civil Aviation Regulatory Commission (CARC), Jordan, as the Vice- Chairperson of the AIS/MAP Task Force.

REPORT ON AGENDA ITEM 2: FOLLOW-UP ON MIDANPIRG/12 CONCLUSIONS AND DECISIONS RELEVANT TO THE AIS/MAP FIELD

2.1 The meeting noted the status of relevant MIDANPIRG/12 Conclusions and Decisions related to the AIS/MAP field and the follow up actions taken by concerned parties as at **Appendix 2A** to the Report on Agenda Item 2.

2.2 The meeting urged States, that have not yet done so, to ensure that replies to the State Letters issued by the ICAO MID Regional Office as a follow up actions to the MIDANPIRG/12 Conclusions and Decisions are sent to the ICAO MID Regional Office, in a timely manner, to provide feedback on the follow-up action taken by States.

AIS/MAP TF/6
Appendix 2A to the Report on Agenda Item 2

FOLLOW-UP ACTION PLAN ON MIDANPIRG/12 CONCLUSIONS AND DECISIONS

CONCLUSIONS AND DECISIONS	FOLLOW-UP	TO BE INITIATED BY	DELIVERABLE	TARGET DATE	REMARKS
CONC. 12/2: INCREASING THE EFFICIENCY OF THE MIDANPIRG SUBSIDIARY BODIES That, with a view to maintain the continuity in the activity of the MIDANPIRG subsidiary bodies and increase their efficiency: a) States be invited to nominate for each MIDANPIRG subsidiary body Experts/Specialists as Members of the body concerned to fully contribute to the work of this body; and b) the specialists nominated for membership in a MIDANPIRG subsidiary body, act as focal points within their Civil Aviation Administration for all issues and follow-up activities related to the Work Programme of that body.	Implementation of the Conclusion	ICAO States	State Letter Nomination of Experts/Specialist	January 2011	Ongoing SL Ref.: ME 3/56 - 11/041 dated 7 March 2011 4 States replied
CONC. 12/8: QUALITY OF AERODROME AERONAUTICAL DATA AND COORDINATION BETWEEN AERODROME OPERATORS AND AIS That, a) ICAO to consider development of additional guidance on the implementation of quality requirements for protection and reporting aerodrome-related aeronautical data in accordance with the SARPs contained in Annex 14, Volume I; and b) MID States to ensure proper coordination with the Aeronautical Information Services and aerodrome authorities/operators for the timely transfer of aerodrome operational data through Service Level Agreements (SLA), worldwide best practices, etc	Implementation of the Conclusion	ICAO States	AIM Quality Manual State Letter	2011	Ongoing

CONCLUSIONS AND DECISIONS	FOLLOW-UP	TO BE INITIATED BY	DELIVERABLE	TARGET DATE	REMARKS
CONC. 12/9: RNAV 5 IMPLEMENTATION IN THE MID REGION That, States that have not yet done so, be urged to: a) update their AIP to change RNP 5 to RNAV 5; and b) take necessary measures to implement RNAV 5 area in the level band FL 160 - FL460 (inclusive).	Implementation of the Conclusion	ICAO States	State Letter update AIP Implement RNAV 5 (FL 160-FL460)	January 2011	Ongoing SL Ref.: AN 6/29 – 10/432 dated 16 December 2010
CONC. 12/10: ALLOCATION OF FIVE-LETTER-NAME CODES IN THE MID REGION That, prior to 31 March 2011, States that have not yet done so: a) assign ICARD ATS Route Planners, in order to make use of the ICARD system and improve the process of allocation of 5LNCs; b) take necessary action in order for their designated ICARD Route Planner(s) to register to the ICAO ICARD 5LNC web-based System; c) review their list of allocated 5LNCs and identify the non-used, duplicate and non-ICAO 5LNCs, and inform the ICAO MID Regional Office accordingly for necessary action; d) release those allocated 5LNCs which were replaced and/or are no longer used; and e) update the ICARD database by adding the missing information (missing latitude and longitude coordinates, etc).	Implement the Conclusion	ICAO States	State Letter Assign ATS Route Planner. Register to ICAO ICARD Update ICARD	January 2011 March 2011	Ongoing SL Ref.: AN 8/15.2 – 10/444 dated 22 December 2010

CONCLUSIONS AND DECISIONS	FOLLOW-UP	TO BE INITIATED BY	DELIVERABLE	TARGET DATE	REMARKS
CONC. 12/27: IMPROVEMENT OF THE ADHERENCE TO THE AIRAC SYSTEM That, in order to improve the adherence to the AIRAC System, States, that have not yet done so, be urged to: a) fully comply with the AIRAC procedures, in accordance with the provisions of Annex 15 and the MID Basic ANP Chapter VIII; a) organize awareness campaigns involving AIS and all technical Departments providing the raw data to the AIS for promulgation; and c) arrange for the signature of Service Level Agreements (SLA) between AIS and the data originators.	Implement the Conclusion	ICAO States	State Letter Feedback from States	February 2011 June 2011	Ongoing SL Ref.: AN 8/4 – 11/087 dated 12 April 2011
CONC. 12/28: eTOD CHECKLIST That, MID States be encouraged to use the eTOD checklist at **Appendix 5.3B** to the Report on Agenda Item 5.3 in order to assist them in the process of planning and implementation of the eTOD provisions.	Implement the Conclusion	ICAO States	State Letter Feedback from States	February 2011 June 2011	Completed SL Ref.: AN 8/2.4 – 11/094 dated 19 April 2011
CONC. 12/29: eTOD AWARENESS CAMPAIGNS That, for the sake of an efficient and harmonized implementation of eTOD, MID States be invited to organize, at the National Level and, to the extent possible co-operatively, awareness campaigns and training programmes (seminars, workshops, etc) to promote and expedite the process of eTOD implementation.	Implement the Conclusion	ICAO States	State Letter Feedback from States	February2011 June 2011	Ongoing SL Ref.: AN 8/2.4 – 11/094 dated 19 April 2011
DEC. 12/30: DISSOLUTION OF THE eTOD WORKING GROUP That, noting that the majority of the tasks assigned to the eTOD Working Group have been completed:	Implement the Decision	MIDANPIRG/12	Dissolve eTOD WG	October 2010	Completed

CONCLUSIONS AND DECISIONS	FOLLOW-UP	TO BE INITIATED BY	DELIVERABLE	TARGET DATE	REMARKS
a) the eTOD Working Group is dissolved; and b) the eTOD tasks which have not yet been completed be included into the Work Programme of the AIS/MAP Task Force.					
CONC. 12/31: AWARENESS CAMPAIGNS AND TRAINING PROGRAMMES ON QMS That**,** MID States be invited to organize, at the National level, awareness campaigns and training programmes with the support of ICAO and the QMS Implementation Action Group (QMS AG), to promote and expedite the process of implementation of QMS for AIS.	Implement the Conclusion	ICAO States	State Letter Feedback from States	February 2011 June 2011	Ongoing SL Ref.: AN 8/4 – 11/087 dated 12 April 2011
DEC 12/32: TERMS OF REFERENCE OF THE QMS IMPLEMENTATION ACTION GROUP That, the Terms of Reference of the QMS Implementation Action Group (QMS AG) be updated as at **Appendix 5.3G** to the Report on Agenda Item 5.3.	Implement the Decision	MIDANPIRG	Updated TOR	October 2010	Completed
DEC.12/33: TERMS OF REFERENCE OF THE AIS AUTOMATION ACTION GROUP That, the Terms of Reference of the AIS Automation Action Group (AISA AG) be updated as at Appendix 5.3H to the Report on Agenda Item 5.3.	Implement the Decision	MIDANPIRG	Updated TOR	October 2010	Completed
CONC.12/34: TRANSITION FROM AIS TO AIM That, recognizing the limitations of the current AIS, which does not meet the new global ATM system requirements envisioned by the ATM Operational Concept, and taking into consideration the ICAO Roadmap for the transition from AIS to AIM: a) MID States, that have not yet done so, be urged to develop national plans to implement the transition from AIS to AIM and send them to the ICAO MID Regional Office before 31 March 2011; and	Implement the Conclusion	ICAO States AIS/MAP TF	State Letter National Plans AIS/MAP TF/6 Report	February 2011 April 2011	Ongoing SL Ref.: AN 8/4 – 11/091dated 14 April 2011

CONCLUSIONS AND DECISIONS	FOLLOW-UP	TO BE INITIATED BY	DELIVERABLE	TARGET DATE	REMARKS
b) the AIS/MAP Task Force monitor the progress of transition from AIS to AIM in the MID Region and supports regional and national planning.					
DEC. 12/35: PLANNING FOR THE TRANSITION FROM AIS TO AIM That, based on the ICAO Global ATM Operational Concept and the ICAO Roadmap for the transition from AIS to AIM, the AIS/MAP Task Force: a) develop performance goals for the transition from AIS to AIM in the MID Region and identify achievable Milestones; and b) carry out a review of the AIS parts of the MID Basic ANP and FASID in order to introduce/develop planning material related to the transition from AIS to AIM.	Implement the Decision	AIS/MAP TF	AIM Performance goals Draft Proposal for Amendment to the MID ANP (Part AIM)	October 2011	Ongoing
CONC. 12/36: MID AIM SEMINAR That, with a view to provide States with a better understanding of the planning and implementation issues related to the transition from AIS to AIM: a) a MID AIM Seminar be organized in 2012; b) ICAO coordinate with Egypt for the hosting of the Seminar; and c) MID States be encouraged to participate actively in this event.	ICAO to follow up with Egypt for the organization of the Seminar	ICAO Egypt	Seminar	2012	Ongoing
DEC. 12/37: TERMS OF REFERENCE OF THE AIS/MAP TASK FORCE That, the Terms of Reference and Work Programme of the AIS/MAP Task Force be updated as at **Appendix 5.3I** to the Report on Agenda Item 5.3.	Implement the Decision	MIDANPIRG	Updated TOR	October 2010	Completed

CONCLUSIONS AND DECISIONS	FOLLOW-UP	TO BE INITIATED BY	DELIVERABLE	TARGET DATE	REMARKS
CONC. 12/47: MID REGION PERFORMANCE METRICS That: a) the following MID Region Metrics be adopted for performance monitoring of the air navigation systems: MID Metric 1: Number of accidents per 1,000 000 departures; MID Metric 2: Percentage of certified international aerodromes; MID Metric 3: Number of Runway incursions and excursions per year; MID Metric 4: Number of States reporting necessary data to the MIDRMA on regular basis and in a timely manner; MID Metric 5: The overall collision risk in MID RVSM airspace; MID Metric 6: Percentage of air navigation deficiencies priority "U" eliminated; MID Metric 7: Percentage of instrument Runway ends with RNP/RNAV approach procedure; and MID Metric 8: Percentage of en-route PBN routes implemented in accordance with the regional PBN plan. b) the MIDANPIRG subsidiary bodies monitor the Metrics related to their work programmes; develop associated performance targets and provide feed-back to MIDANPIRG.	Monitor performance of ANS using the endorsed metrics	MIDANPIRG & subsidiary bodies	Develop performance targets	2011	Ongoing SL Ref.: AN 7/26.1-11/121 dated 24 May 2011
CONC. 12/48: DATA COLLECTION FOR MID REGION PERFORMANCE METRICS That, States be invited to: a) incorporate the agreed MID Region Performance Metrics into their National performance monitoring process;	Implement the Conclusion	ICAO States	State Letter Include metrics into national performance monitoring	January 2011	Ongoing SL Ref.: AN 7/26.1-11/121 dated 24 May 2011

CONCLUSIONS AND DECISIONS	FOLLOW-UP	TO BE INITIATED BY	DELIVERABLE	TARGET DATE	REMARKS
b) collect and process relevant data necessary for performance monitoring of the air navigation systems to support the regional Metrics adopted by MIDANPIRG; and c) submit this data to the ICAO MID Regional Office on a regular basis.			Submit data to ICAO		
DEC. 12/49: REVIEW OF THE MID AIR NAVIGATION PLAN (ANP) That, in support to ICAO efforts to improve regional ANPs, the MIDANPIRG subsidiary bodies: a) carry out a complete review of the MID Basic ANP and FASID parts related to their Terms of Reference (TOR) and Work Programme; b) develop revised draft structure and content of the Basic ANP in order to reconcile it with the ATM Operational Concept, the Global Plan provisions and the performance based approach; c) identify the need for and development of those FASID Tables necessary to support the implementation of a performance-based global air navigation systems; and d) report progress to MIDANPIRG/13.	Implement the Decision	ICAO States Users	New structure, format & content of ANP/FASID	2012	Ongoing

CONCLUSIONS AND DECISIONS	FOLLOW-UP	TO BE INITIATED BY	DELIVERABLE	TARGET DATE	REMARKS
CONC.12/75: ELIMINATION OF AIR NAVIGATION DEFICIENCIES IN THE MID REGION That, MID States be urged to: a) review their respective lists of identified deficiencies, define their root causes and forward an action plan for rectification of outstanding deficiencies to the ICAO MID Regional Office prior to 31 March 2011; b) use the online facility offered by the ICAO MID Air Navigation Deficiency Database (MANDD) for submitting online requests for addition, update, and elimination of air navigation deficiencies; c) accord high priority to eliminate all air navigation deficiencies with emphasis on those with priority "U"; in particular by allocating the necessary budget to ensure that their Civil Aviation Authorities have and retain a sufficient number of qualified technical personnel, who are provided with appropriate initial, on-the-job and recurrent training; and d) seek support from regional and international organizations (i.e. ACAC, GCC, etc.) for the elimination of identified air navigation deficiencies.	Implement the Conclusion	ICAO States	State Letter Feedback from States	January 2011	Ongoing SL Ref.: AN2/2 – 11/123 dated 25 May 2011

AIS/MAP TF/6
Report on Agenda Item 3

REPORT ON AGENDA ITEM 3: TRANSITION FROM AIS TO AIM

3.1 GLOBAL DEVELOPMENTS RELATED TO AIM

3.1.1 The meeting was apprised of the activities and main outcome of the Aeronautical Information Services-Aeronautical Information Management Study Group (AIS-AIMSG).

3.1.2 The meeting recalled the definition of Aeronautical Information Management as agreed by the AIS-AIMSG:

> ***Aeronautical information management (AIM).*** *The dynamic, integrated management of aeronautical information services — safely, economically and efficiently — through the provision and exchange of quality-assured digital aeronautical data in collaboration with all parties.*

Development of Annex 15 Amendment 37 and 38

3.1.3 The meeting noted that the AIS/AIM SG/4 meeting (Bordeaux, France, 23 - 27 May 2011) was presented with the work of the ad-hoc group on AIM development related to Amendment 37 to Annex 15. It was noted that the AIS/AIM SG/4 meeting expressed its appreciation of the scope of work accomplished and progress of the work; and was of view that Amendment 37 work would take precedence over further development of Amendment 38.

3.1.4 The meeting noted that the aggregated draft Amendment 37 proposal in its current state is attached as Appendix D to the Summary of Discussion of the AIS-AIM SG/4 meeting which is available at: http://www2.icao.int/en/ais-aimsg/Lists/Meetings/AllItems.aspx.

AIM Roadmap, AIM Operational Concept and PANS-AIM

3.1.5 The meeting noted that the AIS/AIM SG/4 meeting recognized the gap that exists between the SARPs contained in Annex 15 and the guidance provided in the *Manual of Aeronautical Information Services*, Doc 8126. In this respect, it was highlighted that Annex 15 contains a significant amount of procedure and format specifications while the procedures and protocols contained in Doc 8126 are often needed for uniform application.

3.1.6 It was further noted that the Study Group noted that the possibility of developing a *Procedures for Air Navigation Services* document (PANS-AIM) to span this gap has been outlined and discussed in a number of forums and there is emerging consensus as to the value and utility of such a document. The meeting agreed that the development of PANS-AIM would provide a core element of provisions to be published concurrently with Annex 15, Amendment 38.

3.1.7 The AIS-AIM SG expressed support also for the development of an AIM Operational Concept that would provide a visionary statement for the expected development of AIM and form the basis of an updated Roadmap. The meeting was informed that the development of updated Roadmaps for Communications, Surveillance, Navigation, and AIM is planned for incorporation into the Global Air Navigation Plan (GANP) for global review at the 12th Air Navigation Conference.

eTOD

3.1.8 The meeting noted that the AIS/AIM SG/4 meeting was presented with a proposal to amend Annex 15 Chapter 10 (eTOD), as being worked out by the EUROCAE WG44/RTCA SC217 group. The proposal aims to align Annex 14 & 15, simplify the collection of data, remove inconsistencies but also slightly increase the data collection requirements.

Airport Mapping Database (AMDB)

3.1.9 The meeting noted that the AIS/AIM SG/4 meeting concluded that the development and implementation of AMDB would have significant safety benefit and would be a prerequisite to deliver certain operational capabilities being envisioned as a result of the Global ATM Operational Concept. Nevertheless, the Study Group was apprised of a number of reservations on the subject expressed especially by the Aerodrome Experts. Nonetheless, the Study Group agreed to continue to support the initiative to include AMDB provisions in ICAO material.

Vertical Reference System

3.1.10 It was noted that the AIS/AIM SG/4 meeting was apprised of the EUROCONTROL guidance material related to heighting issues and expressed its appreciation for it. It noted that the specification identifies a number of methods by which the heighting requirements of ICAO Annex 15 can be met and that no single method is appropriate to all States and that regional reference systems will always exist. It requested the ICAO secretariat to consider updating Doc 9674 based on the provided guidance material.

Use of automation and digital NOTAM

3.1.11 With the overall objective of improved timeliness, quality, efficiency and cost-effectiveness, the meeting noted that it was agreed to propose standards for the automation and digital data exchange based upon performance requirements throughout the data chain. It was also agreed to include a standard ensuring consistent data delivery through printed and electronic media. A recommendation was agreed to enable the availability of the whole IAIP in electronic format. Furthermore, it was agreed to postpone any reference to digital NOTAM until Amendment 38 to Annex 15.

NOTAM/SNOWTAM/ASHTAM

3.1.12 The meeting noted the ongoing investigations/developments related to the NOTAM Selection Criteria Tables in Doc 8126, SNOWTAM Template and Volcanic Ash NOTAM Template.

Integrated Briefing

3.1.13 The meeting noted that integrated briefing would be an important component of further service delivery and agreed that it should be further considered in the development of the AIM operational concept and in particular its relationship to SWIM. In this respect, it was highlighted that the Study Group noted that there was still a gap in determining the user requirement from the perspective of what the AIS/AIM service role should be as compared to what is expected to be provided by 3rd part service providers. Accordingly, the AIS/AIM SG/4 meeting agreed that the ad-hoc group on AIM development consider the future utility and need of the integrated aeronautical information package (IAIP) and in particular, the PIB, in developing the AIM Operational Concept and AIM Roadmap.

System Wide Information Management (SWIM)

3.1.14 The AIS/AIM SG/4 meeting was apprised of the SESAR SWIM developments including the Information Management, SWIM Infrastructure, ATM information Reference Model, the Information Service Reference Model, and the registry. It was highlighted that it would be good to stay aware of the SWIM developments and the possible impact on AIM especially in consideration of developing revised provisions earmarks for Amendment38.

3.1.15 The meeting noted that the AIS-AIM SG/4 meeting underlined that SWIM is an area that should assume some priority and that for meaningful consensus on a SWIM definition, SWIM regional activities and desired outcomes to be reached at the 12th Air Navigation Conference, a coordinated SWIM concept would be needed as a matter of priority.

MET Integration

3.1.16 The meeting was informed of the ongoing initiatives to change Annex 3 along the lines of Annex 15 Amendment 37 and 38 changes and the proposal to develop a PANS-MET document.

AIM Quality Manual

3.1.17 The meeting was informed that the AIM Quality Manual had entered the ICAO editorial process and it's expected that the Manual would be available for publication in the second half of 2011.

Data integrity

3.1.18 The meeting noted that it was agreed that in the development of Amendment 37 to Annex 15, the numerical integrity values would be removed from SARPs material and consequential changes to other Annexes and the WGS-84 Manual had been identified.

AIM Training Development Manual

3.1.19 The meeting was apprised of the progress achieved for the development of the "*AIM Training Development Manual*". It was further noted that the ad-hoc group would finish the work by the next AIS-AIM SG meeting (November 2011).

3.1.20 It was observed however that the matter of AIM training was of imperative interest to a number of States and Regions and that the evolving "*AIM Training Development Manual*" may not meet the detail desired by certain organizations for specific guidance. It was noted that guidance in the form of a document may not be sufficient to meet those more specific needs which may also include guidance on AIM development and implementation.

AIS/AIM SG Terms of Reference and Future Work Programme

3.1.21 The meeting noted that existing Terms of Reference (TOR) of the AIS-AIM SG envisioned completion of the work in 2012. In recognition of the ANConf/12, the time to develop Amendment 38 and the new work on PANS-AIM, the AIM operational Concept and the AIM Roadmap, it was considered that this date is no longer realistic. Consequently the AIS-AIM SG/4 meeting agreed to amend the TOR to include the deliverables planned up to Amendment 38, a meeting frequency of twice a year, and a planned completion date in 2016.

3.1.22 Based on the above, the meeting urged States to review in detail the draft Amendment 37 to Annex 15 in its current state and provide any comment or suggestion to ICAO prior to **15 July 2011**. The meeting invited also States to follow-up the AIM developments, especially, by keeping an eye on the documentation/information posted on the AIS-AIM SG website: http://www2.icao.int/en/ais-aimsg.

3.2 PROGRESS MADE TOWARDS AIM IMPLEMENTATION IN THE MID REGION

3.2.1 The meeting re-iterated the need for the development of national plans for the transition from AIS to AIM and reviewed the progress made towards the implementation of the different steps of the ICAO Roadmap for the transition to AIM in the MID Region.

3.2.2 The meeting recalled that MIDANPIRG through Conclusion 12/34 urged MID States, that have not yet done so, to develop national plans to implement the transition from AIS to AIM and send them to the ICAO MID Regional Office before 31 March 2011, in order for the AIS/MAP Task Force to monitor the progress of transition from AIS to AIM in the MID Region and support regional and national planning. It was also noted that, through Decision 12/35, MIDANPIRG/12 tasked the AIS/MAP Task Force to develop performance goals for the transition from AIS to AIM in the MID Region and identify achievable Milestones.

3.2.3 The meeting noted that only Bahrain, Iran, Kuwait, Oman and Qatar provided their National AIM Plan/Roadmap to the ICAO MID Regional Office. Accordingly and as a follow-up action to the above MIDANPIRG/12 Conclusion and Decision, the ICAO MID Regional Office issued on 14 April 2011 State Letter Ref.: AN 8/4 – 11/091, requesting States to complete the questionnaire at **Appendix 3A** to the Report on Agenda Item 3, and send it back to the Regional Office prior to 15 May 2011. It was noted that, so far, Bahrain, Egypt, Oman and Qatar replied to the questionnaire (their replies are reflected in Appendix 3A). Accordingly, the meeting agreed to the following Draft Conclusion:

DRAFT CONCLUSION 6/1: QUESTIONNAIRE ON THE TRANSITION FROM AIS TO AIM

*That, States are urged to complete/update the questionnaire at **Appendix 3A** to the Report on Agenda Item 3 and send it back to the ICAO MID Regional Office before 15 August 2011.*

3.2.4 The meeting, then, reviewed the progress made towards the implementation of the different phases and steps of the ICAO Roadmap for the transition from AIS to AIM:

Phase 1 — Consolidation

3.2.5 The meeting re-iterated that the implementation of the current ICAO Annex 4 and Annex 15 provisions represents a pre-requisite for the transition from AIS to AIM. This concerns mainly the following steps of Phase 1 — Consolidation:

- P-03 — AIRAC adherence monitoring;
- P-04 — Monitoring of States' differences to Annex 4 and Annex 15;
- P-05 — WGS-84 implementation;

- P-17 — Quality.

AIRAC adherence monitoring (P-03)

3.2.6 The meeting recalled that MIDANPIRG/12 noted that the late receipt of aeronautical information continues to be a problem for the aviation community in the MID Region. It was also noted that the AIRAC procedures have not yet been fully adhered to by a number of MID States. Accordingly, MIDANPIRG, through Conclusion 12/27, urged States that have not yet done so, to fully comply with the AIRAC procedures; organize awareness campaigns involving AIS and all technical Departments providing the raw data to the AIS for promulgation; and arrange for the signature of Service Level Agreements (SLA) between AIS and the data originators.

3.2.7 In the same vein, the meeting noted with concern that, frequently aeronautical information that should be published in accordance with the AIRAC system is published through normal AIP Amendments or even by NOTAM; and highlighted the safety implications of such proceedings. Furthermore, the meeting underlined that AIRAC adherence monitoring is a continuous task and accordingly, urged States, as part of their National performance monitoring process, to record and report all the cases of non-compliance with the AIRAC procedures, in order to take necessary preventive and corrective actions.

3.2.8 The meeting recognized that failure of a State to follow the AIRAC procedures is very troublesome for charts provided to the cockpits. In this respect, it was highlighted that the production, extraction and distribution of a navigation database is a complicated process which involves all players in the data supply chain – initial source providers (e.g. airports and ATM), State AIS/ANSPs, commercial data providers, Flight Management System (FMS) manufacturers and end users (e.g. airlines). It was underlined that the key element in this string of activities is the requirement for airlines to physically "load" databases into the FMS on every aircraft so it is available on the AIRAC effective date. The meeting further highlighted that once data is loaded in the FMS, it cannot be changed for 28 days. In addition, if data cannot be available on the AIRAC cycle, it has to wait another 28 days. This Annex 15 requirement is based on the complex set of steps it takes to get data loaded on aircraft on the 28-day cycle. It was re-iterated that, if data has been added to an AIRAC cycle and then postponed lately by the responsible State Authority, it would stay in the FMS for 28 days until it can be removed. In this respect, the meeting noted that in 2008 Jeppesen published 23 Nav-Data alerts based on erroneous or late source information on its website to notify its customers. In 2009 the number of alerts increased to 31 followed by another 31 in 2010. Thousands of flights had been affected by these alerts.

3.2.9 Based on the above, the meeting urged MID States to thoroughly plan all Aeronautical Information changes that fall under the AIRAC provisions, and publish them in compliance with the AIRAC procedures; in particular, when it comes to the planning of major changes for which a 56-day advanced notification is recommended. It was underlined that the planning process should involve all affected parties. The meeting urged MID States also to avoid late postponements of aeronautical information published through AIRAC AIP Amendment or Supplement.

3.2.10 The meeting noted that the system of AIRAC numbering differs from State to State and that many States are not complying with Annex 15 provisions related to NIL notification (para. 6.1.3). In this respect, it was underlined that, 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. The meeting urged States also to comply with

ICAO 8126 provisions related to the numbering of AIRAC AIP Amendments, using consecutive numbers from 01-13 in line with the AIRAC cycle, followed by a two digit number to denote the year of issue or validity, e.g. AIRAC AIP AMDT 05/11.

3.2.11 In connection with the above, the meeting recalled that Amendment No. 1 to the Fifteenth Edition of the Procedures for Air Navigation Services — Air Traffic Management (PANS-ATM, Doc 4444, which encompasses a substantial revision to the ICAO flight plan (FPL), will become applicable on 15 November 2012. Taking into consideration the complexity of implementing the ICAO New FPL format worldwide and the efforts put by States to comply with Amendment No. 1 to PANS-ATM, effective 15 November 2012the meeting agreed that States should avoid the use of the AIRAC date 15 November 2012 as an effective date for the introduction of significant changes to the aeronautical information publications. Accordingly, the meeting agreed to the following Draft Conclusion:

DRAFT CONCLUSION 6/2: AVOIDANCE OF THE AIRAC DATE 15 NOVEMBER 2012

That, taking into consideration the complexity of implementing the ICAO New FPL format, MID States be invited to avoid the use of the AIRAC date 15 November 2012 as an effective date for the introduction of significant changes to the aeronautical information publications.

Monitoring of States' differences to Annex 4 and Annex 15 (P-04)

3.2.12 The meeting recognized that the transition to AIM offers an opportunity to increase the focus on implementation and on reviewing differences in the application of the Standards by States.

3.2.13 In connection with the above, the meeting was informed that the Secretary General of ICAO issued on 1 April 2011 State Letter Ref.: AN 1/1-11/28 on the establishment of the Electronic Filing Of Differences (eFOD) System, which is available online through the ICAO USOAP website (www.icao.int/soa), inviting States to use eFOD as an alternative means for filing of differences. In this respect, it was highlighted that eFOD has been developed to address the need for a more efficient means for reporting and researching differences to Standards and Recommended Practices (SARPs) and for replacing the existing paper-based mechanism. It also aims to reduce duplication of effort by allowing States to report compliance and differences data only once to serve obligations under the Convention and the USOAP Memorandum of Understanding (MOU).

WGS-84 implementation (P-05)

3.2.14 The meeting reviewed and updated the status of implementation of WGS-84 in the MID Region as at **Appendix 3B** to the Report on Agenda Item 3. In this respect, it was highlighted that WGS-84 has been fully implemented by seven (7) States; however, although, the remaining six (6) States have implemented the majority of WGS-84 requirements; some elements such as the geoid undulation, are yet to be implemented.

3.2.15 The meeting recalled that MIDANPIRG/11 and MIDANPIRG/12 underlined that the implementation of WGS-84 is an important pre-requisite for the implementation of Performance Based Navigation (PBN); and agreed that although the status of implementation of WGS-84 in the MID Region has been improved, it's deemed necessary that States that have not yet fully implemented the system, take all necessary measures to expedite the completion of WGS-84 implementation.

Quality (P-17)

3.2.16 The meeting recalled that Amendment 36 to Annex 15, which became effective on 18 November 2010, introduced new and revised provisions related to QMS. It was highlighted, in particular, that a new Recommended Practice was added stating that "*Quality management should be applicable to the whole aeronautical information data chain from data origination to distribution to the next intended user, taking into consideration the intended use of data*". In addition, the meeting noted that the collection and management of metadata became also a standard.

3.2.17 The meeting underlined that the provision of quality assured and timely aeronautical information/data to the aviation community is a significant enabling activity for the globalization of ATM. In this respect, the meeting recalled that MIDANPIRG/12 recognized that, while the importance and need for the provision of high quality aeronautical information is gaining momentum, the implementation of quality system appears to be a specific domain with low degree of implementation among MID States. The meeting reviewed and updated the status of implementation of QMS in the MID Region as follows:

	Not started	Planning	Ongoing/ partially implemented	Implemented	Certified	Remarks
Bahrain					√	
Egypt					√	
Iran					√	
Iraq	√					
Israel		√				
Jordan					√	
Kuwait		√				Dec 2013
Lebanon		√				
Oman			√			Dec 2012
Qatar					√	
Saudi Arabia			√			Aug 2011
Syria		√				
UAE					√	The QMS implemented is not fully compliant with Annex 15 requirements
Yemen			√			Dec 2013

3.2.18 The meeting noted that investigations performed by data integrators dealing with huge volumes of AIP data from nearly 200 States worldwide, showed that less than 50% of all AIPs are fully compliant with ICAO SARPs, the rest is either partly compliant or critical which has serious safety implications.

3.2.19 The meeting agreed that the lack of automated processes and lack of an effective Quality Management System that covers the data chain from data origination to AIS are the two most critical contributors to insufficient data quality.

3.2.20 In connection with the above, the meeting recalled that the QMS Action Group (QMS AG) was established with a view to support the implementation of QMS within MID States' AISs. The meeting further noted that MIDANPIRG, through Conclusion 12/31, invited States to organize at the National level, awareness campaigns and training programmes with the support of ICAO and the

QMS AG, to promote and expedite the process of implementation of QMS for AIS. However, the meeting noted that the activities of the Action Group were very limited and that the tasks assigned to it were not completed. Accordingly, the meeting agreed to dissolve the QMS AG and encouraged States to exchange information related to QMS implementation and to share their experiences in this particular endeavour.

3.2.21 Based on the above, the meeting agreed to the following Draft Decision:

DRAFT DECISION 6/3: DISSOLUTION OF THE QMS ACTION GROUP

That, recognizing that the activities of the QMS AG were very limited, the QMS AG is dissolved.

3.2.22 The meeting was apprised of Jordan's experience and steps for the implementation of a Quality Management System. It was highlighted in particular that Jordan followed the steps recommended in the MID Region Methodology for the implementation of QMS approved by MIDANPIRG/10 through Conclusion 10/54 and re-iterated by MIDANPIRG/11 through Conclusion 11/46. The meeting further noted that Jordan recognized that the implementation of QMS was one of the most important steps towards eliminating the related air navigation deficiencies in the AIS/MAP field.

3.2.23 Based on the above, the meeting re-emphasized the need for the provision of accurate, consistent, complete and timely digital aeronautical information and agreed that current limitations and drawbacks in the MID Region need to be eliminated or at least significantly reduced, in an expeditious manner, in order to support the expected growth in the region's aviation sector and to build a solid foundation for a rapidly increasing amount of PBN operations in an airspace that requires substantially an increasing capacity.

3.2.24 The meeting recalled that the implementation of QMS has been mandated by ICAO since 1997 and urged those States that have not yet done so, to take necessary measures to implement the required QMS in an expeditious manner. In this respect, the meeting agreed that as a regional performance target, all deficiencies related to the non-implementation of QMS should be eliminated by December 2013. Accordingly, the meeting agreed to the following Draft Conclusion, which is proposed to replace and supersede Conclusion 12/31:

DRAFT CONCLUSION 6/4: QMS IMPLEMENTATION

That, in accordance with Annex 15 provisions, States, that have not yet done so, be urged to take necessary measures to:

a) organize at the National level, awareness campaigns and training programmes to promote and expedite the process of implementation of QMS for AIS;

b) implement/complete the implementation of the required QMS in an expeditious manner;

c) arrange for an ISO 9001 certification by an accredited certification body; and

d) ensure that quality management is applicable to the whole aeronautical information data chain from data origination to distribution to the next intended user, taking into consideration the intended use of data.

3.2.25 Based on the review of the progress made towards the implementation of the ICAO Roadmap steps related to Phase 1 — Consolidation in the MID Region, the meeting recognized that deficiencies still exist with regard to the provision of AIS/MAP services in accordance with Annex 4 and Annex 15 requirements. In particular, it was highlighted that eight (8) States in the MID Region have not yet fully complied with Annex 15 provisions related to the implementation of QMS, while the provision of quality assured and timely aeronautical information/data to the aviation community is a significant enabling activity for the globalization of ATM.

3.2.26 In connection with the above, the meeting recalled that Article 28 of the Convention on International Civil Aviation oblige States to provide air navigation facilities and services in accordance with the Standards and Recommended Practices (SARPs) developed by ICAO, including those of Annex 4 and Annex 15. In this respect, the meeting recalled that, based on the analysis of the USOAP audit results in the different ANS fields, it was highlighted that the separation between the regulatory and service provisions functions and the non-establishment of an ANS safety oversight system represent the main reasons for the non-elimination of the identified deficiencies. In addition, the lack of national regulations is an important contributing factor in many States. Accordingly, it was reiterated that the most effective and transparent means of ensuring compliance with applicable specifications/regulatory provisions, is the availability of a separate safety oversight entity and a well-defined safety oversight mechanism with support of appropriate legislation/regulations.

3.2.27 The meeting noted that currently, the certification of the Air Navigation Services (ANS) is not yet mandated by ICAO. However, in Europe it has been mandated through EC Regulation No 2096/2005 since December 2005.

3.2.28 The meeting noted that certification of ANS has been already mandated by Egypt since 2005 Regulation Ref.: ECAR 173. It was also noted that UAE had developed Regulations related to Certification of ANSPs providing safety critical services to aviation. The meeting further noted that Jordan and Saudi Arabia are also in the process of developing new Regulations related to ANS certification. In this respect, the meeting recalled that the DGCA-MID/1 meeting invited MID States to work together with ICAO, within the framework of MIDANPIRG for the development of a MID Region Strategy for the certification of ANSPs, taking into consideration UAE experience.

3.2.29 Based on the above, the meeting agreed that the inclusion of a requirement for the certification of AIM Services in the national regulations will ensure that the AIM Service Providers meet their obligations in accordance with the terms and conditions of the AIM Certificate. It will also vest the regulatory authority with the necessary power to enforce compliance with the regulations. Accordingly, the meeting agreed to the following Draft Conclusion:

DRAFT CONCLUSION 6/5: CERTIFICATION OF THE AIM SERVICES

That, in order to improve the level of compliance with the Standards and Recommended Practices of Annex 4 and Annex 15 and pave the way for the transition from AIS to AIM, ICAO consider the inclusion of a requirement for the certification of AIM Services in Annex 15.

Phase 2 — Going digital

3.2.30 The meeting recalled that during Phase 2 of the transition to AIM, the main focus will be on the establishment of data-driven processes for the production of the current products in all States. States are encouraged "to go digital" by using computer technology or digital communications and introducing structured digital data from databases into their production processes. The emphasis is, therefore, on the introduction of highly structured databases and tools such as geographic information systems.

3.2.31 The introduction of database-driven processes will improve the value of current products by improving their quality and availability for current users. This will concern mainly the creation of national or regional databases used to produce the existing products and services, but with better quality and availability.

3.2.32 In this respect, the meeting noted that States are at different stages for the implementation of the following steps that compose Phase 2 — Going digital, of the ICAO Roadmap for the transition from AIS to AIM:

- P-01 — Data quality monitoring;
- P-02 — Data integrity monitoring;
- P-06 — Integrated aeronautical information database;
- P-07 — Unique identifiers;
- P-08 — Aeronautical information conceptual model;
- P-11 — Electronic AIP;
- P-13 — Terrain;
- P-14 — Obstacles;
- P-15 — Aerodrome mapping.

3.2.33 With regard to P-01 and P-02, it was clarified that the requirement is to monitor aeronautical data quality and data integrity from data origination to distribution to the next intended user.

3.2.34 It was also highlighted that for *P-06 — Integrated aeronautical information database (IAID) and P-08 — Aeronautical information conceptual model*, the establishment and maintenance of a database where digital aeronautical data from a State are integrated and used to produce current and future AIM products and services is the main step in Phase 2 of the transition to AIM. The meeting further noted that the database may be operated by States or by regional initiatives under delegation from States. In this respect, it was highlighted that the IAID of a State is a single access point for one or more databases (AIS, Terrain, Obstacles, AMDB, etc) and that in case some systems (ATS, PANS-OPS, etc) are using different databases, these systems should be interoperable with the IAID.

3.2.35 In connection with the above, the meeting recalled that taking into consideration the limitations and drawbacks related to the current operational structure and provision of AIS/AIM services in the MID Region, and the experience of adjacent Regions in the implementation of Regional AIS databases, especially the European AIS Database (EAD), the DGCA-MID/1 meeting agreed that a study/business case be carried out in the MID Region pertaining to the establishment of a MID Region AIS Database (MIDAD). In this respect, the meeting noted with appreciation that Jordan and Bahrain volunteered to take the lead in carrying out the study with the support of appropriate Consultant and in close coordination with ICAO. Accordingly, the meeting agreed to the following Conclusion:

DGCA-MID/1 CONCLUSION 1/5 - MID REGION AIS DATABASE (MIDAD)

That,

a) Jordan and Bahrain take the lead in carrying out a study/business case pertaining to the establishment of a MID Region AIS Database (MIDAD), in close coordination with ICAO;

b) States provide all necessary information and support for the achievement of the study; and

c) Jordan and Bahrain present the outcome of the study to the appropriate MIDANPIRG subsidiary bodies (AIS/MAP TF and ATM/SAR/AIS SG).

3.2.36 The meeting agreed that multilateral cooperation in the development of MID Region AIS Database will foster an environment for regular and effective communications between all stakeholders (States, users, industry, etc). In addition to the technical benefits, this kind of Regional/Sub-Regional projects provide economies of scale by allowing for the sharing of required resources and providing administrative savings by sharing costs. However, it was highlighted that the efficiency of the project is proportional to the number of participant/committed States. Nevertheless, if the project starts with a limited number of States, new participants would always be welcome to join.

3.2.37 The meeting noted that the fifth meeting of the Gulf Cooperation Council – Air Navigation Committee held in Riyadh, Saudi Arabia, 22 - May 2011 supported the establishment of MIDAD.

3.2.38 The meeting was apprised of the lessons learned from the EAD project and the experience gained by AFI-CAD Study Group in the development of the AFI-CAD Business/Financial Plan. A number of technical and operational issues/options were highlighted. In particular, it was underlined that MIDAD would make it easier for users to access aeronautical data and to exchange it with other Regions. The meeting recognized that a project like MIDAD needs integrated programme management principles for the whole life-cycle of the concept/project and a good supporting documentation to allow the development of further actions. It was also highlighted that a strategic decision should be taken from the beginning to cover the whole data chain and to ensure that MIDAD would be compliant with the RTCA DO-200A standards.

3.2.39 Based on the above, the meeting agreed that the questionnaire/checklist at **Appendix 3C** to the Report on Agenda Item 3, be used for the development of the first phase of the MIDAD study/business case. In this respect, it was highlighted that the study at its first step would not tackle all issues in detail. The objective is to collect data from States to illustrate that MIDAD would be an advantageous and worthy solution for the Region and provide necessary information on the future of the project with different technical and financial options, in order to help States to decide about the most appropriate option. It was also noted that, as a second phase, a more detailed study would be necessary to cover all technical, financial, human, legal and institutional issues. In this respect, the meeting agreed that a MIDAD Study Group (MIDAD SG) be established with Terms of Reference as at **Appendix 3D** to the Report on Agenda Item 3, to monitor the MIDAD Project and address all associated technical, operational, financial, legal and institutional issues.

3.2.40 In the same vein, the meeting noted with concern that the activities of the AIS Automation Group (AISA AG), were very limited and that the tasks assigned to it were not completed Accordingly, the meeting agreed to the following Draft Decisions:

DRAFT DECISION 6/6: DISSOLUTION OF THE AIS AUTOMATION ACTION GROUP

That, recognizing that the activities of the AIS Automation Action Group (AISA AG) were very limited, the AISA AG is dissolved.

DRAFT DECISION 6/7: ESTABLISHMENT OF THE MIDAD STUDY GROUP

*That, the MID Region AIS Database (MIDAD) Study Group (MIDAD SG) is established with Terms of Reference as at **Appendix 3D** to the Report on Agenda Item 3.*

3.2.41 With regard to P-07 — Unique identifiers: "*Improvements to the existing mechanisms for the unique identification of aeronautical features are required to increase the effectiveness of information exchange without the need for human intervention*", the meeting noted that the Universal Unique Identifier (UUID) is implemented in AIXM 5.1.

3.2.42 The meeting recognized that P-11 — Electronic AIP is an important step of Phase 2. In this respect, it wwas recalled that a new Recommended Practice (paragraph 4.6) was introduced in Annex 15 through Amendment 36, for the provision of eAIP. The meeting noted that further Guidance material related to eAIP based on the EUROCONTROL specifications was reviewed by the AIS-AIM Study Group and will be incorporated into Doc 8126 through Amendment 3, which is expected to be issued in the second half of 2011.

3.2.43 In connection with the above, the meeting noted with satisfaction, that UAE has developed and published its eAIP in February 2011 and that trial versions of eAIP Bahrain, Egypt and Saudi Arabia have been developed and will be available for operational use, soon (end of 2011). The meeting further noted that the trial version of eAIP Bahrain is already available to users on CD and on the website. The meeting was informed also that a trial version of eAIP Jordan is being developed through the EAD and should be available by end of 2011 with a plan for operational use by mid 2012.

3.2.44 With regard to eTOD: P-13 — Terrain and P-14 — Obstacles, the meeting recalled that, as a follow-up action to MIDANPIRG/12 Conclusion 12/28 "*eTOD Checklist*" and Conclusion 12/29 "*eTOD Awareness Campaigns*", a State Letter was issued on 19 April 2011 requesting States to inform the ICAO MID Regional Office, not later than 15 May 2011, about the actions taken/planned in order to implement these Conclusions; and send their updated eTOD implementation plan, specifying in particular, the status of implementation of Area 1 and Area 4, which are applicable since November 2008. The meeting noted that the number of replies to the above-mentioned State Letter was below expectation and accordingly updated the status of implementation of eTOD (Area 1 and Area 4) based on the information provided by the participating States. In addition, the meeting urged States, when completing the questionnaire on the transition from AIS to AIM to reflect their plans related to eTOD (P-13 and P-14).

3.2.45 In connection with the above, the meeting noted the following:

- Bahrain has fully implemented eTOD for Area 1 and Area 4 and the data is available through an eTOD management system, which offers tailored requests for users. However, the cost-recovery issue for the provision of eTOD to the users is not yet finalized.

- Egypt has published in its AIP the information related to the availability of eTOD for Area 1 and Area 4. However, the cost-recovery issue for the provision of eTOD to the users is not yet finalized.

- Jordan has completed the work for Area 1 and expects to complete Area 4 by mid 2012, date at which the eTOD data related to both Area 1 and Area 4 would be made available to the users against fees that have not yet been determined.

- Qatar has fully implemented eTOD for Area 1, Area 3 and Area 4. The data will be available on the web free of charge by September 2011.

- Saudi Arabia has completed the work related to Area 1 and Area 4.

- UAE has made available the eTOD data related to Area 1 free of charge on the web, as part of the Integrated Aeronautical Information Package.

3.2.46 Based on the above, the meeting invited States to issue specific Aeronautical Information Circulars (AIC) related to the implementation of eTOD to inform the users about the availability and "price" of the eTOD data.

3.2.47 With regard to the last step of phase 2, P-15 — Aerodrome mapping, it was highlighted that this *requirement is emerging from the industry in order for traditional aerodrome charts to be complemented by structured aerodrome mapping data that can be imported into electronic displays*. The meeting noted that currently the Aerodrome mapping related SARPs do not exist. However, it was recalled that the AIS-AIM SG/4 meeting supported the inclusion of a new Chapter in Annex 15 (Chapter 11) related to Aerodrome mapping, through Amendment 37 to Annex 15, with the following Recommended Practices: *"Aerodrome mapping data **should** be provided at aerodromes regularly used by international civil aviation where safety and/or performance-based operations suggest possible benefits"; and "Aerodrome mapping data **should** be supported by electronic terrain and obstacle data (eTOD) for Area 3 in order to ensure consistency and quality of all geographical data related to the aerodrome"*.

Phase 3 — Information management

3.2.48 The meeting recalled that during Phase 3 of the transition to AIM, the digital databases introduced in Phase 2 will be used for the transfer of information in the form of digital data. This should be based on a Standard aeronautical data exchange model to ensure interoperability between all systems not only for the exchange of full aeronautical data sets, but also for short-term notification of changes.

3.2.49 The meeting noted that although one or two steps of Phase 3— Information management, are being partially implemented by a number of States in the MID Region; the entire scope of phase 3, which is composed of the following Steps, could not be achieved before 2016-2020:

- P-09 — Aeronautical data exchange;
- P-10 — Communication networks;
- P-12 — Aeronautical information briefing;
- P-16 — Training;
- P-18 — Agreements with data originators;
- P-19 — Interoperability with meteorological products;
- P-20 — Elecronic aeronautical charts; and
- P-21 — Digital NOTAM.

3.2.50 The meeting noted in particular that, through the ICAO AIS-AIM Study Group, AIXM has been proposed for adoption as ICAO Guidance Material supporting the transition to AIM. Accordingly, the guidance material on aeronautical conceptual and data exchange model for the development of databases and the establishment of data exchange services will be incorporated into Doc 8126 through Amendment 3.

3.2.51 With regard to P-21 — Digital NOTAM, the meeting noted that the digital NOTAM concept proposes to evolve from the provision of text NOTAM messages towards the provision of structured data, based on the Aeronautical Information Exchange Model (AIXM) version 5.1. However, the current NOTAM messages will continue to be issued for as long as operationally necessary, but they will be automatically generated from the digitally encoded data.

3.2.52 The meeting was informed that an implementation roadmap for digital NOTAM in the ECAC Area, in Europe, was developed in consultation with stakeholders and an incremental approach was endorsed. The scope for the Increment #1 of the digital NOTAM Implementation consists of eight categories of “events”:

- Airspace activation / reservations / warning areas / CTR (that are not H24);
- Route closures1 (CDR1, CDR 2, other routes);
- Navaid events (enroute and airport, including ILS);
- Airport/Runway closures;
- Taxiway closures;
- Obstacles;

- SNOWTAM;
- All other NOTAM as Text NOTAM associated with the feature.

3.2.53 It was also highlighted that detailed rules for the encoding of the information that is associated with these event scenarios are developed in the form of a digital NOTAM Event Specification. An implementation schedule is proposed for the first increment, which includes the EAD plans for delivering digital NOTAM (initial capability by 2012). The proposed objective is to achieve a complete implementation of the first increment by 2016.

3.2.54 Considering all of the foregoing, it was recognized that the the clarifications provided during the meeting related to the different steps of the ICAO Roadmap, were very useful and would help States to develop their National plans for the transition from AIS to AIM and provide updated information by completeing the questionnaire on the subject, which would allow the ATM/SAR/AIS SG/12 meeting scheduled for November 2011, to review the progress made towards AIM implementation in the MID Region and recommend possible course of action to expedite the implementation of the transition to AIM in a harmonized manner, including a realistic timeframe.

AIS/MAP TF/6
Appendix 3A to the Report on Agenda Item 3

QESTIONNARE TRANSITION FROM AIS TO AIM

Summary of replies to State Letter Ref.: AN 8/4 – 11/091 dated 14 April 2011

1. National Plan for the transition from AIS to AIM

a) Have you developed a National Plan for the transition from AIS to AIM? If Yes, is it based on the ICAO Roadmap (Phases 1, 2 and 3) ?		YES	NO
Sample	No formal plan has been developed for the whole transition but a set of initiatives for several steps of the Roadmap. Phase 1 is fully covered by our initiatives / Phases 2 and 3 are partly covered by our initiatives.		X
Bahrain	Yes and please Refer to Bahrain Road Map V.1.4 dated 12/6/2011	X	
Egypt	Our plan for the transition from AIS to AIM is presented through answering this questionnaire.	X	
Iran			
Iraq			
Jordan			
Kuwait			
Lebanon			
Oman	Yes	X	
Qatar	Yes	X	
Saudi Arabia			
Syria			
UAE			
Yemen			

2. Phase 1 – Consolidation (2009)

a) What do you consider a realistic timeframe for the implementation of Phase 1?	
Sample	2013 – due to the implementation of QMS by the raw data originators Quality measures will be reinforced to ensure the required level of quality of the aeronautical information. Before end of June 2013. Incremental improvements in data quality will be achieved through the implementation of the revised QMS. Data quality is expected to be fully compliant before the end of June 2017.

a) What do you consider a realistic timeframe for the implementation of Phase 1?	
Bahrain	Since 2003 Bahrain AIS certified with ISO 9001according to the annex 15 ,and during the transition from AIS to AIM (new environment) give opportunity to develop QMS Manual and process map and becoming mature enough to develop a new AIM Quality Manual with all changes of process maps to reflect the new AIM environment (digital)
Egypt	Already implemented
Iran	
Iraq	
Jordan	
Kuwait	
Lebanon	
Oman	December 2012
Qatar	Completed except for P-04 as explained below.
Saudi Arabia	
Syria	
UAE	
Yemen	

b) What is the status of implementation of the following steps of Phase 1 in your State?			
P-03 — AIRAC adherence monitoring			
	Implemented (specify how)	**Planned (specify when/how)**	**Additional comments/clarification required**
Sample	Implemented up to the process step "publication" in the frame of the Quality Management System.		There seems currently no effective means available to monitor the process steps after "publication", (which is beyond our influence and control (mailing).
Bahrain	Implemented 2003		
Egypt	• Through our CAA team; • feed back of the customer satisfaction.	We are planning to have access to Eurocontrol pTracker web based tool	One of the problems we are facing with the originators is convincing them with adhering to AIRAC cycles. Overcoming such problem is by holding meetings and exchanging mutual letters with them.
Iran			

b) What is the status of implementation of the following steps of Phase 1 in your State?			
P-03 — AIRAC adherence monitoring			
	Implemented (specify how)	**Planned (specify when/how)**	**Additional comments/clarification required**
Iraq			
Jordan			
Kuwait			
Lebanon			
Oman		2014/Sultanate of Oman will adhere to the regulations of ICAO Annex 15 for the standard regulation and control mechanisms for the distribution of aeronautical information.	The COMSOFT AIM solution is fully supports AIRAC cycles based on AIXM 5 time slices and effective dates using an AIRAC calendar. Moreover, the system is already prepared for a more relaxed AIRAC cycle which is envisaged for a fully digital data exchange in the near future. RMK/Sultanate of Oman has been following the AIRAC system 70%.
Qatar	Yes. All the publications are processed in accordance with the AIRAC requirements and monitored in collaboration with Bahrain AIS.		
Saudi Arabia			
Syria			
UAE			
Yemen			

b) What is the status of implementation of the following steps of Phase 1 in your State?			
P-04 — Monitoring of States' differences to Annex 4 and Annex 15			
	Implemented (specify how)	**Planned (specify when/how)**	**Additional comments/clarification required**
Sample	During preparations for ICAO USOAP all differences to Annex 4 and Annex 15 have been identified and recorded, using standard checklists supplied from ICAO. Since then, some of those differences are removed and some standards are changed, checklists were updated. Differences are published in the AIP.		Dialogs are conducted concerning differences between CAA and service provider about measures and time frame.
Bahrain	1-By ISO Regulation and AIS/M manual 2-Monitoring processed has been established since 2003 and under Head responsibility		
Egypt	• Through our CAA team. • Through our QMS procedures.		
Iran			
Iraq			
Jordan			
Kuwait			
Lebanon			
Oman		2012/Adherence to the standards in Annex 4 and Annex 15 is ongoing. The transition to AIM will offer an opportunity to increase the focus on implementation, and on reviewing differences in application of the Standards.	
Qatar	Yes. Monitoring processed has been established.		National regulations have been prepared for Annex 4 and 15 and are pending approval.
Saudi Arabia			
Syria			
UAE			
Yemen			

b) What is the status of implementation of the following steps of Phase 1 in your State?

P-05 — WGS-84 implementation

	Implemented (specify how)	**Planned (specify when/how)**	**Additional comments/clarification required**
Sample	Implemented – since 1998		Geoid Undulation not yet implemented
Bahrain	-2007-Bahrain started full implementation -Feb 2011 -for updating WGS-84 See attached certificate.		
Egypt	YES – Ref AIP A.R.E page GEN 2.1-2		
Iran			
Iraq			
Jordan			
Kuwait			
Lebanon			
Oman	Sultanate of Oman has fully implemented WGS-84; this is one of the steps achieved in the transition to AIM. The COMSOFT AIM solution fully supports WGS-84 by implementing AIXM 5.		We are implementing since 1999
Qatar	Yes. WGS-84 already implemented in 2009 and has been published in the AIP.		
Saudi Arabia			
Syria			
UAE			
Yemen			

b) What is the status of implementation of the following steps of Phase 1 in your State?			
P-17 — Quality			
	Implemented (specify how)	**Planned (specify when/how)**	**Additional comments/clarification required**
Sample	Partially achieved. Not in place for all data throughout the data management chain. Partly implemented concerning integrity.		Data exchange tool will improve data integrity.
Bahrain	ISO 9001:2008 certification Implemented 2003		
Egypt	ISO 9001:2000 certified since DEC 2007 and renewed as ISO 9001/2008 on DEC 2010		
Iran			
Iraq			
Jordan			
Kuwait			
Lebanon			
Oman		2012/Oman will have the Quality Management System Manual, and ISO certificate in December 2012 as per expectation.	
Qatar	Yes. Quality Management System is already implemented. ISO 9001:2008 certification achieved by Aeronautical Information Service-State of Qatar, through Quality Austria Training, Certification and Evaluation Ltd. dated 28th March 2011.		
Saudi Arabia			
Syria			
UAE			
Yemen			

3. Phase 2 – Going Digital (2009 – 2011)

a) What do you consider a realistic timeframe for the implementation of Phase 2?	
Sample	Many steps of Phase 2 are already implemented; however the entire scope of data will be covered by 2015.
Bahrain	To be completed by 2011-13 according to the timeframe of Bahrain roadmap
Egypt	Mid of 2012
Iran	
Iraq	
Jordan	
Kuwait	
Lebanon	
Oman	December 2016
Qatar	To be completed by December 2012.
Saudi Arabia	
Syria	
UAE	
Yemen	

b) What is the status of implementation of the following steps of Phase 2 in your State?			
P-01 — Data quality monitoring			
	Implemented (specify how)	**Planned (specify when/how)**	**Additional comments/clarification required**
Sample	A structured monitoring system is not implemented. Quality management in the chain is fractured.		State policy under development
Bahrain	There are numerous data quality and data integrity measures built into BAIMS tools, which by design as well as by integrated workflows support the aims outlined in the ICAO Roadmap document (Refer to Bahrain Roadmap V.1.4 dated 12/6/2011for more information) 2011-2013		

b) What is the status of implementation of the following steps of Phase 2 in your State?			
P-01 — Data quality monitoring			
	Implemented (specify how)	**Planned (specify when/how)**	**Additional comments/clarification required**
Egypt	Implemented inside AIS by: • Applying quality control procedures for both technical check for the raw data and editorial check before publication • Using an automated Archiving system for storing and retrieving of raw data.	Development of KPIs software is ongoing, will be in operation by the end of JUL 2011. It is intended to be measured on a quarterly basis.	Its will known that data quality monitoring is extended beyond the AIS (Data originators, End users and sometimes commercial agents i.e Jeppessen). So applying such step on the wide range requires extra efforts especially from State AIS and that's apparent in Egypt through holding monthly meeting with the originators as well as some end users.
Iran			
Iraq			
Jordan			
Kuwait			
Lebanon			
Oman		2015/The COMSOFT AIM solution provides the following data quality monitoring support: - Static data procedures (SDP) implement the coordinator, editor, and data approval workflows. - Graphical display of Aeronautical data allows to visually detect errors. E.g., a specified runway can be overlaid over a satellite image such that an spatial offset caused by erroneous geographical coordinates could easily be detected. - Central logging of information allows for traceability. This allows to track known quality problems and to generate key figures.	

b) What is the status of implementation of the following steps of Phase 2 in your State?			
P-01 — Data quality monitoring			
	Implemented (specify how)	**Planned (specify when/how)**	**Additional comments/clarification required**
		- Further means to improve data quality like "Double Blind Keying" can be easily added on request.	
Qatar		December 2011. Acquisition of an AIM system which is capable of data quality monitoring process.	
Saudi Arabia			
Syria			
UAE			
Yemen			

b) What is the status of implementation of the following steps of Phase 2 in your State?			
P-02 — Data integrity monitoring			
	Implemented (specify how)	**Planned (specify when/how)**	**Additional comments/clarification required**
Sample	Partially implemented - Data integrity monitoring systems in place – Airport survey data quality is monitored in accordance with International/State Policy.	Full Implementation is expected to be completed before the end of July 2013. Definition of specifications and requirements for digital connection between computers without manual interaction throughout the data chain with measuring tools.	State policy is under development/update.
Bahrain	Refer to P-01		
Egypt	Cyclic Redundancy Check (CRC) values are applied inside Egypt AIS through an automated system based on AIXM 4.5 DB	Intention to use Standard Input Forms (SIF) which will enable data to be processed electronically avoiding human interference and numerous manual re-entries. (under study)	Since exchanging of data is done in paper form the only method used for the time being is the manual check on every entry
Iran			
Iraq			
Jordan			
Kuwait			

b) What is the status of implementation of the following steps of Phase 2 in your State?			
P-02 — Data integrity monitoring			
	Implemented (specify how)	**Planned (specify when/how)**	**Additional comments/clarification required**
Lebanon			
Oman		- 2015/The AIM solution supports data integrity on several levels: - Working data for editing - Validated and not validated data are separated - Erroneous data is marked with failure report (Deviations). - Status management to keep track of no yet verified data with state transitions. Moreover, data consistency is enforced through business rules. - Scripting solution for business rule - Definition. - Fast execution. - Easy to maintain. - Powerful language and expression Syntax. - Access to related features is granted to check the consistency between different data. - AIXM 5 Time Slice types can be considered. - Different checks for permanent or temporary events - Support for Schematron as proposed by EUROCONTROL.	
Qatar		December 2011. Acquisition of an AIM system that supports data integrity monitoring.	
Saudi Arabia			
Syria			
UAE			
Yemen			

b) What is the status of implementation of the following steps of Phase 2 in your State?			
P-06 — Integrated aeronautical information database			
	Implemented (specify how)	**Planned (specify when/how)**	**Additional comments/clarification required**
Sample	AISP operates a database of static aeronautical data based on AICM/AIXM 4.5 and a separate database for dynamic aeronautical data. The database was converted to the current AIXM 4.5 version with the effective date of 4th of June 2010. Obstacle data database with only one way exchange from (originator) to AISP under test operation.	With the introduction of a system based on AIXM 5.1 an integration of the static and dynamic database is expected. The deadline for the transition to AIXM 5.1 is not specified yet.	
Bahrain	All BAIMS products for AIS/AIM utilize an integrated aeronautical information database an AIM system that is compliant with AIXM 5++(Refer to Bahrain Road Map V.1.4 dated 12/6/2011 for more information) 2011-2013		
Egypt		Egypt is intending to have a system based on Integrated DB (AIXM5.1) between NOTAM, Briefing, AIP, Chart and procedure design as well. It will be in operation on the MID of 2012.	The integration of AIS DB with other DBs (ATS, MET etc) is taken in our concern and practical steps is on the way.
Iran			
Iraq			
Jordan			
Kuwait			
Lebanon			
Oman		2016/A core part of the COMSOFT AIM solution is the central Aeronautical database CADAS-AIMDB. The database is fully compliant to the AIXM 5 data model. Currently, AIXM version 5.1 is implemented. A mapping module allows automated conversion between AIXM 5.1 and AIXM 4.5.Since AIXM 5 is a superset of all existing AIS data models, conversion to other formats like AIXM 4.5 is feasible. Moreover, digital NOTAMs as defined by EUROCONTROL and FAA require AIXM 5 and cannot be modeled by proprietary or previous AIXM versions.	

b) What is the status of implementation of the following steps of Phase 2 in your State?			
P-02 — Data integrity monitoring			
	Implemented (specify how)	**Planned (specify when/how)**	**Additional comments/clarification required**
Qatar		December 2011. Acquisition of an AIM system that is compliant with AIXM 5.	
Saudi Arabia			
Syria			
UAE			
Yemen			

b) What is the status of implementation of the following steps of Phase 2 in your State?			
P-07 — Unique identifiers			
	Implemented (specify how)	**Planned (specify when/how)**	**Additional comments/clarification required**
Sample	AISP uses a model of unique feature identification based on natural keys in compliance with AIXM 4.5.	With the introduction of a system based on AIXM 5.1 the universally unique identifier (UUID) model will be implemented. We expect possible difficulties in the transition process to the new unique identifiers.	
Bahrain	Improvements to the existing mechanisms for the unique identification of aeronautical features is required to improve the effectiveness of information exchange without the need for human intervention.		
Egypt	Implemented as our data base is based on AIXM 4.5		From Egypt's point of view this step should be omitted from the road map steps as it only concerns the IT developers rather than the States
Iran			
Iraq			
Jordan			
Kuwait			
Lebanon			

b) What is the status of implementation of the following steps of Phase 2 in your State?			
P-07 — Unique identifiers			
	Implemented (specify how)	**Planned (specify when/how)**	**Additional comments/clarification required**
Oman		2015/Improvements to the existing mechanisms for the unique identification of aeronautical features are required to increase the effectiveness of information exchange without the need for human intervention. Unique identifiers are natively supported by CADAS-AIMDB using AIXM 5 UUIDs. Every feature is assigned such a UUID on creation. The UUID of a particular feature never changes even if data is exchanged because it is part of the data exchange format.	
Qatar		December 2011. Acquisition of AIM system that is capable of supporting unique identification of aeronautical features.	
Saudi Arabia			
Syria			
UAE			
Yemen			

b) What is the status of implementation of the following steps of Phase 2 in your State?			
P-08 — Aeronautical information conceptual model			
	Implemented (specify how)	**Planned (specify when/how)**	**Additional comments/clarification required**
Sample	The data model which is used by AIXM 4.5 is implemented.	With the introduction of a system based on AIXM 5.1 the appropriate data model will be implemented.	

b) What is the status of implementation of the following steps of Phase 2 in your State?			
P-08 — Aeronautical information conceptual model			
	Implemented (specify how)	**Planned (specify when/how)**	**Additional comments/clarification required**
Bahrain	New information requirements coming from the Global Air Traffic Management Operational Concept will be analyzed and modelled if needed (e.g. airspace sectors, or information related to airspace and route traffic restrictions, or generic information related to aircraft performance, or information related to airline operators call signs).		
Egypt	Implemented as Egypt has an automated system based on AICM/AIXM 4.5	Coordination with our supplier to upgrade our Data from AICM/AIXM 4.5 to AICM/AIXM 5.1 Mid of 2012	
Iran			
Iraq			
Jordan			
Kuwait			
Lebanon			
Oman		2015/New information requirements coming from the Global Air Traffic Management Operational Concept will be analyzed and modeled if needed (e.g. airspace sectors, or information related to airspace and route traffic restrictions, or generic information related to aircraft performance, or information related to airline operators' call signs). All of these features are a core part of AIXM 5 and therefore available in the COMSOFT AIM solution as part of the central Aeronautical database CADAS-AIMDB. This is fully in line with EUROCONTROL and FAA requirements.	
Qatar		December 2011. Acquisition of AIM system that support the requirement for conceptual model.	
Saudi Arabia			

b) What is the status of implementation of the following steps of Phase 2 in your State?			
P-08 — Aeronautical information conceptual model			
	Implemented (specify how)	**Planned (specify when/how)**	**Additional comments/clarification required**
Syria			
UAE			
Yemen			

b) What is the status of implementation of the following steps of Phase 2 in your State?			
P-11 — Electronic AIP			
	Implemented (specify how)	**Planned (specify when/how)**	**Additional comments/clarification required**
Sample	No	Initial eAIP produced May 11. Operational version planned for Sep 11.	AIP available in digital format (PDF) on CD and on the web
Bahrain	The eAIP provides the user with integrated quality process management for the publishing of AIP, AIP Amendment, AIP AIRAC Amendment, AIP Supplement, AIP AIRAC Supplement and AIC. Other publication types like Military AIP or FLIP can be produced as well. (Refer to Bahrain Road Map V.1.4 dated 12/6/2011 for more information) eAIP Published on 6/6/2011 during AIS/MAP/TF6 Cairo 6-8 June 2011 for Trail and available on Web **www.caa.gov.bh/ais** Ref Bahrain AIC 006/11 "eAIP Trial Version		
Egypt	In course of implementation	We already have the eAIP module in our AIP automated system and we are expecting to produce it by the End of 2011	
Iran			
Iraq			
Jordan			
Kuwait			
Lebanon			
Oman		2015/The eAIP provides the user with integrated quality process management for the publishing of AIP, AIP Amendment, AIP AIRAC Amendment, AIP Supplement, AIP	

b) What is the status of implementation of the following steps of Phase 2 in your State?			
P-11 — Electronic AIP			
	Implemented (specify how)	**Planned (specify when/how)**	**Additional comments/clarification required**
		AIRAC Supplement and AIC. The COMSOFT eAIP solution is based on Group Verve AIS from Synclude company (an exclusive partner company of COMSOFT) and the central Aeronautical database CADAS-AIMDB. The solution is fully integrated and provides a high grade of automation. The solution is compliant to the following standards: -EUROCONTROL eAIP 1.1.0, including Bilingual and Annotations extensions. -EUROCONTROL AIXM 4.5 -EUROCONTROL SDP -ICAO Annex 15, up to date with the latest amendment. -ICAO Doc 8126.	
Qatar		Refer to Bahrain implementation/plan.	The State of Qatar plan to have its own electronic AIP by December 2012.
Saudi Arabia			
Syria			
UAE			
Yemen			

b) What is the status of implementation of the following steps of Phase 2 in your State?			
P-13 — Terrain			
	Implemented (specify how)	**Planned (specify when/how)**	**Additional comments/clarification required**
Sample		Terrain datasets are available, but unfit to cover all eTOD requirements. Implementation is planned until mid 2013	Implementation Project is ongoing, charging mechanism under discussion. State policy under development.
Bahrain	The eTOD.wiz@rd Data Management is used to maintain the data of obstacles relevant for Procedure Design and for aeronautical charts. This also provides the feature to store and to retrieve Digital Terrain Models and Geography data. The eTOD.wiz@rd supports import/export of data maintained in industry standard formats (e.g. DGN, DWG, GeoTIFF, etc.) (Refer to Bahrain Road Map V.1.4 dated 12/6/2011 for more information)		
Egypt	Egypt has developed Area 1 Terrain Database with 20 Giga byte of storage and Area 4 for both ends of runway 05C/23C at Cairo International airport and 04/22 at Sharm El Sheikh International airport, to be the first State in the Middle East area to meet the requirements of Annex 15 CH. 10. For Area 1 Obstacles database it has been prepared for electricity company high tensions and TV antenna masts and checked by resurveying to meet the ICAO requirement	Egypt planned to implement for the coming years measures aimed at continuously improving the quality of obstacle data in area 1. In addition to new measurements of known obstacles, this improvement will involve for areas 2 and 3 the acquisition of new data sets for obstacles satisfying area 1 criteria Area 1 obstacle, Area 2 obstacle and terrain and area 4 Obstacle MID 2012. Aerodrome mapping END 2012	
Iran			
Iraq			
Jordan			
Kuwait			
Lebanon			
Oman		2015/The compilation and provision of terrain data sets is an integral part of the transition to AIM.	

b) What is the status of implementation of the following steps of Phase 2 in your State?			
P-13 — Terrain			
	Implemented (specify how)	**Planned (specify when/how)**	**Additional comments/clarification required**
		The COMSOFT AIM system supports digital elevation data for use by the application. The compilation and provision of obstacle data sets is an integral part of the transition to AIM.	
Qatar	Yes. Electronic terrain data for Area 1, 3 and 4 available since January 2009.		Terrain data for Area 2 will be acquired along with WGS-84 re-survey which is scheduled in December 2011.
Saudi Arabia			
Syria			
UAE			
Yemen			

b) What is the status of implementation of the following steps of Phase 2 in your State?			
P-14 — Obstacles			
	Implemented (specify how)	**Planned (specify when/how)**	**Additional comments/clarification required**
Sample	Partially provided but not compliant with chapter 10 of ICAO Annex 15 Data collected for Area 1	Area 1 planned for 2012 Aera 2 and Area 3 planned 2015	State policy under development.
Bahrain	Refer to P-13 Area 1Data available since March 2009 Area 2,3 Data available on Dec 2011.		WGS-84 Surveys for obstacle in Area Area 2,3 by SLC UK Feb 2011
Egypt	Refer P-13	Refer P-13	
Iran			
Iraq			
Jordan			
Kuwait			
Lebanon			

b) What is the status of implementation of the following steps of Phase 2 in your State?			
P-14 — Obstacles			
	Implemented (specify how)	**Planned (specify when/how)**	**Additional comments/clarification required**
Oman		2015/Obstacle data is fully supported by the central aeronautical database CADAS-AIMDB since obstacles are fully contained in the AIXM 5 data model. Even obstacle data in non-AIXM 5 format can be mapped to the database. In recent projects the database was populated using obstacle data from customers.	
Qatar	Yes. Electronic obstacle data for Area 1 available since January 2009.		Surveys for obstacle in Area 2/Area 3 will be acquired along with WGS-84 re-survey which is scheduled in December 2011.
Saudi Arabia			
Syria			
UAE			

b) What is the status of implementation of the following steps of Phase 2 in your State?			
P-15 — Aerodrome mapping			
	Implemented (specify how)	**Planned (specify when/how)**	**Additional comments/clarification required**
Sample	No	No concrete planning available yet, still under review.	
Bahrain	Bahrain will have eMap which will be included in the Aerodrome Map. The users will have electronic displays according to ICAO standard.		
Egypt	Refer P-13	Refer P-13	
Iran			
Iraq			
Jordan			
Kuwait			
Lebanon			

b) What is the status of implementation of the following steps of Phase 2 in your State?			
P-15 — Aerodrome mapping			
	Implemented (specify how)	**Planned (specify when/how)**	**Additional comments/clarification required**
Oman		2015/Aerodrome mapping is fully supported by the central aeronautical database CADAS-AIMDB since it is a core part of AIXM 5. Full support on the client side, i.e. the 3D display of aerodrome maps is also available.	
Qatar		December 2011. Acquisition of AIM system that supports the requirements for aerodrome mapping.	
Saudi Arabia			
Syria			
UAE			
Yemen			

4. Phase 3 – Information Management (2011 – 2016)

a) What do you consider a realistic timeframe for the implementation of Phase 3?	
Sample	We believe that the foreseen implementation time frame of Phase 3 is too ambitious and think that 2013-2018 would be a more realistic time frame.
Bahrain	2014-16
Egypt	End of 2016
Iran	
Iraq	
Jordan	
Kuwait	
Lebanon	
Oman	December 2017
Qatar	To be completed by December 2016.
Saudi Arabia	
Syria	
UAE	
Yemen	

b) What is the status of implementation of the following steps of Phase 3 in your State?			
P-09 — Aeronautical data exchange			
	Implemented (specify how)	**Planned (specify when/how)**	**Additional comments/clarification required**
Sample	An AIXM interface from/to the central aeronautical database (refer to P-06) is available.	It is planned to implement the exchange model and mechanisms together with AICM 5.1. This starts in 2013	Not implemented between data providers and AIS
Bahrain	The exchange of data, and the mechanisms to exchange or access the new digital products or services, will be defined by an exchange model that supports the requirement for data exchange AIXM 5++ (Refer to Bahrain Road Map V.1.4 dated 12/12/2011 for more information)		
Egypt	Implemented as Egypt has an automated system based on AICM/AIXM 4.5	Coordination with our supplier to upgrade our Database from AICM/AIXM 4.5 to AICM/AIXM 5.1 Mid of 2012	
Iran			
Iraq			
Jordan			
Kuwait			
Lebanon			
Oman		2017/The exchange of data and the mechanisms to exchange or access the new digital products or services will be defined by an exchange model. The content of the model will be driven by the aeronautical information conceptual model (top-down) and by requirements coming from technological choices (bottom-up); the evolution of the model will be coordinated in order to balance the need for innovation with the need for protecting investments. The COMSOFT AIM solution fully supports AIXM version 4.5 and 5 as exchange models. AIXM 5 is natively supported by the central Aeronautical database CADAS-AIMDB and the applications. Data exchange in AIXM 4.5 format is provided by the system using a data	

b) What is the status of implementation of the following steps of Phase 3 in your State?			
P-09 — Aeronautical data exchange			
	Implemented (specify how)	**Planned (specify when/how)**	**Additional comments/clarification required**
		conversion between AIXM 4.5 and the stored AIXM 5 data.	
Qatar		February 2013. Acquisition of AIM system that supports the requirement for data exchange (AIXM 5).	
Saudi Arabia			
Syria			
UAE			
Yemen			

b) What is the status of implementation of the following steps of Phase 3 in your State?			
P-10 — Communication networks			
	Implemented (specify how)	**Planned (specify when/how)**	**Additional comments/clarification required**
Sample	AISP has been using the Internet for static and dynamic data exchange for some time already. AFTN is also being used, currently in the role of a backup network for dynamic data exchange. Starting August 2010 the AISP is using PENS for dynamic data exchange.	Migration to AMHS completed. For some specific services Internet is being used.	In some specific cases the ANSP is delivering aeronautical data to customers (airlines) through business-to-business (B2B) web services (industry standard). Briefing services (self- and home briefing) are provided by making use of the Internet in line with the ICAO Doc 9855 (requires update in line with latest developments).
Bahrain	More data will be exchanged on ground networks and the current data will be exchanged in a form that will require more bandwidth (Refer to Bahrain Road Map V.1.4 dated 12/6/2011 for more information)		

b) What is the status of implementation of the following steps of Phase 3 in your State?			
P-10 — Communication networks			
	Implemented (specify how)	**Planned (specify when/how)**	**Additional comments/clarification required**
Egypt	AMHS was installed in Cairo FIR since NOV 2008 and in operation since DEC 2010		While developing new ways of communication, Egypt is putting into consideration the requirements needed in the near future to cope with the environment of SWIM suit are applied
Iran			
Iraq			
Jordan			
Kuwait			
Lebanon			
Oman		2017/More data will be exchanged on ground networks and the current data will be exchanged in a form that will require more bandwidth. It is envisaged that a transition of the network to one based on Internet protocol (IP) will be required to cope with these future needs. For the transition to AIM to be effective, the needs of future AIM will have to be declared in terms useable for network specification. Which data network will be used to distribute the new data products and services; what information can be exchanged via the Internet; and what information requires a secured network reserved for aviation are open questions that will need to be answered for the transition to be effective. The COMSOFT AIM system already fully supports Aeronautical data exchange over TCP/IP based networks using Web Services. Moreover, the current version of CADAS-AIMDB already supports the new WFS-T 2.0 interface according to ISO standards 19142 and	

b) What is the status of implementation of the following steps of Phase 3 in your State?			
P-10 — Communication networks			
	Implemented (specify how)	**Planned (specify when/how)**	**Additional comments/clarification required**
		19143. These standards are currently discussed as mandatory for SWIM compliance. COMSOFT takes an active part in these discussions in terms of its Open Geospatial Consortium (OGC) membership and participation in the OGC Web Services test-bed OWS-7.	
Qatar		February 2013. Acquisition of AIM system that is capable of aeronautical data exchange over TCP/IP based networks using Web Services and also WFS-T 2.0 interface according to ISO standards 19142 and 19143.	
Saudi Arabia			
Syria			
UAE			
Yemen			

b) What is the status of implementation of the following steps of Phase 3 in your State?			
P-12 — Aeronautical information briefing			
	Implemented (specify how)	**Planned (specify when/how)**	**Additional comments/clarification required**
Sample	For many years the ANSP is applying enhanced NOTAM selection criteria for the delivery of NOTAMs to airlines going beyond the ICAO provisions (enhancing the operational relevance for the airline). This procedure is applied in agreement with the Regulator.		Despite the constraints with the current NOTAM selection criteria, the presentation of all required pre-flight information (AIS, FPL and MET) has been improved in an integrated system allowing for custom tailored information.

b) What is the status of implementation of the following steps of Phase 3 in your State?			
P-12 — Aeronautical information briefing			
	Implemented (specify how)	**Planned (specify when/how)**	**Additional comments/clarification required**
Bahrain	This functionality at the present fully implemented for BCAA (FPL ,AD, Special Area, and Narrow Route Briefing) (Refer to Bahrain Road Map V.1.4 dated 12/6/2011 for more information)		
Egypt	An automated system for AIS briefing including a self briefing position in Cairo AP was installed and operated since JUL 2004.	The combination of graphical and textual information in a digital briefing environment through the implementation of D-NOTAM and using new version of AIXM 5.x is on its way to be applied in Egypt Mid of 2012	
Iran			
Iraq			
Jordan			
Kuwait			
Lebanon			
Oman		2017/All aeronautical data available in the central database is subject to integrated briefing like : - NOTAM - OPMET - AIP - Weather charts. COMSOFT will continue to support and follow the recommendations for an integrated briefing.	
Qatar		February 2013. Acquisition of AIM system that support the requirement for an integrated briefing.	
Saudi Arabia			
Syria			
UAE			
Yemen			

b) What is the status of implementation of the following steps of Phase 3 in your State?			
P-16 — Training			
	Implemented (specify how)	**Planned (specify when/how)**	**Additional comments/clarification required**
Sample			Currently it is not clear what is expected under the training header. ICAO training manual has to be developed to reflect the new competencies required by the transition to AIM, before national requirements can be developed.
Bahrain	Bahrain will have training as per the ICAO and Euro standard. Skill and competences introduced by the transition to AIM. (Refer to Bahrain Road Map V.1.4 dated 12/6/2011 for more information) Training appendix		
Egypt	As part of implementation, Egypt is sending its trainees to attend the AIM Courses and meetings held by the International Organizations (ICAO, Eurocontrol, IATA etc)	Mapping of the future needs in terms of personnel knowledge, skills and competence has started and amending training manuals/methods accordingly. Mid of 2012	
Iran			
Iraq			
Jordan			
Kuwait			
Lebanon			
Oman		2012/Oman will have training as per the ICAO and European standards. Skill and Competence will be introduced by the transition to AIM. Refer to Appendix 2.	
Qatar		December 2011. Extensive training will be conducted for every AIM system that will be available.	

b) What is the status of implementation of the following steps of Phase 3 in your State?			
P-16 — Training			
	Implemented (specify how)	**Planned (specify when/how)**	**Additional comments/clarification required**
Saudi Arabia			
Syria			
UAE			
Yemen			

b) What is the status of implementation of the following steps of Phase 3 in your State?			
P-18 — Agreements with data originators			
	Implemented (specify how)	**Planned (specify when/how)**	**Additional comments/clarification required**
Sample	Partially achieved, some requirements in current CAA publications.	By July 2013 – Implementation of CAA Policy for Agreements with Data Originators.	Under Development. See P-01.
Bahrain	Bahrain signed service level agreements (SLA) to be required better control relationships along the whole data chain from the producer to the distributor standard template with data originators, information service providers or others. Data of high quality can only be maintained if the source is of good quality. (Ref appendix 2)		
Egypt	• There is Service Level Agreement SLA between Egypt's AIS and most of the data originators. • There is a committee held on monthly basis between Egypt's AIS and both the main originators and the ECAA.		
Iran			
Iraq			
Jordan			
Kuwait			
Lebanon			

b) What is the status of implementation of the following steps of Phase 3 in your State?			
P-18 — Agreements with data originators			
	Implemented (specify how)	**Planned (specify when/how)**	**Additional comments/clarification required**
Oman		2012/Data of high quality can only be maintained if the source material is of good quality. Service level agreements (SLA) will be required with the data originators, information service providers or other in order to establish better control relationships along the whole data chain from the producer to the distributor.	
Qatar	Yes. SLA's between Doha AIS and data originators (except for Aerodrome Operator) implemented in March 2011.		SLA between Doha AIS and Aerodrome Operator will be implemented by the end of August 2011.
Saudi Arabia			
Syria			
UAE			
Yemen			

b) What is the status of implementation of the following steps of Phase 3 in your State?			
P-19 — Interoperability with meteorological products			
	Implemented (specify how)	**Planned (specify when/how)**	**Additional comments/clarification required**
Sample	Partially implemented, pre-flight information briefing is provided in harmonized way (one stop shop) in accordance with current ICAO Annex 3 and ICAO Annex 15 requirements.	Next step (fully integrated briefing) will be implemented after the design and implementation of the appropriate data exchange technology is finished (WXXM – Weather Exchange Model).	
Bahrain	The implementation of an according interface is part of the current project scope. that is capable of combining AIM and meteorological data products.(Refer to Bahrain Road Map V.1.4 dated 12/6/2011 for more information)		

b) What is the status of implementation of the following steps of Phase 3 in your State?			
P-19 — Interoperability with meteorological products			
	Implemented (specify how)	**Planned (specify when/how)**	**Additional comments/clarification required**
Egypt			A discussion with MET Services is planned in order to investigate ways of implementation
Iran			
Iraq			
Jordan			
Kuwait			
Lebanon			
Oman		2017/The meteorological data products of the future will be combined with the AIM data products to form the future flight briefings and the new services provided to all ATM components. This will require that meteorological data be made available in a similar format to the other aeronautical data that are clearly focusing on the use of open standards (such as XML and GML) for the implementation of table-driven data validation built into the data exchange mechanism, whereas current meteorological data products for aviation are based on simple alphanumeric codes. Now that the bandwidth of telecommunication links and space for digital storage devices are no longer limiting factors, the move towards net-centric and system-wide information management is becoming feasible for the wider distribution of meteorological forecast data from the world area forecast centres in a format that will not require considerable effort for the learning and configuration of decoding software, thereby ensuring true interoperability. Meteorological information is essential in the compilation of pilot briefings. The transition to	

b) What is the status of implementation of the following steps of Phase 3 in your State?			
P-19 — Interoperability with meteorological products			
	Implemented (specify how)	**Planned (specify when/how)**	**Additional comments/clarification required**
		AIM will include activities at both the standardization and the implementation level to find solutions for the interoperability of meteorological data products with the new AIM data products. The discussion and standardisation concerning meteorological information is still in progress. Eventually, meteorological information will become part of the COMSOFT AIM solution by adopting WXXM (Weather data exchange model).	
Qatar		**February 2013.** Acquisition of AIM system that is capable of combining AIM and meteorological data products.	
Saudi Arabia			
Syria			
UAE			
Yemen			

b) What is the status of implementation of the following steps of Phase 3 in your State?			
P-20 — Electronic aeronautical charts			
	Implemented (specify how)	**Planned (specify when/how)**	**Additional comments/clarification required**
Sample			More detailed specification are required; Annex 4, Chapter 20 Electronic Aeronautical Chart Display is too general.

b) What is the status of implementation of the following steps of Phase 3 in your State?			
P-20 — Electronic aeronautical charts			
	Implemented (specify how)	**Planned (specify when/how)**	**Additional comments/clarification required**
Bahrain	BAIMS electronic aeronautical charts, based on digital databases and the use of Geographic Information Systemsdefined to complement paper charts and replace others that have become obsolete and need to be improved to satisfy user needs. that generates all aeronautical charts as specified by ICAO (Refer to Bahrain Road Map V.1.4 dated 12/6/2011 for more information)		
Egypt	Already have an automated system for producing the eCHARTS based on AIXM 4.5 and MapInfo tool and procedure design (facing some training problems with our charting team)		
Iran			
Iraq			
Jordan			
Kuwait			
Lebanon			
Oman		2017/New electronic aeronautical charts, based on digital databases and the use of geographic information systems, will be defined to complement some paper charts and to replace others that have become obsolete and need to be improved to satisfy user needs. The possibility of deploying these new products over the Internet will be explored. New electronic aeronautical charts will be made available in line with the ongoing standardization. Moreover, since the COMSOFT applications are web-based and provide standard web based interfaces, new applications from 3rd party vendors can be easily integrated if these applications support the AIXM 5 data model along with the respective interfaces like WFS-T 2.0.	

b) What is the status of implementation of the following steps of Phase 3 in your State?			
P-20 — Electronic aeronautical charts			
	Implemented (specify how)	**Planned (specify when/how)**	**Additional comments/clarification required**
Qatar		**February 2013.** Acquisition of AIM system that generates all aeronautical charts as specified by ICAO.	
Saudi Arabia			
Syria			
UAE			
Yemen			

b) What is the status of implementation of the following steps of Phase 3 in your State?			
P-21 — Digital NOTAM			
	Implemented (specify how)	**Planned (specify when/how)**	**Additional comments/clarification required**
Sample		Plan to provide digital NOTAM by Jul 2017.	AIXM 5.1 will be the enabler to digital NOTAM.
Bahrain	One of the most innovative data products that will be based on the standard aeronautical data exchange model will be a digital NOTAM that will provide dynamic aeronautical information to all stakeholders with an accurate and up-to-date common representation of the aeronautical environment. in which flights are operated.(Refer to Bahrain Road Map V.1.4 dated 12/6/2011 for more information)		
Egypt	Egypt is contributing in all D-NOTAM trials made by Eurocontrol except SNOWTAM trails.	Since Egypt is intending to upgrade its automated system to be coinciding with D-NOTAM environment. Its planned to continue Personnel training and contributing in the next trials made by Eurocontrol.	
Iran			
Iraq			
Jordan			
Kuwait			
Lebanon			

b) What is the status of implementation of the following steps of Phase 3 in your State?			
P-21 — Digital NOTAM			
	Implemented (specify how)	**Planned (specify when/how)**	**Additional comments/clarification required**
Oman		2017/One of the most innovative data products that will be based on the Standard for an aeronautical data exchange model will be a digital NOTAM that will provide dynamic aeronautical information to all stakeholders with an accurate and up-to-date common representation of the aeronautical environment in which flights are operated. The digital NOTAM will be defined as a data set that contains information included in a NOTAM in a structured format that can be fully interpreted by a computer system for accurate and reliable updates of the aeronautical environment representation both for automated information equipment and for aviation personnel. The central Aeronautical database CADAS-AIM_{DB} already fully supports Digital NOTAMs as part of the AIXM 5 data model. At the EUROCONTROL xNOTAM workshop COMSOFT recently demonstrated Digital NOTAM capabilities using the NOTAM application. Once the Digital NOTAM encoding has been finalized by the respective EUROCONTROL working group the NOTAM application will be updated to support this new standard. The system will still be able to create conventional ICAO compliant text NOTAMS in order to guarantee backwards compatibility with other states that have not implemented Digital NOTAMs already.	
Qatar		Acquisition of AIM system that supports digital NOTAM is planned. Target date will be determined later.	

b) What is the status of implementation of the following steps of Phase 3 in your State?			
P-21 — Digital NOTAM			
	Implemented (specify how)	**Planned (specify when/how)**	**Additional comments/clarification required**
Saudi Arabia			
Syria			
UAE			
Yemen			

5. Do you expect any specific difficulty which could impede the transition from AIS to AIM?

		YES	**NO**
Sample	• Potential for the non-participation of key stakeholders providing eTOD data. • Continuation of downturn in aviation industry causing financial constraints on the State AIS provider and other key stakeholders supplying aeronautical data. • Non-agreement by airports to establishment of SLA with State AIS for provision of data. • Justification to aerodromes for additional costs related to the provision of survey data for digital mapping. • Funding, decision making on all levels, manpower capacity, availability of knowledge, technical infrastructure, acceptance by all stakeholders, timescales unrealistic.	X	
Bahrain	1) Training; 2) culture change	X	
Egypt	Despite of not having major technical difficulties in the transition from AIS to AIM but we expect to face some problems with the human factor in coping with digital environment.		X
Iran			
Iraq			
Jordan			
Kuwait			
Lebanon			
Oman		X	
Qatar			X
Saudi Arabia			
Syria			
UAE			
Yemen			

6. What kind of assistance/support do you expect from ICAO to expedite the transition from AIS to AIM?

Sample	• Specific guidance material for implementation of each subject. Development of more detailed guidance materials, manuals, best practices examples and other supporting documents. • Expeditious revisions to Annex 15 and 4 when appropriate. • Regional workshops and seminars to ensure consistency in the transition to AIM.
Bahrain	We would be grateful if the team is presented with an appreciation letter for the efforts taken by them in the transition from AIS to AIM
Egypt	Egypt is expecting more seminars, workshops & training courses organized by ICAO to keep all stakeholders familiar with the recent updates of such matter.
Iran	
Iraq	
Jordan	
Kuwait	
Lebanon	
Oman	Nil
Qatar	• Arrange more workshops/seminars on AIM. • Provide training guidelines/manual for AIM. • Provide a list of civil aviation training centers/institutions (recognized by ICAO) that conducts AIM training.
Saudi Arabia	
Syria	
UAE	
Yemen	

7. Do you have any suggestion to update/improve the ICAO Roadmap for the Transition from AIS to AIM?

Sample	• In the first version of the Roadmap document the description of the steps is quite basic and insufficient. Those definitions should be expanded and/or reference to specific standards, manuals and other documents should be provided within it. • Timelines should be permanently monitored and adapted accordingly.
Bahrain	Nil
Egypt	From Egypt's point of view we suggest the following: • Unique identifier step should be omitted from the road map steps as it only concerns the IT developers rather than the States; • The following steps (Aeronautical Information Conceptual Model, Aeronautical Data Exchange and Unique Identifier) should be merged in one step as the State having an automated system based on AIXM DB recommend ICAO SARPS the three steps are achieved. • Both Data Quality Monitoring and agreements with data originators steps should be merged as the dealing with the same subject
Iran	
Iraq	
Jordan	
Kuwait	
Lebanon	
Oman	Nil
Qatar	Nil
Saudi Arabia	
Syria	
UAE	
Yemen	

8. Any other suggestion on the subject?

Sample	• ICAO Doc 9881 is only a draft, but the content is paramount for the transition to AIM - e.g. the attributes of terrain and obstacle data need clear definitions and explanations – including examples of obstacles together with attributes.
Bahrain	Nil
Egypt	Nil
Iran	
Iraq	
Jordan	
Kuwait	
Lebanon	
Oman	Nil

Qatar	Nil
Saudi Arabia	
Syria	
UAE	
Yemen	

AIS/MAP TF/6
Appendix 3B to the Report on Agenda Item 3

STATUS OF IMPLEMENTATION OF WGS-84 IN THE MID REGION

	FIR	ENR	TMA/CTA/CTZ	APP	RWY	AD/HEL	GUND	QUALITY SYSTEM	AIP	REMARKS
BAHRAIN	**F**	**F**	**F**	**F**	**F**	**F**	**F**	**F**	**F**	
EGYPT	**F**	**F**	**F**	**F**	**F**	**F**	**F**	**F**	**F**	
IRAN	**F**	**F**	**F**	**N**	**F**	**F**	**F**	**F**	**F**	
IRAQ	**P**	**P**	**P**	**P**	**P**	**P**	**N**	**N**	**P**	Implementation to be completed by 2011
JORDAN	**F**	**F**	**F**	**F**	**F**	**F**	**F**	**F**	**F**	
KUWAIT	**F**	**F**	**F**	**F**	**F**	**F**	**F**	**F**	**F**	
LEBANON	**F**	**F**	**F**	**F**	**F**	**F**	**N**	**N**	**F**	
OMAN	**F**	**F**	**F**	**F**	**F**	**F**	**F**	**F**	**F**	
QATAR	**F**	**F**	**F**	**F**	**F**	**F**	**F**	**F**	**F**	
SAUDI ARABIA	**F**	**F**	**F**	**F**	**F**	**N**	**N**	**N**	**F**	
SYRIA	**F**	**F**	**F**	**F**	**F**	**F**	**N**	**N**	**F**	Implementation of GUND is expected for 2010
UNITED ARAB EMIRATES	**F**	**F**	**F**	**F**	**F**	**F**	**F**	**F**	**F**	
YEMEN	**F**	**F**	**F**	**F**	**F**	**F**	**F**	**N**	**F**	

Legend:	**F: Fully implemented**	**P: Partly implemented**	**N: Not implemented**

AIS/MAP TF/6
Appendix 3C to the Report on Agenda Item 3

DRAFT MIDAD QUESTIONNAIRE/CHECKLIST

1- State/Organization name and location
2- AIS/AIM Organizational Structure (Regulator/Service Provider, including AIS Aerodrome Units)
3- Volume of activity (area of responsibility: big, medium, small; size of the FIR, Number of Aerodromes, Number of Waypoints, Number of Routes, Number of Radio navigation aids (en- route, aerodrome),
4- Services provided (is ARO functions and PANS-OPS part of the AIS/AIM business/activity?)
5- AIS/AIM facilities available
6- Communication infrastructure used/to be used by AIS/AIM
7- AIS/AIM personnel number, qualification, competency and training
8- Transition from AIS to AIM (current status and future plan, including budget and timelines)
9- AIS automation (current system(s) and plans, including budget and timelines)
10- Commitment to MIDAD. Is MIDAD part of the National Plan for the transition from AIS to AIM?
11- Vision/suggestions, expectations related to MIDAD. Preferable scenario/option (Technical, financial and institutional)
12- MIDAD focal point
13- Any other issue/suggestion related to MIDAD

AIS/MAP TF/6
Appendix 3D to the Report on Agenda Item 3

MID REGION AIS DATABASE STUDY GROUP (MIDAD SG)

1. TERMS OF REFERENCE

The terms of Reference of the MIDAD SG are to:

1) carry out necessary coordination with States for the establishment of the MID Region AIS Database (MIDAD);

2) monitor the development of the MIDAD initial Study/Business case;

3) monitor the development of the detailed MIDAD study addressing all technical, operational, financial, human, legal and institutional issues, and provide necessary guidance;

4) develop the Call for Tender for the establishment of MIDAD;

5) negotiate the contract for the establishment of MIDAD with the chosen Contractor (MIDAD Service Provider); and

6) agree on the mechanism for the monitoring of MIDAD operations and maintenance.

2. COMPOSITION

The MIDAD SG is composed of:

a) all MID States; and

b) concerned International/Regional Organizations as observers.

Other representatives from industry and user Organizations having a vested interest in Aeronautical Information Management and experience in the development of Regional AIS Databases, could participate as observers, as necessary.

REPORT ON AGENDA ITEM 4: REVIEW OF AIR NAVIGATION SEFICIENCIES IN THE AIS/MAP FIELD

4.1 The meeting recalled that that the DGCA-MID/1 meeting (Abu Dhabi, UAE, 22-24 March 2011) noted the concerns expressed by the various ICAO organs including the Council, the Air Navigation Commission (ANC) and MIDANPIRG on the serious impact the long standing deficiencies have on safety.

4.2 The meeting recalled that MIDANPIRG/12 (Amman, Jordan, 17-21 October 2010) noted with concern, that in many cases, two (2) or three (3) rationale for the non-elimination of deficiencies are reflected in the MID Air Navigation Deficiency Database (MANDD) (i.e.: F, H and O or F, H and S), which does not provide an accurate result, when carrying out an analysis related to the root-causes for non-elimination of deficiencies. Accordingly, the meeting agreed that, to the extent possible, it is preferable to reflect in the MANDD only the major factor/rationale for the non-elimination of the concerned deficiency.

4.3 It was further recalled that MIDANPIRG/12 underlined that the lack of sufficient number of qualified technical staff is the highest contributing factor for the non-elimination of the safety deficiencies in the MID Region (both air navigation deficiencies and USOAP findings). In this respect, the DGCA-MID/1 meeting noted that as part of the ICAO MID Regional Office Work Programme, Seminars, Workshops and Training Courses are being organized in the MID Region based on needs identified within the framework of MIDANPIRG or by ICAO (HQ and Regional Office). Nevertheless, it recognized that more effort should be put in the training of technical staff and re-iterated MIDANPIRG/12 recommendations and Conclusion on the subject, including, the call for States to organize at the National Level Seminars, Workshop and Training courses, in coordination with and with the support of the ICAO MID Regional Office, in order to touch a larger number of staff from the State.

4.4 The meeting noted that the DGCA-MID/1 meeting was of the view that a number of deficiencies were common to many States and accordingly encouraged States to work cooperatively towards the elimination of such deficiencies, in particular with a joint effort for the training of technical staff. It was also highlighted that the Regional Safety Oversight Organizations (RSOOs) could play an important and effective role in this respect.

4.5 The meeting re-iterated that the identification and reporting of Air Navigation Deficiencies by User Organizations contribute significantly to the enhancement of air navigation safety in the MID Region. However, the non-attendance of IATA and IFALPA was noted with concern. In addition, it was highlighted that MANDD has not yet been used by IATA and IFALPA for the submission of requests for additions, updates and elimination of Air Navigation Deficiencies.

4.6 The meeting reviewed and updated the list of deficiencies in the AIS/MAP field as at **Appendix 4A** to the Report on Agenda Item 4.

4.7 The meeting recalled that MIDANPIRG/12 through Conclusion 12/47 agreed that the "*Percentage of air navigation deficiencies priority "U" eliminated*", should be used as one Metric (MID Metric 6) for performance monitoring of the air navigation systems in the MID Region; and requested the MIDANPIRG subsidiary bodies to monitor the Metrics related to their work programmes and develop associated performance targets. In this respect, it was highlighted that two

(2) deficiency priority "U" in the AIS/MAP field were eliminated. Furthermore, the meeting agreed that the elimination of 20% of the deficiencies priority "U" is to be endorsed as an initial performance target, which should be reviewed by the ATM/SAR/AIS SG and the CNS/ATM/IC SG.

4.8 In connection with the above, the meeting urged States to take necessary follow-up actions to the following MIDANPIRG/12 Conclusion 12/75 and the DGCA-MID/1 Conclusion 1/2:

CONCLUSION 12/75: ELIMINATION OF AIR NAVIGATION DEFICIENCIES IN THE MID REGION

That, MID States be urged to:

a) review their respective lists of identified deficiencies, define their root causes and forward an action plan for rectification of outstanding deficiencies to the ICAO MID Regional Office prior to 31 March 2011;

b) use the online facility offered by the ICAO MID Air Navigation Deficiency Database (MANDD) for submitting online requests for addition, update, and elimination of air navigation deficiencies;

c) accord high priority to eliminate all air navigation deficiencies with emphasis on those with priority "U"; in particular by allocating the necessary budget to ensure that their Civil Aviation Authorities have and retain a sufficient number of qualified technical personnel, who are provided with appropriate initial, on-the-job and recurrent training; and

d) seek support from regional and international organizations (i.e. ACAC, GCC, etc.) for the elimination of identified air navigation deficiencies.

DGCA-MID/1 CONCLUSION 1/2 - ELIMINATION OF AIR NAVIGATION DEFICIENCIES IN THE MID REGION

That, States:

a) accord high priority to the elimination of air navigation deficiencies; in particular by allocating the necessary budget to ensure that their Civil Aviation Authorities have and retain a sufficient number of qualified technical personnel, and provide appropriate initial, on-the-job and recurrent training;

b) work cooperatively towards the elimination of common deficiencies; and

c) consider the use of the Regional Safety Oversight Organizations (RSOOs) as an efficient mechanism for, inter-alia, the provision of appropriate training to technical staff and elimination of common deficiencies.

AIS/MAP TF/6
Appendix 4A to the Report on Agenda Item 4

Deficiencies in the AIS/MAP Field

BAHRAIN

No Deficiencies Reported

[(1)] Rationale for non-elimination: "F"= Financial "H"= Human Resources "S"= State (Military/political) "O"= Other unknown causes

Deficiencies in the AIS/MAP Field

EGYPT

No Deficiencies Reported

Deficiencies in the AIS/MAP 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 4: Para. 16.2	-	Non-production of World Aeronautical Chart – ICAO 1:1 000 000	May, 1995	Coordination with neighboring States required	O	Need to produce the assigned sheets of the World Aeronautical Chart – ICAO 1:1 000 000	Iran+neighboring states	Jun, 2011	B
2	ANNEX 4: Para. 3.2	-	Non-production of Aerodrome Obstacle Chart-ICAO Type A	May, 1995	ICAO to follow up with State	O	Need to produce Aerodrome Obstacle Chart-ICAO Type A for all Int`l Airports RWYs, except if a notification to this effect is published in the AIP (if no significant obstacles exist)	Iran	Dec, 2011	A
3	ANNEX 15: Para. 3.6.5	-	Lack of AIS automation	Dec, 2007	-	O	AIS automation should be introduced with the objective of improving the speed, accuracy, efficiency and cost-effectiveness of aeronautical information services	Iran	Dec, 2011	A
4	Annex 15 Para. 6	AIRAC System	Lack of implementation of AIRAC System. Publication of significant changes to aeronuatical information publications through normal AIP amendments and NOTAMs.	Jun, 2011	-	S	Need to fully comply with the AIRAC procedures.	Iran	Sep, 2011	U

(1) Rationale for non-elimination: "F"= Financial "H"= Human Resources "S"= State (Military/political) "O"= Other unknown causes

Deficiencies in the AIS/MAP 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 15: Para 6.	-	Lack of implementation of AIRAC System	May, 1995	ICAO to follow up with State	F H O	Need to fully comply with the AIRAC procedure	Iraq	Dec, 2011	U
2	ANNEX 4: Para. 16.2	-	Non-production of World Aeronautical Chart – ICAO 1:1 000 000	May, 1995	-	F H S	Need to produce the assigned sheets of the World Aeronautical Chart – ICAO 1:1 000 000	Iraq	Dec, 2011	B
3	ANNEX 4: Para. 7.2	-	Non-production of the Enroute Chart-ICAO	May, 1995	-	F H O	Need to produce the Enroute Chart-ICAO	Iraq	Dec, 2011	A
4	ANNEX 4: Para. 13.2	-	Non-production of Aerodrome/ Heliport Chart - ICAO	May, 1995	-	F H O	Need to produce Aerodrome/ Heliport Chart - ICAO for all Int`l Aerodromes	Iraq	Dec, 2011	A
5	ANNEX 15: Para 4.1.1	-	Newly Restructured AIP	Jun, 1996	An incomplete electronic version of the AIP is available on the web	F H O	Need to produce and issue the new restructured AIP	Iraq	Dec, 2011	U
6	ANNEX 15: Para 3.7.1	-	Implementation of WGS-84	Dec, 1997	-	F H O	Need to complete implementation of WGS-84	Iraq	Dec, 2011	U

(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
7	ANNEX 15: Para. 3.2	-	Implementation of a Quality System	Jan, 2003	-	F H O	Need to introduce a properly organized quality system in conformity with ISO 9000 series of quality assurance standards.	Iraq	Dec, 2011	U
8	ANNEX 15: Para 4.2.9 & 4.3.7	-	Lack of regular and effective updating of the AIP	Jan, 2003	ICAO to follow up with State	F H O	Need to update the AIP on a regular basis	Iraq	Dec, 2011	U
9	ANNEX 15: Para. 5.2.8.3	-	Non-production of the monthly printed plain language summary of NOTAM	Jan, 2003	-	H O	Need to produce the monthly printed plain language summary of NOTAM	Iraq	Dec, 2011	A
10	ANNEX 4: Para. 11.2	-	Non-production of Instrument Approach Chart-ICAO	Jan, 2003	-	F H O	Need to produce Instrument Approach Chart-ICAO for all Int`l Aerodromes	Iraq	Dec, 2011	A
11	ANNEX 15: Para. 8.1	-	Non provision of pre-flight information service at international airports	Mar, 2004	-	F H O	Need to provide a pre-flight information service at all aerodromes used for international air operations.	Iraq	Dec, 2011	A

(1) Rationale for non-elimination: "F"= Financial "H"= Human Resources "S"= State (Military/political) "O"= Other unknown causes

Deficiencies in the AIS/MAP 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-productionof World Aeronautical Chart – ICAO1:1 000 000	Feb, 2008	-	~~F~~ ~~H~~ ~~S~~ H	Need to produce the assigned sheets of the World Aeronautical Chart – ICAO 1:1 000 000	Jordan	~~Dec, 2009~~ Jun, 2012	B

(1) Rationale for non-elimination: "F"= Financial "H"= Human Resources "S"= State (Military/political) "O"= Other unknown causes

Deficiencies in the AIS/MAP 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
1	ANNEX 15: Para. 3.2	-	Implementation of a Quality System	Jan, 2003	Work in progress	~~H~~ ~~O~~ H	Need to introduce a properly organized quality system in conformity with ISO 9000 series of quality assurance standards.	Kuwait	~~Dec, 2010~~ Dec, 2013	U

(1) Rationale for non-elimination: "F"= Financial "H"= Human Resources "S"= State (Military/political) "O"= Other unknown causes

Deficiencies in the AIS/MAP 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-productionof World Aeronautical Chart – ICAO1:1 000 000	May, 1995	-	F H S	Difference published in the AIP. There`s no plan to produce the required sheets of the WAC 1:1000 000	Lebanon	Dec, 2015	B
2	ANNEX 15:Para. 3.2	-	Implementation of a Quality System	Jan, 2003	-	F H	Need to introduce a properly organized quality system in conformity with ISO 9000 series of quality assurance standards.	Lebanon	Dec, 2010	U
3	ANNEX 15:Para. 3.7.2.4	-	Implementation of geoid undulation referenced to the WGS-84 ellipsoid.	Jan, 2003	ICAO to follow up with State to determine what action is needed to achieve implementation.	F H	Need to implement geoid undulation referenced to the WGS-84 ellipsoid.	Lebanon	Dec, 2011	A

(1) Rationale for non-elimination: "F"= Financial "H"= Human Resources "S"= State (Military/political) "O"= Other unknown causes

Deficiencies in the AIS/MAP 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. 3.2	-	Implementation of a Quality System	Jan, 2003	-	O	Need to introduce a properly organized quality system in conformity with ISO 9000 series of quality assurance standards.	Oman	Dec, 2012	U
2	ANNEX 15: Para. 3.6.5and 8.2	-	Lack of AIS automation	Jul, 2005	-	O	AIS automation should be introduced with the objective of improving the speed, accuracy, efficiency and cost-effectiveness of aeronautical information services	Oman	~~Dec, 2011~~ Dec, 2014	A

(1) Rationale for non-elimination: "F"= Financial "H"= Human Resources "S"= State (Military/political) "O"= Other unknown causes

Deficiencies in the AIS/MAP 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
~~1~~	~~ANNEX 15:Para. 3.2~~	~~-~~	~~Implementation of a Quality System~~	~~Jan, 2003~~	~~-~~	~~H O~~	~~Need to introduce a properly organized quality system in conformity with ISO 9000 series of quality assurance standards.~~	~~Qatar~~	~~Mar, 2011~~	~~U~~

(1) Rationale for non-elimination: "F"= Financial "H"= Human Resources "S"= State (Military/political) "O"= Other unknown causes

Deficiencies in the AIS/MAP 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 4: Para. 16.2	-	Non-productionof World Aeronautical Chart – ICAO1:1 000 000	May, 1995	-	O	Need to produce the assigned sheets of the World Aeronautical Chart – ICAO 1:1 000 000	Saudi Arabia	Jun, 2011	B
~~2~~	~~ANNEX 4: Para. 7.2~~	~~-~~	~~Non-production of the Enroute Chart-ICAO~~	~~May, 1995~~	~~-~~	~~H O~~	~~Need to produce the Enroute Chart-ICAO~~	~~Saudi Arabia~~	~~Dec, 2011~~	~~A~~
~~3~~	~~ANNEX 15: Para. 3.2~~	~~-~~	~~Implementation of a Quality System~~	~~Jan, 2003~~	~~-~~	~~H~~	~~Need to introduce a properly organized quality system in conformity with ISO 9000 series of quality assurance standards.~~	~~Saudi Arabia~~	~~Jun, 2011~~	~~U~~
~~4~~	~~ANNEX 15: Para. 3.7.2.4~~	~~-~~	~~Implementation of geoid undulation referenced to the WGS-84 ellipsoid.~~	~~Jan, 2003~~	~~ICAO to follow up with State to determine what action is needed to achieve implementation.~~	~~O~~	~~Need to implement geoid undulation referenced to the WGS-84 ellipsoid.~~	~~Saudi Arabia~~	~~Jun, 2011~~	~~A~~
5	ANNEX 15: Para. 8.1	-	AIS Aerodrome Units not established at International Airports and pre-flight information service not provided	Nov, 2007	-	O	Need to provide a pre-flight information service at all aerodromes used for international air operations.	Saudi Arabia	Mar, 2011	A

(1) Rationale for non-elimination: "F"= Financial "H"= Human Resources "S"= State (Military/political) "O"= Other unknown causes

Deficiencies in the AIS/MAP 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 implementation of AIRAC System	May, 1995	ICAO to follow up with State	F H	Need to fully comply with the AIRAC procedure	Syria	Dec, 2010	U
2	ANNEX 4: Para. 16.2	-	Non-productionof World Aeronautical Chart – ICAO1:1 000 000	May, 1995	-	F H S	Need to produce the assigned sheets of the World Aeronautical Chart – ICAO 1:1 000 000	Syria	Dec, 2010	B
3	ANNEX 15: Para. 3.2	-	Implementation of a Quality System	Jan, 2003	-	F H	Need to introduce a properly organized quality system in conformity with ISO 9000 series of quality assurance standards.	Syria	Dec, 2010	U
4	ANNEX 15: Para. 3.7.2.4	-	Implementation of geoid undulation referenced to the WGS-84 ellipsoid.	Jan, 2003	ICAO to follow up with States to determine what action is needed to achieve implementation.	F H	Need to implement geoid undulation referenced to the WGS-84 ellipsoid.	Syria	Dec, 2010	A
5	ANNEX 15: Para 4.2.9 & 4.3.7	-	Lack of regular and effective updating of the AIP	Jul, 2005	ICAO to follow up with State	F H O	Need to update the AIP on a regular basis	Syria	Dec, 2011	U
6	ANNEX 15 Para. 3.1.1.2, 3.1.5, 3.1.6 & 4.1	-	Lack of consistency between the different Sections of the AIP containing the same information.	Jul, 2005	-	H	Need to review the AIP for consistency	Syria	Dec, 2011	U

(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**
7	ANNEX 15: Para. 3.6.5	-	Lack of AIS automation	Jul, 2005	-	F H	AIS automation should be introduced with the objective of improving the speed, accuracy, efficiency and cost-effectiveness of aeronautical information services	Syria	Dec, 2010	A
8	ANNEX 15: Para. 8.1	-	Non provision of pre-flight information service at international airports	Jul, 2005	-	F H	Need to provide a pre-flight information service at all aerodromes used for international air operations.	Syria	Dec, 2010	A

(1) Rationale for non-elimination: "F"= Financial "H"= Human Resources "S"= State (Military/political) "O"= Other unknown causes

Deficiencies in the AIS/MAP 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
~~1~~	~~ANNEX 15: Para. 3.6.5~~	~~-~~	~~Lack of AIS automation~~	~~Mar, 2007~~	~~Contract signed~~	~~O~~	~~A project implementing an electronic AIP basedn AIXM 4.5 was completed in Q2/2010. However, difficulties related to the automatic production of charts sre not yt resolved. Migration to AIXM 5.1 is in progress; the project planned for completion in March 2011~~	~~UAE~~	~~Mar, 2011~~	~~A~~
2	ANNEX 15: Para. 3.2	-	The scope and objectives of the quality system implemented do not fully address the requirements of ICAO Annex 15	Jun, 2007	-	O	a properly organized quality system for AIS, which provides users with the necessary assurance and confidence that distributed aeronautical information/data satisfy stated requirements for data quality and for data traceability by the use of appropriate p	UAE	~~Mar, 2011~~ Dec, 2011	U

(1) Rationale for non-elimination: "F"= Financial "H"= Human Resources "S"= State (Military/political) "O"= Other unknown causes

Deficiencies in the AIS/MAP 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 implementation of AIRAC System	May, 1995	ICAO to follow up with State	H O	Need to fully comply with the AIRAC procedure	Yemen	Dec, 2011	U
2	ANNEX 4: Para. 16.2	-	Non-productionof World Aeronautical Chart – ICAO1:1 000 000	May, 1995	-	~~F H S~~ F	Need to produce the assigned sheets of the World Aeronautical Chart – ICAO 1:1 000 000	Yemen	~~Dec, 2011~~ Dec, 2013	B
~~3~~	~~ANNEX 4: Para. 7.2~~	~~-~~	~~Non-productionof the Enroute Chart-ICAO~~	~~May, 1995~~	~~-~~	~~F H~~	~~Need to produce the Enroute Chart-ICAO~~	~~Yemen~~	~~Dec, 2011~~	~~A~~
4	ANNEX 15: Para. 3.2	-	Implementation of a Quality System	Jan, 2003	-	~~F H~~ F	Need to introduce a properly organized quality system in conformity with ISO 9000 series of quality assurance standards.	Yemen	~~Dec, 2011~~ Dec, 2013	U
5	ANNEX 4: Para. 11.2	-	Non-productionof Instrument Approach Chart-ICAO	Jan, 2003	Yemen has produced the Instrument Approach Chart-ICAO except for TAIZ Intl Airport	O	~~Need to produce Instrument Approach Chart-ICAO for all Int`l Aerodromes~~ RNAV procedures are under development for Taiz aiport	Yemen	~~Dec, 2011~~ Dec, 2012	A
6	ANNEX 15: Para. 8.1	-	Non provision of pre-flight information service at international airports	Mar, 2004	-	F H	Need to provide a pre-flight information service at all aerodromes used for international air operations.	Yemen	Dec, 2011	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
7	ANNEX 15: Para. 3.6.5	-	Lack of AIS automation	Jul, 2005	-	~~F~~ ~~H~~ F	AIS automation should be introduced with the objective of improving the speed, accuracy, efficiency and cost-effectiveness of aeronautical information services	Yemen	~~Dec, 2011~~ Dec, 2013	A

[(1)] 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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(1) Rationale for non-elimination: "F"= Financial "H"= Human Resources "S"= State (Military/political) "O"= Other unknown causes

AIS/MAP TF/6
Report on Agenda Item 5

REPORT ON AGENDA ITEM 5: REVIEW OF THE AIS/AIM PARTS OF THE MID AIR NAVIGATION PLAN (ANP)

5.1 The meeting recalled that MIDANPIRG/12 recalled that in many occasions, the usefulness and effectiveness of the Air Navigation Plans were questioned, in particular, when it comes to duplication of some Annexes provisions in the Basic ANP or reproduction of the data published in the Aeronautical Information Publications in the FASID Tables. In this regard, it was highlighted that the ANPs should set forth in detail the facilities, services and procedures required for international air navigation within a specified area. Such plans contain recommendations that States can follow in programming the provision of their air navigation facilities and services, with the assurance that facilities and services furnished in accordance with the plan will form with those of other States an integrated system adequate for the foreseeable future. The meeting further noted that the ANP, does not list all facilities in the region but only those required for international civil aviation operations; the aeronautical information publications, NOTAM and other State documents should be consulted for information on additional facilities and for operational information in general.

5.2 It was highlighted that the current format and content of the regional ANPs as well as the amendment process do not meet the need of States and users and are inconsistent with the new requirements set-forth by the ATM Operational Concept, the Global ANP and the Performance Based Approach. Accordingly, through Decision 12/49, MIDANPIRG/12 agreed that a significant revision of the current regional ANPs, format and content is therefore required in order to meet the intended objectives and increase their effectiveness.

DECISION 12/49: REVIEW OF THE MID AIR NAVIGATION PLAN (ANP)

That, in support to ICAO efforts to improve regional ANPs, the MIDANPIRG subsidiary bodies:

a) carry out a complete review of the MID Basic ANP and FASID parts related to their Terms of Reference (TOR) and Work Programme;

b) develop revised draft structure and content of the Basic ANP in order to reconcile it with the ATM Operational Concept, the Global Plan provisions and the performance based approach;

c) identify the need for and development of those FASID Tables necessary to support the implementation of a performance-based global air navigation systems; and

d) report progress to MIDANPIRG/13.

5.3 In the same vein, the meeting recalled that, MIDANPIRG/12, through Decision 12/35, tasked the AIS/MAP Task Force, as part of its Work Programme, to carry out a review of the AIS parts of the MID Basic ANP and FASID in order to introduce/develop planning material related to the transition from AIS to AIM.

5.4 The meeting noted that a similar work is being carried out in the European Region. In this regard, the meeting was apprised of the outcome of the EUR ANP AIM Task Force.

5.5 The meeting reviewed and supported the following ANP material related to AIM, which was developed by the Secretariat based on the work carried out in the European Region:

a) **Appendix 5A** to the report on Agenda Item 5: draft version of the MID Basic ANP, Part xx-AIM;

b) **Appendix 5B** to the report on Agenda Item 5: draft version of the Introduction part of the MID FASID Part xx-AIM;

c) **Appendix 5B1** to the report on Agenda Item 5: FASID Table AIM-1 setting out the responsibilities for the provision of AIM services in the MID Region;

d) **Appendix 5B2** to the report on Agenda Item 5: FASID Table AIM-2 setting out the requirements for the Provision of AIM products and services based on the Integrated Aeronautical Information Database (IAID);

e) **Appendix 5B3** to the report on Agenda Item 5: FASID Table AIM-3 setting out the requirements for the provision of Terrain and Obstacles datasets and Airport mapping Databases (AMDB);

f) **Appendix 5B4** to the report on Agenda Item 5: FASID Table AIM-4 setting out the requirements for aeronautical data quality;

g) **Appendix 5B5** to the report on Agenda Item 5: FASID Table AIM-5 setting out the requirements for the implementation of the World Geodetic System – 1984 (WGS-84);

h) **Appendix 5B6** to the report on Agenda Item 5: FASID Table AIM-6 setting out the requirements for the production of aeronautical charts;

i) **Appendix 5B7** to the report on Agenda Item 5: FASID Table AIM-7 setting out the responsibilities for the production of the sheets of the World Aeronautical Chart 1: 1 000 000;

j) **Appendix 5B8** to the report on Agenda Item 5: FASID Table AIM-8 setting out the requirements for the provision of pre-flight information services; and

k) **Appendix 5B9** to the report on Agenda Item 5: FASID Table AIM-9 setting out the requirements for AIM Certification.

5.6 Based on the above, the meeting urged all the members of the Task Force to review the new Basic ANP and FASID AIM Parts and Tables, and provide their comments to the Secretariat before **15 September 2011** for review by the ATM/SAR/AIS SG/12 meeting.

AIS/MAP TF/6
Appendix 5A to the Report on Agenda Item 5

PART xx - AERONAUTICAL INFORMATION MANAGEMENT (AIM)

1. INTRODUCTION

Regional AIS/AIM Planning

1.1 This part of the Middle East Basic Air Navigation Plan contains basic planning principles, operational requirements, planning criteria and implementation guidelines related to Aeronautical Information Services and Charts (AIS/MAP) considered to be the minimum necessary for effective planning of AIS and MAP facilities and services in the Middle East Region. It contains also the developing transition path to achieve MID Region Aeronautical Information Management (AIM) based on the *ATM Operational Concept (Doc 9854)* and the *Global Air Navigation Plan (Doc 9750).*

1.2 The dynamic material constituted by the AIS/AIM facilities and services required for international air navigation is contained in the MID ANP Volume 2 - Facilities and Services Implementation Document (FASID). The FASID would also include appropriate additional guidance, particularly with regard to implementation, to complement the material contained in the Basic ANP.

1.3 During the transition to and pending full implementation of AIM, it is expected that the existing requirements will be gradually replaced by the new AIM related requirements. Subsequently, it is expected that some elements of the ANP will be subject to amendment, as necessary, on the basis of experience gained in the implementation.

Standards, Recommended Practices and Procedures

1.4 The Standards, Recommended Practices and Procedures and related guidance material applicable to the provision of AIS and ultimately AIM are contained in the following ICAO documentation:

a) Annex 4 – Aeronautical Charts;
b) Annex 15 - Aeronautical Information Services;
c) Doc 7030 - Regional Supplementary Procedures, EUR Region;
d) Doc 7383 - Aeronautical Information Services Provided by States;
e) Doc 7910 – Location Indicators;
f) Doc 8126 – Aeronautical Information Services Manual;
g) Doc 8168 – Aircraft Operations Volume 2 – Construction of Visual and Instrument Flight Procedures;
h) Doc 8400 - ICAO Abbreviations and Codes (PANS-ABC);
i) Doc 8697 - Aeronautical Charts Manual;
j) Doc 9377 - Manual on Coordination between Air Traffic Services, Aeronautical Information Services and Aeronautical Meteorological Services;
k) Doc 9674 – World Geodetic System (1984) Manual;
l) Doc 9855 – Guidelines on the Use of the Public Internet for Aeronautical Applications; and
m) Doc 9881- Guidelines for Electronic Terrain, Obstacle and Aerodrome Mapping Information.

2. GENERAL PROCEDURES/REQUIREMENTS

MID Regional Office and MIDANPIRG Responsibilities

2.1 The ICAO MID Regional Office, in accordance with the Middle East Planning and Implementation Regional Group (MIDANPIRG) policy and directions, will:

i) support States and provide necessary assistance and guidance to improve the AIM services in the MID Region;

ii) process endorsed proposals for amendment to ICAO AIS/AIM related documents; and

iii) support the MIDANPIRG AIM Task Force.

State Responsibilities

2.2 Each Contracting State is responsible for the aeronautical information/data published by its aeronautical information service or by another State or a non-governmental agency on its behalf.

2.3 Aeronautical information published for and on behalf of a State should clearly indicate that it is published under the authority of that State.

2.4 Each Contracting State should take all necessary measures to ensure that the aeronautical information/data it provides relating to its own territory, as well as areas in which the State is responsible for providing air traffic services outside its territory, is adequate, of required quality and timely. This should include arrangements for the timely provision of required information/data to the aeronautical information service by each of the State services associated with aircraft operations.

2.5 International NOTAM Offices (NOF) and their areas of responsibility should be established so as to ensure maximum efficiency in the provision of AIS and in the dissemination of aeronautical information.

2.6 The designated International NOTAM Offices for the MID Region are listed in the ***MID ANP Volume 2 - FASID Table AIM-1***.

2.7 Coordination/liaison on a permanent basis should be established between AIS/AIM and other technical services responsible for planning and operating air navigation facilities and services.

2.8 Technical services responsible for origination of the raw aeronautical information should be acquainted with the requirements for promulgation and advance notification of changes that are operationally significant as established in Annexes 11 and 14 and other relevant ICAO documentation. They should take due account of the time needed by AIS/AIM for the preparation, production and issue of the relevant material.

2.9 Appropriate AIS/AIM personnel should be included in the air navigation planning processes. This should ensure the timely preparation of appropriate AIS documentation and that the effective dates for changes to the air navigation system and procedures are satisfied.

2.10 Whilst Annex 4 and 15 detail the SARPS for the provision of charts and AIS respectively, the following State responsibilities are highlighted:

a) Each Contracting State should:

i) Arrange for the implementation of a quality management system for aeronautical information and chart services. The quality management system should include the necessary policies, processes and procedures, including those for the use of metadata, to ensure and verify that aeronautical data is traceable throughout the aeronautical information data chain from origin to distribution to the next intended user. As part of the quality management system, arrangements should be made for the signature of letters of agreement with data originators to manage the aeronautical information data chain.

ii) Ensure Human Factors are considered.

iii) Ensure adherence to the AIRAC System.

iv) Ensure that the aeronautical information/data to be exchanged with States is published as an Integrated Aeronautical Information Package (i.e. Aeronautical Information Publication (AIP), including amendment service, AIP Supplements, NOTAM, pre-flight information bulletins (PIB), Aeronautical Information Circulars (AIC), checklists and list of valid NOTAM) in accordance with the requirements of Annex 15.

v) Arrange for the provision of an electronic AIP (eAIP) in accordance with the requirements of Annex 15.

vi) Comply with WGS 84 requirements (GPI-20 refers).

vii) Introduce automation enabling digital data exchange with the objective of improving the speed, accuracy, efficiency and cost-effectiveness of aeronautical information services.

viii) Ensure that pre-flight information is provided at all aerodromes/heliports normally used for international air operation, in accordance with the requirements of Annex 15, using Automated pre-flight information systems for the supply of aeronautical information/data for self-briefing, flight planning and flight information service.

ix) Arrange for the provision of post-flight information.

x) Arrange for the provision of required electronic Terrain and Obstacle Data (eTOD), in accordance with the requirements of Annex 15.

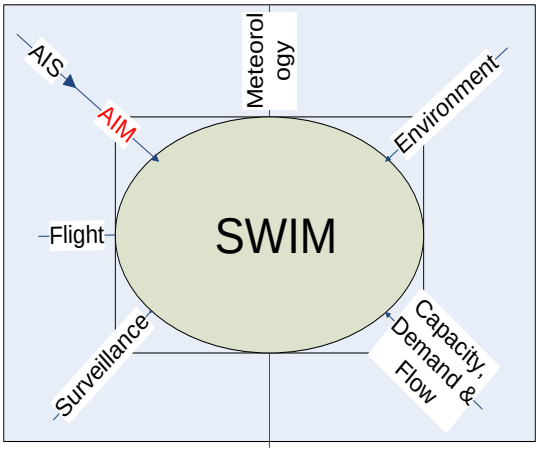
xi) Arrange for the production and publication of necessary aeronautical charts in accordance with Annex 4 provisions and regional agreements.

3. AERONAUTICAL INFORMATION MANAGEMENT

3.1. The Global Air Traffic Management Operational Concept presented in ICAO Doc 9854 depends upon a system wide information management (SWIM) system. The management, utilization and transmission of data and information are vital to the proper functioning of the ATM system and are at the core of air navigation services.

3.2. As part of system-wide information management (SWIM), AIM is required to support evolving requirements for, inter alia, collaborative decision making (CDM), performance-based navigation (PBN), ATM system interoperability, network-centred information exchange, and to take advantage of improved aircraft capabilities.

3.3. The scope of information management includes all types of information and in particular aeronautical information. The relationship diagram below shows a number of the core elements of a SWIM System:



Aeronautical information management (AIM) is considered to be the dynamic, integrated management of aeronautical information services — safely, economically and efficiently — through the provision and exchange of quality-assured digital aeronautical data in collaboration with all parties.

TRANSITION TO AIM

3.4. The transition to AIM requires that all aeronautical information, including that currently held in aeronautical information publications (AIPs) be stored as individual digital standardized data sets to be accessed by user applications. The distribution of these data sets will both enhance the quality of output and ultimately provide a platform for new applications. This will constitute the future integrated aeronautical information package that will contain the minimum regulatory requirement to ensure the flow of information necessary for the safety, regularity and efficiency of international air navigation. (GPI-18 refers).

Guiding Principles for the Transition to AIM

3.5. The transition from AIS to AIM will have to:

a) support or facilitate the generation and distribution of aeronautical information which serves to improve the safe and cost-effective accessibility of air traffic services in the world;

b) provide a foundation for measuring performance and outcomes linked to the distribution of quality assured aeronautical information and a better understanding of the determinants of ATM, safety and effectiveness not related to the distribution of the information;

c) assist States in making informed choices about their aeronautical information services and the future of AIM;

d) build upon developments in States, international organizations and industry and acknowledge that the transition to AIM is a natural evolution rather than a revolution;

e) provide over-arching and mature Standards that apply to a wide range of aeronautical information products, services and technologies;

f) be guided by the *Global Air Navigation Plan* (Doc 9750) and ensure that all development is aimed at achieving the ATM system envisaged in the *Global Air Traffic Management Operational Concept* (Doc 9854); and

g) ensure, to the greatest extent possible, that solutions are internationally harmonized and integrated and do not unnecessarily impose multiple equipment carriage requirements for aircraft or multiple systems on the ground.

The Roadmap to AIM

Source Document: ICAO Roadmap for the Transition from AIS to AIM

3.6. The purpose of the Roadmap is to develop the AIM concept and associated performance requirements by providing a basis upon which to manage and facilitate, on a worldwide basis, the transition from AIS to AIM. The roadmap is based on what is known today and has been developed with sufficient flexibility to facilitate the new concepts that will emerge from future research.

3.7. Three phases of action are envisaged for States and ICAO to complete the transition to AIM:

Phase 1 — Consolidation

3.8. During Phase 1, steps will be taken to establish a solid base by enhancing the quality of the existing products and improving the status of implementation of current Annex 4 and Annex 15 provisions. This is a pre-requisite before Phase 2 can be achieved.

Phase 2 — Going digital

3.9. Phase 2 of the transition to AIM will mainly focus on the establishment of data-driven processes for the production of the current products in all States. States that have not yet done so will be encouraged “to go digital” by using computer technology or digital communications and through introducing structured digital data from databases into their production processes. The emphasis will, therefore, not be on the introduction of new products or services but will be on the introduction of highly structured databases and tools such as geographic information systems.

Phase 3 — Information management

3.10. Phase 3 will introduce steps to enable future AIM functions in States to address the new requirements that will be needed to implement the Global Air Traffic Management Operational Concept in a net centric information environment.

The digital databases introduced in Phase 2 will be used for the transfer of information in the form of digital data. This will require the adoption of a Standard for an aeronautical data exchange model to ensure interoperability between all systems not only for the exchange of full aeronautical data sets, but also for short-term notification of changes.

National Plans for the transition to AIM

3.11. States should be planning for the transition from AIS to AIM. The national plans for the transition from AIS to AIM should be based on the ICAO Roadmap for the transition from AIS to AIM, identifying clearly the associated performance goals and achievable milestones with a view to satisfy the requirements arising from the Global ATM Operational Concept, in particular the management of a seamless information flow ensuring interoperability between the different CNS/ATM systems.

3.12. Additional guidance, particularly with regard to AIM implementation, as well as information on States progress towards transition to AIM is shown in **Volume 2 – MID FASID Part xx-AIM**.

AIS/MAP TF/6
Appendix 5B to the Report on Agenda Item 5

MID ANP, VOLUME II, FASID

PART xx - AERONAUTICAL INFORMATION MANAGEMENT (AIM)

1. INTRODUCTION

1.1. The material in this part complements that contained in Part xx — AIM of the MID Basic ANP and should be taken into consideration in the overall planning processes for the MID Region.

1.2. This part contains the details of the facilities and services to be provided to fulfill the basic requirements of the plan as agreed between the provider and user States concerned. Such agreement indicates a commitment on the part of the State(s) concerned to implement the requirement(s) specified. This element of the FASID, in conjunction with the MID Basic ANP, is kept under constant review by MIDANPIRG in accordance with its schedule of management, in consultation with user and provider States and with the assistance of the ICAO MID Regional Office.

1.3. Detailed guidance related to the provision of AIS is contained in ICAO Doc 8126, Aeronautical Information Services Manual.

1.4. Detailed guidance related to the production of aeronautical charts is contained in ICAO Doc 8697, Aeronautical Charts Manual.

1.5. (Brief overview on AIM implementation scope, objectives, etc: To be developed)

2. ORGANISATION AND PROVISION OF AIM FACILITIES AND SERVICES

2.1. FASID Table AIM-1 sets out the responsibilities for the provision of AIM services in the MID Region. …

2.2. FASID Table AIM-2 sets out the requirements for the Provision of AIM products and services based on the Integrated Aeronautical Information Database (IAID). …

2.3. FASID Table AIM-3 sets out the requirements for the provision of Terrain and Obstacles datasets and Airport mapping Databases (AMDB). …

2.4. FASID Table AIM-4 sets out the requirements for aeronautical data quality. …

2.5. FASID Table AIM-5 sets out the requirements for the implementation of the World Geodetic System – 1984 (WGS-84). …

2.6. FASID Table AIM-6 sets out the requirements for the production of aeronautical charts. …

2.7. FASID Table AIM-7 sets out the responsibilities for the production of the sheets of the World Aeronautical Chart 1: 1 000 000. …

2.8. FASID Table AIM-8 sets out the requirements for the provision of pre-flight information services. …

2.9. FASID Table AIM-9 sets out the requirements for AIM Certification. …

3. AIM IMPLEMENTATION

3.1. (guidance to States with regard to AIM implementation, AIM business planning, etc): To be developed

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AIS/MAP TF/6
Appendix 5B1 to the Report on Agenda Item 5

Table AIM-1

Responsibility for the provision of AIM Services

EXPLANATION OF THE TABLE

Column:

1 Name of the State or territory
2 Designated international NOTAM Office (NOF)
3 Designated State for AIP production
4 Designated State for aeronautical charts (MAP) production
5 Designated State for the provision of the authoritative Integrated Aeronautical Information Database (IAID)
6 Remarks — additional information, as appropriate.

FASID TABLE AIM-1
Responsibility for the provision of AIM Services

State	NOF	AIP	MAP	IAID	Remarks
1	2	3	4	5	6
Bahrain	Bahrain	Bahrain	Bahrain		
Egypt					
Iran					
Iraq					
Jordan					
Kuwait					
Lebanon					
Oman					
Qatar	Bahrain	Bahrain			
Saudi Arabia					
Syria					
UAE					
Yemen					

Table AIM-2

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

EXPLANATION OF THE TABLE

Column:

1 Name of the State or territory for which the provision of 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, 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 — 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:
FC – Fully compliant (eAIP: Text, Tables and Charts)
PC – Partially compliant
NC – Not compliant
Note 4 — AIP production includes, production of AIP, AIP Amendments and AIP Supplements

4 Requirement for an IAID driven NOTAM production, shown by:
FC – Fully Compliant
NC – Not compliant

5 Requirement for an IAID driven SNOWTAM production, shown by:
FC – Fully Compliant
NC – Not compliant

6 Requirement for an IAID driven PIB production, shown by:
FC – Fully 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

8 Requirement for Procedure design systems to be interoperable with the IAID, shown by:
FI – Fully Implemented
PI – Partially Implemented
NI – Not Implemented

9 Requirement for ATS systems to be interoperable with the IAID, shown by:
FI – Fully Implemented
PI – Partially Implemented
NI – Not Implemented

10 Action Plan — short description of the State's Action Plan with regard to the provision of AIM products and services based on the IAID, including planned date(s) of full compliance, as appropriate.

11 Remarks — additional information, including detail of "PC", "NC", "PI" and "NI", as appropriate.

FASID TABLE AIM-2
Integrated Aeronautical Information Database (IAID)

State	IAID	AIP	NOTAM	SNOWTAM	PIB	Charting	Procedure design	ATS	Action Plan	Remarks
1	2	3	4	5	6	7	8	9	10	11
Bahrain										
Egypt										
Iran										
Iraq										
Jordan										
Kuwait										
Lebanon										
Oman										
Qatar										
Saudi Arabia										
Syria										
UAE										
Yemen										

AIS/MAP TF/6
Appendix 5B3 to the Report on Agenda Item 5

Table AIM-3

Terrain and Obstacles datasets and Airport Mapping Databases (AMDB)

EXPLANATION OF THE TABLE

Column

1 Name of the State or territory for which Terrain and Obstacles datasets and AMDB are required.

2 Compliance with requirement for the provision of Terrain datasets, shown by:
FC – Fully compliant
PC – Partially compliant
NC – Not compliant

3 Compliance with requirement for the provision of Obstacle datasets, shown by:
FC – Fully compliant
PC – Partially compliant
NC – Not compliant

4 Implementation of AMDB, shown by:
FI – Fully Implemented
PI – Partially Implemented
NI – Not implemented

5 Action plan — short description of the State's Action Plan with regard to compliance with the requirements for provision of Terrain and Obstacles datasets and implementation of AMDB.

6 Remarks— additional information, including detail of "PC" and "NC", as appropriate.

FASID TABLE AIM-3
Terrain and Obstacle datasets and Airport Mapping Database (AMDB)

State	Terrain Datasets	Obstacle datasets	AMDB	Action Plan	Remarks
1	**2**	**3**	**4**	**5**	**6**
Sample	PC	PC	PI	-Clmn 2: full implementation by 2014 - Clmn 3: full implementation by 2014 - Clmn 4: full implementation by 2016	-Clmn 2: Area 1 and Area 4 implemented - Clmn 3: Area 1 and Area 4 implemented - Clmn 4: 1 out of 16 international airports

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Table AIM-4

Aeronautical Data Quality

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
- PC – Partially 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
- PC – Partially compliant
- NC – Not compliant

9 Action Plan — short description of the State's Action Plan with regard to aeronautical data quality requirements implementation, including planned date(s) of full compliance, as appropriate.

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

FASID TABLE AIM-4
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
Bahrain									
Egypt									
Iran									
Iraq									
Jordan									
Kuwait									
Lebanon									
Oman									
Qatar									
Saudi Arabia									
Syria									
UAE									
Yemen									

AIS/MAP TF/6
Appendix 5B5 to the Report on Agenda Item 5

Table AIM-5

World Geodetic System-1984 (WGS-84)

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, including planned date(s) of full compliance, as appropriate.

7 Remarks — additional information, including detail of "PC" and "NC", as appropriate.

FASID TABLE AIM-5
World Geodetic System-1984 (WGS-84)

State	FIR/ENR	Terminal	AD	GUND	Action Plan	Remarks
1	2	3	4	5	6	7
Sample	FC	PC	FC	NC	timelines	70% of AD completed

AIS/MAP TF/6
Appendix 5B6 to the Report on Agenda Item 5

Table AIM-6

AERONAUTICAL CHARTS

EXPLANATION OF THE TABLE

Column

1 Name of the State or territory for which aeronautical charts are required.

2 Compliance with the requirements for the Enroute Chart — ICAO (ENRC) and the ATC Surveillance Minimum Altitude Chart — ICAO (ATCSMAC), shown by:
FC – Fully compliant
PC – Partially compliant
NC – Not compliant

3 Compliance with requirements for charts related to terminal areas (IAC, ARC, SID, STAR, VAC) shown by:
FC – Fully compliant
PC – Partially compliant
NC – Not compliant

4 Compliance with the requirement for Aerodrome charts (ADC, ADGMC and APDC), shown by:
FC – Fully compliant
PC – Partially compliant
NC – Not compliant

5 Compliance with the requirements for Obstacle Charts (AOC-A, PATC, AOC-E) shown by:
FC – Fully compliant)
PC – Partially compliant
NC – Not compliant

6 Compliance with the requirement for WAC, shown by:
FC – Fully compliant
PC – Partially compliant
NC – Not compliant

7 Action plan — short description of the State's Action Plan with regard to aeronautical charts implementation, including planned date(s) of full compliance, as appropriate.

8 Remarks— additional information, including detail of "PC" and "NC", as appropriate.

FASID TABLE AIM-6
Aeronautical Charts

State	ENR & ATCSMAC	Charts related to Terminal Areas	AD Charts	Obstacle Charts	WAC	Action Plan	Remarks
1	2	3	4	5	6	7	8

FASID Table AIM-7

PRODUCTION RESPONSIBILITY FOR SHEETS OF THE WORLD AERONAUTICAL CHART - ICAO 1:1 000 000

EXPLANATION OF THE TABLE

Column:

1 Name of the State accepting production responsibility.
2 World Aeronautical Chart — ICAO 1:1 000 000 sheet number(s) for which production responsibility is accepted.
3 Remarks.

Note 1— When Aeronautical Charts — ICAO 1:500 000 or Aeronautical Navigation Charts — ICAO Small Scale, are made available instead of the 1:1 000 000 chart, this is to be indicated in the Remarks column.

Note 2— In those instances where the production responsibility for certain sheets has been accepted by more than one State, these States by mutual agreement should define limits of responsibility for those sheets.

FASID Table AIM-7
Production responsibility for sheets of the World Aeronautical Chart - ICAO 1:1 000 000 (WAC)

State	Sheet number(s)	Remarks
Bahrain	2547	
Egypt	2447, 2448, 2543, 2544	
Iran, Islamic Republic of	2338, 2339, 2428, 2429, 2443, 2444, 2548	
Iraq	2427, 2445	
Israel		
Jordan	2426, 2446, 2447	*Note: Jordan to cover its own territory within Amman FIR*
Kuwait	2445	*Note: Kuwait to cover its own territory within Kuwait FIR*
Lebanon	2426	*Note: Lebanon to cover its own territory within Beirut FIR*
Oman	2563, 2670	
Qatar		
Saudi Arabia	2446, 2545, 2546, 2564, 2565, 2566, 2668, 2669	
Syrian Arab Republic	2426	*Note: Syria to cover its own territory within Damascus FIR*
United Arab Emirates		
Yemen	2686, 2687	

Table AIM-8

Pre-Flight Information Services

EXPLANATION OF THE TABLE

Column:

1 Name of the State or territory.

2 Compliance with the requirements for the provision of Pre-Flight Information Bulletins (PIB), shown by:

FC – Fully compliant, against each type of PIB
PC – Partially compliant, against each type of PIB
NC – Not compliant, against each type of PIB

Note 1 — AD: Aerodrome type bulletins
Area: Area type bulletins (FIR or group of FIRs or States)
FIR route: FIR route specific bulletin
Narrow route: Narrow path route specific bulletin

3 Compliance with the requirements for the availability of the elements of the Integrated Aeronautical Information Publications (IAIP), maps and charts to the flight operations personnel, shown by:

FC – Fully compliant
PC – Partially compliant
NC – Not compliant

4 Requirement for a common point of access to aeronautical information and meteorological information briefings, shown by:

FI – Fully Implemented
PI – Partially Implemented
NI – Not implemented

5 Action Plan — short description of the State's Action Plan with regard to Pre-Flight Information Services, including planned date(s) of full compliance, as appropriate.

6 Remarks — additional information, including detail of "PC", "NC", "PI" and "NI", as appropriate.

FASID TABLE AIM-8
Pre-Flight Information Services

State	PIB				IAIP	Aeronautical Information and Meteorological information Integrated Briefing	Action Plan	Remarks
	AD	Area	FIR route	Narrow route				
1	2				3	4	5	6
Bahrain								
Egypt								
Iran								
Iraq								
Jordan								
Kuwait								
Lebanon								
Oman								
Qatar								
Saudi Arabia								
Syria								
UAE								
Yemen								

AIS/MAP TF/6
Appendix 5B9 to the Report on Agenda Item 5

Table AIM-9

AIM Certification

EXPLANATION OF THE TABLE

Column:

1 Name of the State or territory for which implementation of AIM Certification is required.

2 Availability of AIM Regulations, shown by:

FC – Fully compliant
PC – Partially compliant
NC – Not compliant

Note.— Please provide in the Remarks column detail of "PC" and "NC".

3 Compliance with the requirements for the establishment of a Safety Oversight System for ensuring the effective implementation of safety-related policy and procedures in the area of AIM, shown by:

FC – Fully compliant
PC – Partially compliant
NC – Not compliant

Note 1.— Please provide in the Remarks column detail of "PC" and "NC".

Note 2.— A Safety Oversight System is based on the eight (8) Critical Elements (CEs) as defined in the ICAO Safety Oversight Manual (Doc 9734, Part A).

Note 3.— As part of the Safety Oversight System, States should, in particular:

a) establish an entity responsible for the safety oversight of the AIS/AIM service provider(s)(not necessarily limited to the safety oversight of AIM) with clearly defined functions and responsibilities, or delegate this function to a Regional/Sub-Regional Organization;

b) ensure the availability of sufficient number of qualified AIM inspectors;

c) establish minimum qualifications and experience for the AIM inspectorate staff ;

d) establish detailed job descriptions reflecting all the regulatory and safety oversight tasks for the AIM inspectorate staff;

e) establish the necessary procedures for the AIM inspectorate staff;

f) establish and implement a formal surveillance programme for the continuing supervision of the AIS/AIM service provider(s) and ensure that safety oversight is effectively conducted; and

g) *establish and implement a mechanism/system for the elimination of deficiencies identified by the AIM inspector*ate staff.

4 Compliance with the requirements for implementation of AIM certification, shown by:

FC – Fully compliant
PC – Partially compliant
NC – Not compliant

Note 4.— AIM Certification may be performed within the framework of ANS Certification

5 Action Plan — short description of the State's Action Plan with regard to the implementation of the different requirements of AIM certification, including planned date(s) of full compliance, as appropriate.

6 Remarks — additional information, including detail of "PC" and "NC", as appropriate.

FASID TABLE AIM-9
AIM Certification

State	AIM Regulations	AIM Safety Oversight	AIM Certification	Action Plan	Remarks
1	2	3	4	5	6
Bahrain					
Egypt					
Iran					
Iraq					
Jordan					
Kuwait					
Lebanon					
Oman					
Qatar					
Saudi Arabia					
Syria					
UAE					
Yemen					

REPORT ON AGENDA ITEM 6: MID REGION AIM PERFORMANCE OBJECTIVES

6.1 The meeting recalled that the Performance-Based Approach (PBA) adheres to strong focus on results through adoption of performance objectives and targets; collaborative decision making driven by the results; and reliance on facts and data for decision making. The assessment of achievements is periodically checked through a performance review, which in turn requires adequate performance measurement and data collection capabilities. In this regard, one of the key aspects of the performance based approach to air navigation planning is the development of performance objectives with related measurable indicators and metrics.

6.2 The meeting recalled the following Definitions:

a) *Performance Objective:* objectives defined to satisfy ATM community expectations;

b) *Performance Indicator:* Current/past performance, expected future performance as well as actual progress in achieving performance objectives is quantitatively expressed by means of performance indicators (also called Key Performance Indicators, or KPIs);

c) *Performance target*: Performance targets are closely associated with performance indicators: they represent the values of performance indicators that need to be reached or exceeded to fully achieve performance objective; and

d) *Metrics:* determine which data needs to be collected to calculate values of performance indicators. Metrics are challenging and expensive to collect; therefore it is important to keep them "SMART" (Specific, Measurable, Achievable, Realistic & Time-bound) and easy to measure.

6.3 In connection with the above, the meeting noted that MIDANPIRG/12 developed the following Conclusions related performance monitoring of the air navigation systems in the MID Region:

CONCLUSION 12/47: MID REGION PERFORMANCE METRICS

That:

a) the following MID Region Metrics be adopted for performance monitoring of the air navigation systems:

MID Metric 1: Number of accidents per 1,000 000 departures;

MID Metric 2: Percentage of certified international aerodromes;

MID Metric 3: Number of Runway incursions and excursions per year;

MID Metric 4: Number of States reporting necessary data to the MIDRMA on regular basis and in a timely manner;

MID Metric 5: *The overall collision risk in MID RVSM airspace;*

MID Metric 6: *Percentage of air navigation deficiencies priority "U" eliminated;*

MID Metric 7: *Percentage of instrument Runway ends with RNP/RNAV approach procedure; and*

MID Metric 8: *Percentage of en-route PBN routes implemented in accordance with the regional PBN plan.*

b) the MIDANPIRG subsidiary bodies monitor the Metrics related to their work programmes; develop associated performance targets and provide feed-back to MIDANPIRG.

CONCLUSION 12/48: *DATA COLLECTION FOR MID REGION PERFORMANCE METRICS*

That, States be invited to:

a) incorporate the agreed MID Region Performance Metrics into their National performance monitoring process;

b) collect and process relevant data necessary for performance monitoring of the air navigation systems to support the regional Metrics adopted by MIDANPIRG; and

c) submit this data to the ICAO MID Regional Office on a regular basis.

6.4 Taking into consideration the latest developments in the AIM field, especially the transition from AIS to AIM, the meeting reviewed and updated the AIM Performance Framework Forms (PFF) as at **Appendix 6A** to the Report on Agenda Item 6.

6.5 The following KPIs/Metrics were endorsed for AIM performance monitoring in the MID Region:

- number of States having fully implemented WGS 84: ***(7 States)***;
- number of States having organised eTOD awareness campaigns and training programmes: ***(5 States)***;
- number of States having implemented eTOD for Areas 1 & 4: ***(5 States)***;
- Number of deficiency in the AIS/MAP filed Priority "U" eliminated: ***(2)***;
- Number of States having implemented QMS: ***(6 States)***;
- Number of States having developed eAIP: ***(2 States)***;
- Number of States having developed a National Plan for the transition from AIS to AIM: ***(5 States)***;
- Number of States having implemented an AIXM based AIS Database: ***(5 States);***
- Number of States having implemented an Integrated Aeronautical Information Database (IAID): **(0 State)**.

6.6 Based on the above, the meeting urged States to develop/update their National AIM PFFs in order to ensure their alignment with and support to the regional AIM performance objectives and forward their inputs and National PFFs to the ICAO MID Office prior to 15 September 2011 for review by the ATM/SAR/AIS SG/12 meeting.

AIS/MAP TF/6
Appendix 6A to the Report on Agenda Item 6

MID REGIONAL PERFORMANCE OBJECTIVES
AIM PERFORMANCE OBJECTIVES

IMPLEMENTATION OF WGS-84 AND eTOD	
Benefits	
Environment	• Supporting benefits described in performance objectives for PBN
Efficiency	• benefits described in performance objectives for PBN • efficient use of airspace
Safety	• improve situational awareness • support determination of emergency contingency procedures • improve safety in general
KPI	• status of implementation of WGS-84 in the MID Region • status of implementation of eTOD in the MID Region (for Areas 1 & 4)
Proposed Metrics:	• number of States having fully implemented WGS 84 • number of States having organised eTOD awareness campaigns and training programmes • number of States having implemented eTOD for Areas 1 & 4

Strategy
Short term (2010-2012)
Medium term (2013 - 2016)

ATM OC COMPONENTS	TASKS	TIMEFRAME START-END	RESPONSIBILITY	STATUS
ATM AUO	**WGS-84**			
	• establish WGS-84 implementation goals in coordination with the national PBN implementation plan	2009-2010	States	valid
	• complete WGS-84 implementation	2012	States	valid
	• monitor the implementation of WGS-84 until complete implementation of the system by all States and take remedial action, as appropriate	ongoing	ICAO & AIS/MAP TF	valid
ATM CM, ATM SDM	**eTOD**			
	• promote the awareness about the requirements for the provision of electronic Terrain and Obstacle Data (eTOD)	ongoing	ICAO & AIS/MAP TF & States	valid
	• harmonize, coordinate and support the eTOD implementation activities on a regional basis	ongoing	ICAO & AIS/MAP TF	valid

Strategy ***Short term (2010-2012)*** ***Medium term (2013 - 2016)***				
ATM OC COMPONENTS	**TASKS**	**TIMEFRAME START-END**	**RESPONSIBILITY**	**STATUS**
	• provide Terrain and Obstacle data for area 1	2008-2012~~0~~	States	valid
	• provide Terrain and Obstacle data for area 4	2008-2012~~0~~	States	valid
	• assessment of Annex 15 requirements related to the provision of eTOD for area 2 and area 3	2010-2012	States	valid
	• development of an action plan for the provision of eTOD for area 2 and area 3	2013	States	valid
	• provide necessary Terrain and Obstacle data for area 2	2015	States	valid
	• provide necessary Terrain and Obstacle data for area 3	2015	States	valid
Linkage to GPIs	GPI-5: Performance-based navigation GPI-11: RNP and RNAV SIDs and STARs GPI-9: Situational awareness GPI-18: Aeronautical Information GPI-20: WGS-84 GPI-21: Navigation systems			

AIM PERFORMANCE OBJECTIVES

REGIONAL PERFORMANCE OBJECTIVES TRANSITION FROM AIS TO AIM	
Benefits	
Environment	• reductions in fuel consumption
Efficiency	• improved planning and management of flights • efficient use of airspace
Safety	• improved safety
KPI	• Status of implementation of the AIRAC system in the MID Region • Status of implementation of QMS in the MID Region • Status of implementation of AIS Automation in the MID Region
Proposed Metrics:	• Number of deficiency Priority "U" related to the AIS/MAP field • Number of States having implemented QMS • Number of States having developed eAIP • Number of States having developed a National Plan for the transition from AIS to AIM • Number of States having implemented an AIXM based AIS Database • Number of States having implemented an Integrated Aeronautical Information Database (IAID)

Strategy
Short term (2010-2012)
Medium term (2013 - 2016)

ATM OC COMPONENTS	TASKS	TIMEFRAME START-END	RESPONSIBILITY	STATUS
AUO, ATM SDM	• improve the compliance with the AIRAC system	Ongoing	States & AIS/MAP TF	valid
	• use of the internet, including the ICAO MID Forum, for the advance posting of the aeronautical information considered of importance to users	~~2009-2011~~ Ongoing	States & ICAO	valid
	• signature of Service Level Agreements between AIS and data originators	2009-2015~~1~~	States	valid
	• foster the implementation of QMS based on the MID Region Methodology for the implementation of QMS and the Eurocontrol CHAIN deliverables	~~2009-2011~~ Ongoing	ICAO & AIS/MAP TF & States	valid
	• monitor the implementation of QMS until complete implementation of the requirements by all MID States	~~2008-2013~~ Ongoing	ICAO & AIS/MAP TF	valid
	• review and update the deficiencies in the AIS/MAP field and provide necessary guidance for their elimination	Ongoing	ICAO & AIS/MAP TF	valid

Strategy ***Short term (2010-2012)*** ***Medium term (2013 - 2016)***				
ATM OC COMPONENTS	**TASKS**	**TIMEFRAME START-END**	**RESPONSIBILITY**	**STATUS**
	• foster the development of eAIPs by MID States	~~2009-2013~~ Ongoing	States & AIS/MAP TF	valid
AUO, ATM SDM	• monitor the implementation of AIS automation in the MID Region in order to ensure availability, sharing and management of electronic aeronautical information;	2008-2013	ICAO & AIS/MAP TF	valid
	• establishment of Integrated Aeronautical Information Database (IAID)	2011-2016	States	valid
	• foster the development of ~~national/r~~Regional/Sub-regional AIS databases.	2011~~0~~-2015	ICAO & AIS/MAP TF & States	valid
	• foster the implementation of Aerodrome mapping and electronic aeronautical charts in the MID Region	2012-2016	ICAO & AIS/MAP TF & States	valid
	• foster the integrated improvement of AIS/AIM through proper training and qualification of the AIS/AIM personnel in the MID Region	2011-2016	ICAO & AIS/MAP TF & States	valid
Linkage to GPIs	GPI-5: Performance-based navigation GPI-11: RNP and RNAV SIDs and STARs GPI/18: Aeronautical Information			

REPORT ON AGENDA ITEM 7: FUTURE WORK PROGRAMME

7.1 The meeting recalled that MIDANPIRG/12, through Decision 12/37 approved the Terms of Reference and Work Programme of the AIS/MAP Task Force.

7.2 The meeting recalled that the AIS/MAP TF/5 meeting (Tehran, Iran Islamic Republic of, 5 –7 May 2009) inquired if it was time to rename the AIS/MAP Task Force to AIM Task Force and agreed that this could be decided by the AIS/MAP TF/6 meeting.

7.3 The meeting noted a proposal to change the AIS/MAP Task Force to a Sub Group; however the proposal was not supported and considered still premature.

7.4 Taking into consideration the latest development related mainly to the transition from AIS to AIM, the meeting agreed to rename the AIS/MAP Task Force to AIM Task Force with Terms of Reference (TOR) as at **Appendix 7A** to the Report on Agenda Item 7. Accordingly, the meeting agreed to the following Draft Decision, which is proposed to replace and supersede MIDANPIRG/12 Decision 12/37:

DRAFT DECISION 6/8: TERMS OF REFERENCE OF THE AIM TASK FORCE

*That, the AIS/MAP Task Force be renamed AIM Task Force with Terms of Reference (TOR) as at **Appendix 7A** to the Report on Agenda Item 7.*

7.5 The meeting was informed about the ICAO MID Office tentative schedule for meetings and seminars relevant to the activity of the AIS/MAP Task Force, as follows:

- MSG/3 meeting (Tehran, Iran, 10-12 October 2011);
- ATM/SAR/AIS SG/12 meeting (Cairo, 21-24 November 2011);
- MIDAD SG/1 meeting (February 2012);
- MIDANPIRG/13 (April 2012);
- MID AIM Seminar (Cairo, May 2012)

7.6 Based on the above, the meeting agreed that the AIM TF/7 meeting be held in June 2012. The venue will be Cairo, unless a State is willing to host the meeting.

AIS/MAP TF/6
Appendix 7A to the Report on Agenda Item 7

MIDANPIRG AERONAUTICAL INFORMATION MANAGEMENT TASK FORCE (AIM TF)

1. TERMS OF REFERENCE

1.1 The Terms of Reference of the AIM Task Force are:

a) ensure that the planning and implementation of AIM in the MID Region is coherent and compatible with developments in adjacent regions, and that it is carried out within the framework of the ATM Operational Concept, the Global Air Navigation Plan and the associated Global Plan Initiatives (GPIs);

b) seek to achieve common understanding and support from all stakeholders involved in or affected by the AIM developments/activities in the MID Region;

c) provide expert inputs for AIM-related issues; and propose solutions for meeting ATM operational requirements;

d) provide a platform for harmonization of developments and deployments in the AIM domain;

e) monitor and review the latest developments in the area of AIM and procedure design issues associated to AIM, and provide regular progress reports to the ATM/SAR/AIS Sub Group and MIDANPIRG concerning its work programme, as appropriate; and

f) review periodically its Terms of Reference and propose amendments as necessary.

1.2 In order to meet the Terms of Reference, the AIM Task force shall:

a) monitor the status of implementation of the required AIM facilities and services and the transition from AIS to AIM in the MID Region, and provide necessary assistance and guidance to States in this respect;

b) identify and review those specific deficiencies and problems that constitute major obstacles to the provision of efficient AIM services, and recommend necessary remedial actions;

c) 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;

d) develop proposals for the updating of relevant ICAO documentation, including the amendment of relevant parts of the MID Basic ANP and FASID, as deemed necessary;

e) monitor and review technical and operating developments in the area of AIM and foster their implementation in the MID Region in a harmonized manner;

f) foster the integrated improvement of AIM services through proper training and qualification of the AIM personnel; and

g) establish and monitor AIM performance objectives for the MID Region.

2. COMPOSITION

2.1 The Task Force will compose of:

a) MIDANPIRG Member States; and

b) concerned International/Regional Organizations as observers.

Other representatives from industry and user Organizations having a vested interest in Aeronautical Information Management could participate as observers in the work of the Task Force, as appropriate.

REPORT ON AGENDA ITEM 8: ANY OTHER BUSINESS

8.1 The meeting was apprised of the CANSO's AIM Working Group activities, in particular, the development of an AIM business Model and a benchmarking framework, as well as the contribution for the development of the ICAO "A*IM Training Development Manual*" within the framework of the AIS-AIM Study Group.

8.2 The meeting noted that a Workshop on the use of ICARD and associated issues will be held in Cairo, 27-29 June 2011 and urged States to take necessary follow up action to MIDANPIRG Conclusion 12/10 and participate actively in the above-mentioned Workshop.

8.3 The meeting highlighted that the procedure design office/service represents a major data originator and accordingly, States were urged to plan for digital aeronautical data exchange between the procedure design office/service and the AIS/AIM service. In this respect, the interoperability between the procedure design system/database with the integrated aeronautical information database was highlighted.

AIS/MAP TF/6
Attachment A to the Report

LIST OF PARTICIPANTS

NAME	TITLE & ADDRESS
STATES	
BAHRAIN Mr. Mohammed Yousif Bumtaia	AIS-Flight Data Supervisor & Aeronautical Cartography Specialist Civil Aviation Affairs P.O. Box 586 KINGDOM OF BAHRAIN Fax: (973) 17 321 025 Tel: (973) 17 321 179 Mobile: (973) 3962 5550 Email: mbumtai@caa.gov.bh
Mr. Salah Mohamed Al-Humood	Head, Aeronautical Information & Airspace Planning Civil Aviation Affairs Bahrain International Airport P.O. Box 586 KINGDOM OF BAHRAIN Fax: (973) 17 99 66 Tel: (973) 17 321 180 Mobile: (973) 3640 0424 Email: shumood@caa.gov.bh
EGYPT Mr. Ahmed Mahmoud Saleh	Director General of AD AIS Units National Air Naviation Services Company (NANSC) Cairo International Airport Cairo Airport Road Cairo - EGYPT Fax: (202) 226788882/5 Tel: (202) 22683729 Mobile: (2012) 404 0671 Email: Saleh-ais@msn.com
Mr. Awny Massry Mahrous Hanna	G.M. of Publication Cairo Airport-Village Road Cairo-EGYPT Fax: (202) 22679009 Tel: (202) 2267 8882 - 22678885 Mobile: (2010) 6014948 Email: awny.nassry@nansceg.org

NAME	TITLE & ADDRESS
Ms. Heba Mostafa Mohamed	Supervisor AIS Unit & Technical Coordinator of Civil Aviation Ministry Ministry of Civil Aviation Cairo Airport Road Cairo - EGYPT Fax: (202) 2268 5420 Tel: (202) 2417 5389 Mobile: (2012) 496 0150 - (2014) 7222395 Email: heba.mostafa1@hotmail.com
Mr. Micheal Youssef Finan	Air Traffic Controller Senior ATS Inspector Egyptian Civil Aviation Authority Cairo Airport Road Cairo - EGYPT Fax: (202) 2267 8537 Tel: (202) 2267 8537 Mobile: (2010) 109 6295 Email: mickeyfinan@hotmail.com
Mr. Moataz Abdel Aziz Ahmed	Director of AIS Publications National Air Naviation Services Company (NANSC) Cairo International Airport Road Cairo - EGYPT Fax: (202)22678885 Tel: (202) 22679009 Mobile: (2014) 3312 338 Email: mizo-air2000@yahoo.com
Mr. Mohamed El Zoghby Ibrahim	AIS Office Specialist National Air Naviation Services Company (NANSC) Cairo Airport-Village Road Cairo-EGYPT Fax: (202) 22678882 Tel: (202) 22678885 Mobile: (2011) 3415483 Email: cairoais@yahoo.com
Mr. Mohamed Yasser Fikry Gawish	PUB AIS Specialist National Air Naviation Services Company (NANSC) Cairo Airport-Village Road Cairo-EGYPT Tel: (202) 22678882-22678885 Mobile: (2012) 6608535 Email: Mohamed_Gawish@yahoo.com

NAME	TITLE & ADDRESS
Mr. Naeyl Abdel Aziz Mohamed	Director of Procedure Design National Air Naviation Services Company (NANSC) Cairo International Airport Road Cairo - EGYPT Fax: (202) 22678882 Tel: (202) 22679009 - 25322581 Mobile: (2010) 1546857 Email: naeylessa@rocketmail.com
Ms Safaa Hanafi Saleh	Director of Follow-up National Air Naviation Services Company (NANSC) Cairo Airport-Village Road Cairo-EGYPT Tel: (202) 2267 8882 Mobile: (2012) 3450039 Email: safaa_hanafy@hotmail.com
Ms. Sahar Hassan Abdel Salam	Director of Development and Research Dep. (AIS) National Air Navigation Services Company Cairo Airport-Village Road Cairo-EGYPT Fax: (202) 22871056 Tel: (202) 2260743 Mobile: (2012) 3511054 Email: saharkrakish@yahoo.com
Mr. Tarek Abdellatif Hamed	Director of Subscription Directorate National Air Naviation Services Company (NANSC) Cairo Airport Road Cairo Airport-Village Road Cairo-EGYPT Tel: (202) 22678882 - 22678885 Mobile: (2010) 1118670 Email: tarek.rahim@yahoo.com
Mr. Tarek Mohamed Elsaeid	AIS Supervisor Ministry of Civil Aviation Cairo Airport Road Cairo-EGYPT Mobile: (2010) 8085766 Email: tarek-hawash@hotmail.com tarekteka33@yahoo.com

NAME	TITLE & ADDRESS
Ms. Wafaa Elkourashy	F. AIP D.P. Cairo Airport-Village Road Cairo-EGYPT Tel: (202) 22668783 Mobile: (2010)1995576
JORDAN Ms. Hanan A. Qabartai	Chief AIS HQ Civil Aviation Regulatory Commission P.O. Box 7547 Amman - JORDAN Fax: (962-6) 489 1266 Tel: (962-6) 489 2282 Ext 3525 Mobile: (962-79) 6768012 Email: ais.hq@carc.gov.jo qati_hanan@yahoo.com
Mr. Mohamd Al-Adwan	Head Amman/Marka AIS Unit Civil Aviation Regulatory Commission Amman/Marka ANS Directorat P.OO. Box 7547 Amman 11110 JORDN Fax: (962) 64891266 Tel: (962) 795034022 Email: ais.amm@carc.gov.jo
KUWAIT Mr. Abdullah M. Al-Adwani	Superintendent of AIS Directorate General of Civil Aviation Kuwait International Airport P.O. Box 17 Safat 13001 13001 KUWAIT Fax: (965-2) 4346 221 Tel: (965-2) 476 2531 Mobile: (965) 6605 1116 Email: ais1@kuwait-airport.com.kw abm.aladwani@dgca.gov.kw
Mr. Esam Juma Ahmad	AIS Officer Director General of Civil Aviation Kuwait International Airport P.O. Box 6837 - Hawalli State of KUWAIT Fax: (965) 476 5512 Tel: (965) 66630735 Email: ej.ali@dgca.gov.kw essam.ais@hotmail.com

NAME	TITLE & ADDRESS
OMAN Dr. Shobber Sharaf Al Moosawi	Chief AIS Directorate General of Meteorology & Air Navigation (DGMAN) P.O. Box 002 Post Code 111 Muscat, SULTANATE OF OMAN Fax: (968) 24519523 Tel: (968) 24519306 Mobile: (968) 99035954 Email: shobber@caa.gov.om
Mr. Waleed Khalfan Al Riyami	ATC Safety Inspector, Civil Aviation Affairs Directorate General of Safety & Air Services (DGSAS) P.O. Box 1 - Code 111 Muscat - SULTANATE OF OMAN Fax: 968 245 19707 Tel: (968) 245 18 985 Mobile: 968 99323 733 Email: waleedalriyami@caa.gov.om
QATAR Mr. Ahmed Mohamed Al Eshaq	Air Navigation Department Civil Aviation Authority P.O. Box 73 Doha – QATAR Fax: (974) 4465 6554 Tel: (974) 4462 2300 Mobile: (974) 5555 0440 Email: ahmed@caa.gov.qa
Mr. Faisal Mutlaq Al-Qahtani	Head of AIS Civil Aviation Authority P.O. Box 73 Doha – QATAR Fax: (974) 4465 6554 Tel: (974) 44656 230 Mobile: (974) 5553 7060 Email: faisal.alqahtani@cca.gov.qa

NAME	TITLE & ADDRESS
SAUDI ARABIA Mr. Abdul-Rahman Ahmed Batouk	Communication & Computer Engineer, Automation Engineering Branch General Authority of Civil Aviation Air Navigation Services P.O. Box 15441 Jeddah 21444 KINGDOM OF SAUDI ARABIA Fax: (966-2) 671 9041 Tel: (966-2) 671 7717, Ext 1218 Mobile: (966-2) 555664381 Email: arbatouk@gmail.com
Mr. Hamad M. Alaufi	Director of AIS General Authority of Civil Aviation P.O. Box 929 Jeddah 21421 KINGDOM OF SAUDI ARABIA Fax: (966-2) 640 5333 Tel: (966-2) 6290564 or 640 5333 Mobile: (966-55) 561 1136 Email: hmalaufi@gaca.gov.sa
Mr. Hameed Hamad Al-Jeddani	ANS/AIS/Publication Manager General Authority of Civil Aviation P.O. Box 929 Jeddah 21421 KINGDOM OF SAUDI ARABIA Fax: (966-2) 640 5622 Tel: (966-2) 640 5000 Ext 2111 Mobile: (966-5) 04 671134 Email: hjudanee1@yahoo.com haljidani@gaca.gov.sa
UNITED ARAB EMIRATES Mr. Abdalla Al Rashidi	Director AIM General Civil Aviation Authority Sheikh Zayed Air Navigation Centre P.O. Box 666 Abu Dhabi- United Arab Emirates Fax: (971) 2599 6889 Tel: (971) 2599 6891 Mobile: (971) 506119865 Email: akaabi@szc.gcaa.ae

NAME	TITLE & ADDRESS
YEMEN Mr. Saleh Abdullah Alkhamosi	Chief of procedures Department Civil Aviation and MeteorologyAuthority P.O. Box 2900 Sana'a - YEMEN Fax: (967-1) 344047 Tel: (967-1) 344675 Mobile: (967) 00369965 (967) 777369965 Email: alsalih2006@yahoo.com
Mr. Ziad Ahssan Saleh Al Matari	Chief of AIS Publication Department Civil Aviation and MeteorologyAuthority P.O. Box 2900 Sana'a - YEMEN Fax: (967-1) 345527 Tel: (967-1) 346652/3 Mobile: (967) 777 174 219 Email: aisyemen@gmail.com
COMPANIES ***(INDUSTRY)***	
AVITECH AG Mr. Peter Rudolph	VP Business Development/Authorised Officer AVITECH A G, Bahnhofplatz 1 D-88004 Friedrichshafen GERMANY Fax: +49-7541-282-199 Tel: +49-7541-282-354 Mobile: +49-1 79-7 89 54 57 Email: Peter.Rudolph@avitech-ag.com
FREQUENTIS Mr. Engelbert Liebhart	Information Management - Global Sales Manager FREQUENTIS AG Innovationsstr. 1 1100 Wien AUSTRIA Fax: 43-1-811 50 - 77 3370 Tel: 43-1-811 50 - 3370 Mobile: 43-664-60 850 - 3370 Email: engelbert.liebhart@frequentis.com

NAME	TITLE & ADDRESS
JEPPESEN Mr. Werner Kurz	Director International Aviation Affairs Jeppesen GmbH Frankfurter Strasse 233, 63263 Neu-Isenburg – GERMANY Fax: (49) 6102 50 7239 Tel: (49) 6102 50 8170 Mobile: (0173) 880 5515 Email: werner.kurz@jeppesen.com

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