



INTERNATIONAL CIVIL AVIATION ORGANIZATION

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

**REPORT OF THE FOURTH MEETING OF
AIS/MAP TASK FORCE**

(Cairo, Egypt, 19-21 February 2008)

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

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History of the Meeting

PART I – HISTORY OF THE MEETING

1. PLACE AND DURATION

1.1 The Fourth meeting of AIS/MAP Task Force was held at the conference hall of the ICAO MID Regional Office in Cairo, Egypt 19 to 21 February 2008.

2. OPENING

2.1 The Meeting was opened by Mr. Jehad Faqir, ICAO Deputy Regional Director, Middle East Regional Office, Cairo who welcomed the delegates to Cairo and wished them a successful and fruitful meeting. He highlighted the importance of aeronautical information and chart services in the context of the CNS/ATM systems and how AIS/MAP should be further developed to support the new global ATM operational concept. In this regard, he pointed out the importance to foster and expedite the implementation of quality system and AIS automation within MID States' Aeronautical Information Services. Mr. Faqir underlined that the transition from AIS to AIM would be a challenging exercise in the coming years. In this regard, he mentioned that in order to satisfy user requirements for Gate-to-Gate operations, an enlarged scope of aeronautical information would be needed including all categories of information required to support the new ATM environment (both airspace and aerodrome operations). Mr. Faqir pointed out that the implementation of electronic Terrain and Obstacle Data (eTOD) represents another challenge for the AIS Community.

2.2 At the end of his opening speech, Mr. Faqir noted 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. 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 nine (39) participants, including experts from thirteen (13) States (Bahrain, Egypt, Iraq, Iran, Jordan, Kuwait, Oman, Pakistan, Qatar, Saudi Arabia, Syria, United Arab Emirates and Yemen) and (2) two Organizations (EUROCONTROL and IFATCA) and (1) one commercial data provider (Jeppesen). The list of participants is at the **Attachment A** to the Report.

4. OFFICERS AND SECRETARIAT

4.1 The meeting was Chaired by Mr. Hamad M. Al Alaofi, Head of AIS, General Authority of Civil Aviation, Kingdom of Saudi Arabia. Mr. Mohamed Smaoui, Regional Officer Aeronautical Information & Charts/Meteorology acted as Secretary of the meeting.

5. LANGUAGE

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

6. AGENDA

6.1 The following Agenda was adopted:

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- Agenda Item 1: Adoption of Provisional Agenda and Election of Chairperson
- Agenda Item 2: Follow-up on MIDANPIRG/10 and ATM/SAR/AIS SG/9 Conclusions and Decisions relevant to the AIS/MAP Field
- Agenda Item 3: Status of Implementation of AIS/MAP Requirements in the MID Region
- Agenda Item 4: Review of Air Navigation Deficiencies in the AIS/MAP Field
- Agenda Item 5: Electronic Terrain and Obstacle Data (eTOD)
- Agenda Item 6: Quality Management System (QMS)
- Agenda Item 7: AIS Automation
- Agenda Item 8: Latest Developments in the AIS/MAP Field
- Aeronautical Information Management (AIM)
 - MID Region AIS/MAP Implementation Plan
- Agenda Item 9: Future Work Programme
- Agenda Item 10: Any other Business

7. CONCLUSIONS AND DECISIONS – DEFINITION

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

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

8. LIST OF DRAFT CONCLUSIONS AND DRAFT DECISIONS

- DRAFT CONCLUSION 4/1: USE OF THE PUBLIC INTERNET FOR THE ADVANCE PUBLICATION OF AERONAUTICAL INFORMATION*
- DRAFT CONCLUSION 4/2: IMPROVEMENT OF THE ADHERENCE TO THE AIRAC SYSTEM*
- DRAFT CONCLUSION 4/3: ANNEX 15 PROVISIONS RELATED TO AIRAC*
- DRAFT CONCLUSION 4/4: IMPLEMENTATION OF QMS WITHIN MID STATES' AISs*
- DRAFT CONCLUSION 4/5: ELECTRONIC AIP (eAIP)*

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- DRAFT CONCLUSION 4/6: EXTENSION OF THE EAD TO THE EMAC STATES*
- DRAFT DECISION 4/7: ESTABLISHMENT OF AN AIS AUTOMATION ACTION GROUP*
- DRAFT DECISION 4/8: DEVELOPMENT OF PLANNING MATERIAL FOR THE
TRANSITION FROM AIS TO AIM*
- DRAFT CONCLUSION 4/9: HARMONIZATION OF THE PUBLICATION OF LATITUDE AND
LONGITUDE COORDINATES*
- DRAFT DECISION 4/10: TERMS OF REFERENCE OF THE AIS/MAP TASK FORCE*

AIS/MAP TF/4
Report on Agenda Item 1

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 In accordance with the MIDANPIRG Procedural Handbook, Third Edition – April 2007, para. 6.1, it was noted that the Chairperson, should assume his functions at the end of the meeting at which he's elected and serves for two cycles unless other-wise re-elected, in which the term would be limited to one additional cycle only.

1.3 The meeting recalled that Mr. Hamad Al-Aufi from Saudi Arabia has been acting as the Chairman of the AIS/MAP Task Force since its first meeting held in Cairo, from 3 to 6 March 1997.

1.4 Based on the above the meeting thanked Mr. Al-Aufi for his support and excellent chairmanship of the AIS/MAP Task Force for the last 11 years. Accordingly, and in compliance with the MIDANPIRG Procedural Handbook, the meeting proceeded to the election of a new Chairperson. Based on recommendation by Bahrain and Egypt, the meeting unanimously elected Mr. Ramezanali Ziaeeagravi, Deputy of General Director of ATM, Tehran Mehrabad International Airport, Iranian Airports Company, as the new Chairman of the AIS/MAP Task Force.

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Report on Agenda Item 2

**REPORT ON AGENDA ITEM 2: FOLLOW-UP ON MIDANPIRG/10 AND ATM/SAR/AIS SG/9
CONCLUSIONS AND DECISIONS RELEVANT TO THE AIS/MAP
FIELD**

2.1 The meeting noted the status of relevant MIDANPIRG/10 Conclusions and Decisions related to the AIS/MAP field and the follow up actions taken by concerned parties, including relevant Draft Conclusions and Decisions developed by the ATM/SAR/AIS SG/9 meeting, which was held in Cairo from 10 to 13 December 2007 as at **Appendix 2A** to the Report on Agenda Item 2.

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Appendix 2A to the Report on Agenda Item 2

FOLLOW-UP ACTION ON RELEVANT MIDANPIRG/10 AND ATM/SAR/AIS SG/9 CONCLUSIONS AND DECISIONS

MIDANPIRG/10 CONCLUSIONS AND DECISIONS

CONCLUSIONS AND DECISIONS	FOLLOW-UP	TO BE INITIATED BY	DELIVERABLE	TARGET DATE	REMARKS
<p>CONC. 10/4: PAPERLESS MEETINGS</p> <p>That, with the objective to reduce printing and distribution costs of the MID Regional Office, to the extent possible:</p> <p>a) all meetings of MIDANPIRG (including meetings of Sub-Groups, Working Groups and Task Forces, etc.) be conducted in paperless format whereby all meetings documentation and working papers are made available on the MID Regional Office website and/or the MID Forum; and</p> <p>b) meeting reports and Amendment Proposals to the Air Navigation Plan of the MID Region be posted on the MID Regional Office website.</p>	<p>Conduct paperless meetings</p>	<p>ICAO</p>	<p>Electronic WPs/IPs, meeting reports and ANP/FASID Amendment Proposals</p>	<p>Sep 2007</p>	<p>Ongoing</p>
<p>CONC. 10/7: MID BASIC ANP AND FASID (DOC 9708)</p> <p>That, with a view to have the final version of the MID BASIC ANP and FASID (Doc 9708) published prior to 31 December 2007:</p> <p>a) the ICAO MID Regional Office, on behalf of MIDANPIRG, initiate all necessary Amendment Proposals to the MID Basic ANP and FASID, prior to 31 May 2007, in order to update the AIS, AOP, ATM, CNS and MET regional requirements and reflect the changes made to the FASID Tables; and</p>	<p>Process Amendments Proposals to the MID Basic ANP and FASID</p> <p>Finalize and publish the approved version of Doc 9708</p>	<p>ICAO</p>	<p>Amendment Proposal issued</p> <p>Amendment Proposal approved and incorporated in the final version of Doc 9708</p>	<p>Jun 2007</p> <p>Dec 2007</p>	<p>PFA to the MID FASID for AIS, circulated and approved.</p>

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APPENDIX 2A

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CONCLUSIONS AND DECISIONS	FOLLOW-UP	TO BE INITIATED BY	DELIVERABLE	TARGET DATE	REMARKS
<p>b) ICAO allocate sufficient resources and higher priority for the publication of Doc 9708 in English and Arabic versions, incorporating all approved Amendments.</p>					
<p>CONC.10/13: MID REGION STRATEGY FOR THE IMPLEMENTATION OF THE GLOBAL PLAN INITIATIVES (GPIS)</p> <p>That, the MID Region Strategy for the implementation of the Global Plan Initiatives (GPIS) be adopted as at Appendix 5.1C to the Report on Agenda Item 5.1.</p>	<p>Implementation of Strategy</p>	<p>ICAO; States; MIDANPIRG Subsidiary bodies</p>	<p>Feedback from States National Plans Status of implementation of GPIS</p>	<p>Jun 2008</p>	<p>Ongoing</p>
<p>CONC. 10/14: IMPLEMENTATION OF WORK PROGRAMME IN SUPPORT OF STRATEGIC PERFORMANCE OBJECTIVES</p> <p>That, in support of the evolution from a systems-based approach to a performance-based approach to planning and implementation of air navigation, the following projects are to be reflected in the MID Region implementation plan:</p> <p>a) improvement of the MID ATS route structure (FUA, dynamic and flexible ATS route management, improved Civil/Military coordination, etc);</p> <p>b) enhancement of MID States' TMA management;</p> <p>c) MID RMA operations continuity;</p> <p>d) support of the introduction and implementation of SMS in the MID States;</p> <p>e) development of MID States' contingency plans;</p> <p>f) improvement of the quality and efficiency of aeronautical information services provided by MID States;</p>	<p>Follow up progress on each project</p>	<p>ICAO States MIDANPIRG Subsidiary bodies</p>	<p>Feed back on each project</p>	<p>Jun 2008</p>	<p>Ongoing</p>

CONCLUSIONS AND DECISIONS	FOLLOW-UP	TO BE INITIATED BY	DELIVERABLE	TARGET DATE	REMARKS
<p>g) provision of eTOD by MID States; h) establishment of Initial FPL Processing System (IFPS) in the MID Region; i) implementation of ATN in the MID Region; j) improvement of communication infrastructure; k) implementation of GNSS; l) implementation of Certification of aerodromes and SMS at aerodromes in the MID Region; m) preparedness to accommodate NLAs at some existing/new aerodromes in the MID Region; n) support the establishment and implementation of Runway surface pavement maintenance programme in the MID Region; o) enhancement of Runway incursion prevention programme; and p) enhancement of surface movement guidance and control systems (SMGCS) at MID Aerodromes.</p>					
<p>CONC. 10/50: USE OF EMAIL TO ENHANCE COMMUNICATION BETWEEN THE AIS COMMUNITY IN THE MID REGION</p> <p>That, with a view to enhance the communication between the AIS Community in the MID Region:</p> <p>a) States, that have not yet done so, publish in their AIP (para. GEN 3.1.1) their AIS email address, as soon as possible; and b) ICAO consider the amendment of Annex 15 Appendix 1, para. GEN 3.1.1 to add such requirement.</p>	<p>Comply with the Conclusion</p>	<p>ICAO HQ States AIS/MAP TF</p>	<p>Appropriate provisions in Annex 15</p> <p>Feed back from States and users</p>	<p>TBD</p> <p>TBD</p>	<ul style="list-style-type: none"> • SL Ref. AN 8/4 – 354 of 18 Oct.07 and AN 8/4 – 018 of 16 Jan.08 • Replies received from 6 States.

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APPENDIX 2A

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CONCLUSIONS AND DECISIONS	FOLLOW-UP	TO BE INITIATED BY	DELIVERABLE	TARGET DATE	REMARKS
<p>CONC.10/51: ADVANCE POSTING OF THE AIRAC INFORMATION ON THE WEB</p> <p>That, in order to improve the timeliness of aeronautical information, MID States are invited to arrange for the advance posting of AIRAC information on the web, before dissemination of the official hardcopies of the AIP Amendment/ Supplement.</p>	<p>Comply with the Conclusion</p>	<p>States AIS/MAP TF</p>	<p>Feed back from States and users</p>	<p>Feb. 2008</p>	<ul style="list-style-type: none"> • SL Ref. AN 8/4 – 354 of 18 Oct.07and AN 8/4 – 018 of 16 Jan.08 • Proposed to be replaced by Draft Conclusion 4/1
<p>CONC. 10/52: ELECTRONIC AIP (eAIP)</p> <p>That,</p> <p>a) pending the development of Global eAIP provisions, MID States, that have not yet done so, publish their Integrated Aeronautical Information Package in PDF/HTML format on a CD-ROM, without discontinuing the provision of the information in hardcopy; and</p> <p>b) in order to prevent proliferation of eAIP formats, ICAO consider developing necessary specifications and clear provisions related to the eAIP content, structure, presentation and format.</p>	<p>Comply with the Conclusion</p>	<p>States ICAO HQ</p>	<p>States publish their eAIP.</p> <p>ICAO issue appropriate provisions in Annex 15 related to eAIP</p>	<p>Feb. 2008 TBD</p>	<ul style="list-style-type: none"> • SL Ref. AN 8/4 – 354 of 18 Oct.07and AN 8/4 – 018 of 16 Jan.08 • Proposed to be replaced by Draft Conclusion 4/5.
<p>CONC. 10/53: LICENSING OF THE AIS/MAP PERSONNEL</p> <p>That, recognizing the importance of AIS and the safety implication of the non-provision of timely and high quality aeronautical information, and taking into consideration Annex 15 requirements for the evaluation and maintenance of the competence/skill of the AIS staff, ICAO consider the introduction of the licensing of the AIS/MAP personnel as a Recommended Practice in Annex 1.</p>	<p>Follow up with ICAO HQ</p>	<p>ICAO HQ</p>	<p>Appropriate provisions in Annex 1</p>	<p>TBD</p>	<p>Not supported by the ANC during the review of MIDANPIRG/10 report.</p>

CONCLUSIONS AND DECISIONS	FOLLOW-UP	TO BE INITIATED BY	DELIVERABLE	TARGET DATE	REMARKS
<p>CONC. 10/54: METHODOLOGY FOR THE IMPLEMENTATION OF QMS WITHIN MID STATES' AISS</p> <p>That, States that have not yet implemented a QMS within their AIS, are urged to apply the methodology at Appendix 5.4A to the Report on Agenda Item 5.4.</p>	Follow up with concerned States	ICAO States AIS/MAP TF	State Letter Feed back from States	Jul. 2007 Feb. 2008	<ul style="list-style-type: none"> • SL Ref. AN 8/4.1 – 317 of 18Sep.07 and AN 8/4.1 – 016 of 16 Jan.08. • Proposed to be replaced by Draft Conclusion 4/4.
<p>DEC 10/55: ESTABLISHMENT OF A QMS IMPLEMENTATION ACTION GROUP</p> <p>That, the QMS implementation Action Group is established with Terms of Reference as at Appendix 5.4B to the Report on Agenda Item 5.4.</p>	Follow-up the activities of the Action Group	ICAO	Feedback from the Action Group reported to the AIS/MAP TF	Feb. 2008	Completed
<p>CONC. 10/56: ROADMAP FOR THE IMPLEMENTATION OF eTOD REQUIREMENTS</p> <p>That, MID States:</p> <p>a) develop their plans related to the implementation of eTOD requirements; and</p> <p>b) communicate their implementation roadmap to the ICAO MID Regional Office, prior to 15 June 2007, specifying clearly if they would encounter any difficulty to comply with the dates of applicability.</p>	Follow up with States	ICAO States	State Letter Action Plan/ Roadmap for the implementation of eTOD received from States Report of eTOD WG/1 meeting	Jun. 2007 Jun. 2007 Jul. 2007	To be replaced and superseded by ATM/SAR/AIS SG/9 Draft Conc.9/14

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APPENDIX 2A

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CONCLUSIONS AND DECISIONS	FOLLOW-UP	TO BE INITIATED BY	DELIVERABLE	TARGET DATE	REMARKS
<p>CONC. 10/57: COLLABORATIVE APPROACH FOR THE IMPLEMENTATION OF eTOD REQUIREMENTS</p> <p>That, in order to expedite the implementation of eTOD requirements, MID States:</p> <p>a) develop a high level policy for the management of a national eTOD programme;</p> <p>b) define clearly the responsibilities and roles of the different Administrations within and outside the Civil Aviation Authority in the implementation process (AIS, Aerodromes, Military, National Geographic and Topographic Administrations/Agencies, etc); and</p> <p>c) secure the necessary resources for the eTOD programme.</p>	<p>Comply with the conclusion</p>	<p>States</p>	<p>National eTOD Programme defined and managed.</p>	<p>Jul. 2007</p>	<p>To be replaced and superseded by ATM/SAR/AIS SG/9 Draft Conc.9/15</p>
<p>DEC 10/58: ESTABLISHMENT OF AN eTOD WORKING GROUP</p> <p>That, for harmonization and coordination of eTOD implementation activities on a regional basis, the electronic Terrain and Obstacle Data Working Group is established with Terms of Reference as at Appendix 5.4D to the Report on Agenda Item 5.4.</p>	<p>Creation of the eTOD WG</p> <p>Follow up the work programme</p>	<p>ICAO States</p>	<p>Report of meeting</p> <p>Guidance material</p>	<p>Jul. 2007</p> <p>Feb. 2008</p>	<p>Completed</p>
<p>CONC. 10/59: FOLLOW UP ON THE OUTCOME OF THE MID eTOD SEMINAR</p> <p>That,</p> <p>a) the recommendations of the MID eTOD Seminar at Appendix 5.4E to the Report on Agenda Item 5.4 be studied by the concerned MIDANPIRG subsidiary bodies (eTOD WG, AIS/MAP TF, ATM/SAR/AIS SG and CNS/ATM/IC SG); and</p>	<p>Follow up on the recommendations of the MID eTOD Seminar</p>	<p>eTOD WG AIS/MAP TF States ICAO</p>	<p>Reports of meetings</p> <p>Follow-up actions taken, as appropriate</p>	<p>Jul. 2007</p> <p>Feb. 2008</p>	<p>To be replaced and superseded by ATM/SAR/AIS SG/9 Draft Conc.9/15</p>

CONCLUSIONS AND DECISIONS	FOLLOW-UP	TO BE INITIATED BY	DELIVERABLE	TARGET DATE	REMARKS
b) necessary follow-up action is to be taken by States and ICAO with a view to implement them.					
<p>CONC. 10/60: FOLLOW-UP ON THE OUTCOME OF THE GLOBAL AIS CONGRESS</p> <p>That, ICAO with the support of States and international organizations, take necessary follow-up action, as soon as possible, to implement the Recommendations of the Global AIS Congress.</p>	Follow up developments in ICAO HQ	ICAO HQ	Amendment of Annex 4 and Annex 15, as appropriate	TBD	Ongoing
<p>CONC.10/61: AIS/MAP TIMELINES FOR THE MID REGION</p> <p>That, the AIS/MAP Timelines for the MID Region be updated as at Appendix 5.4G to the Report on Agenda Item 5.4.</p>	Follow up the timelines	AIS/MAP TF	Updated Timelines Feed back from States	Feb. 2008 Feb. 2008	Ongoing
<p>DEC 10/62: REVISED TERMS OF REFERENCE AND WORK PROGRAMME OF THE AIS/MAP TASK FORCE</p> <p>That, the Terms of Reference and Work Programme of the AIS/MAP Task Force be updated as at Appendix 5.4H to the Report on Agenda Item 5.4.</p>	Follow up the work programme	AIS/MAP TF	Report of AIS/MAP TF/4	Mar. 2008	To be replaced and superseded by Draft Dec.4/10 (updated TOR)
<p>CONC. 10/76: ENHANCEMENT OF MID REGION'S AIR NAVIGATION DEFICIENCY DATABASE</p> <p>That, ICAO MID Regional Office provide searching feature for the MID Air Navigation Deficiency database on the website.</p>	Implement the conclusion	ICAO MID Office	Searching feature for MID AN Def. Database is provided	TBD	• Ongoing;

CONCLUSIONS AND DECISIONS	FOLLOW-UP	TO BE INITIATED BY	DELIVERABLE	TARGET DATE	REMARKS
<p>CONC. 10/77: ELIMINATION OF AIR NAVIGATION DEFICIENCIES IN THE MID REGION</p> <p>That,</p> <p>a) MID States 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;</p> <p>b) MID States increase their efforts to overcome the delay in mitigating air navigation deficiencies identified by MIDANPIRG and explore ways and means to eliminate deficiencies;</p> <p>c) MID States experiencing difficulties in financing the elimination of safety-related deficiencies may wish to take advantage of the funding opportunity offered by the International Financial Facility for Aviation Safety (IFFAS);</p> <p>d) users of air navigation facilities and services in the MID Region report to the ICAO MID Regional Office when the remedial action on a deficiency has been taken, and</p> <p>e) ICAO continues to provide assistance to States for the purpose of rectifying deficiencies; and when required, States request ICAO assistance through Technical Co-operation Programme and/or Special Implementation Projects (SIP).</p>	<p>Follow-up implementation of the conclusion</p>	<p>States ICAO Users IFFAS</p>	<p>Concerned States eliminate their air navigation deficiencies</p>	<p>Nov. 2008</p>	<p>Ongoing</p>

ATM/SAR/AIS SG/9 DRAFT CONCLUSIONS AND DECISIONS

CONCLUSIONS AND DECISIONS	FOLLOW-UP	TO BE INITIATED BY	DELIVERABLE	TARGET DATE	REMARKS
<p>CONC. 9/11: STRATEGY/ROADMAP FOR THE GLOBAL TRANSITION FROM AIS TO AIM</p> <p>That, with a view to expedite the transition from AIS to AIM in a global and harmonized manner:</p> <p>a) ICAO consider the creation of a multi-disciplinary group in order to, inter-alia:</p> <p>i) develop a global strategy/roadmap for the transition from AIS to AIM; and</p> <p>ii) prepare new AIM related SARPs and guidance material based on the AIM documents developed by Eurocontrol, in line with the Recommendations of the Global AIS Congress; and</p> <p>b) States and international organizations (Eurocontrol, IATA, etc) support the activities of the above-mentioned multi-disciplinary group and participate actively in the development of the AIM strategy/roadmap and related SARPs and guidance material.</p>	<p>Follow-up implementation of the conclusion</p>	<p>ICAO States</p>	<p>Establishment of an AIM multi-disciplinary Group;</p> <p>Global Strategy/roadmap for the transition from AIS to AIM; and</p> <p>AIM related SARPs and guidance material</p>	<p>TBD</p>	

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CONCLUSIONS AND DECISIONS	FOLLOW-UP	TO BE INITIATED BY	DELIVERABLE	TARGET DATE	REMARKS
<p>CONC. 9/12: PRE-REQUISITES FOR THE TRANSITION TO AIM</p> <p>That, as a pre-requisite for the transition from AIS to AIM, States that have not yet done so, are urged to give high priority to the implementation of existing Annex 15 SARPs, in particular, WGS-84, Quality Management System and automation</p>	<p>Follow-up implementation of the conclusion</p>	<p>States ICAO</p>	<p>Number of deficiencies decreased especially with regard to the implementation of WGS-84, QMS and automation</p>	<p>Dec 2008</p>	
<p>CONC. 9/13: PLANNING FOR THE TRANSITION FROM AIS TO AIM</p> <p>That, based on the ICAO Global ATM Operational Concept and in support of the Global Plan Initiative (GPI-18: Aeronautical Information), the AIS/MAP Task Force include in its work programme the development of an action plan/strategy for the transition from AIS to AIM in the MID Region.</p>	<p>Update and follow up the work programme of the AIS/MAP TF</p>	<p>AIS/MAP TF ATM/SAR/AIS SG ICAO</p>	<p>Updated work programme; Action plan Strategy for the transition from AIS to AIM in the MID Region</p>	<p>Dec 2009</p>	

CONCLUSIONS AND DECISIONS	FOLLOW-UP	TO BE INITIATED BY	DELIVERABLE	TARGET DATE	REMARKS
<p>CONC. 9/14: SURVEY ON THE IMPLEMENTATION OF eTOD IN THE MID REGION</p> <p>That, in order to obtain information from MID States regarding their Action Plan/Roadmap for the implementation of eTOD and the difficulties they might encounter to meet the applicability dates specified in Annex 15:</p> <p>a) the questionnaire at Appendix 10B to the Report on Agenda Item 10, be used for a survey on the implementation of eTOD in the MID Region;</p> <p>b) States send their replies to the questionnaire to the ICAO MID Regional Office, prior to 15 January 2008, specifying clearly if they would encounter any difficulty to comply with the dates of applicability; and</p> <p>c) the results of the survey should serve as a basis for the development/update of the MID Region eTOD implementation Strategy/Action Plan.</p>	Carry out survey and analyze results	ICAO States	State Letter States' replies MID Region eTOD implementation Strategy/Action Plan updated	Jul 2007 Nov 2007 Mar 2008	SL Ref.: AN 8/2.4 – 248 of 17 Jul.07 and AN 8/2.4 – 017 of 16 Jan.08 Ongoing
<p>CONC. 9/15: MID REGION eTOD IMPLEMENTATION STRATEGY</p> <p>That, the MID Region eTOD implementation Strategy is adopted as at Appendix 10C to the Report on Agenda Item 10.</p>	Implementation of Strategy	ICAO States eTOD WG AIS/MAP TF	Feedback from States	Feb 2008	Ongoing
<p>CONC. 9/16: DRAFT FASID TABLE RELATED TO eTOD</p> <p>That, ICAO consider to include the Draft FASID Table at Appendix 10E to the Report on Agenda Item 10 into the MID FASID, Part VIII (AIS), with necessary amendments, as appropriate.</p>	Endorsement of the Table by MIDANPIRG	ICAO	MIDANPIRG/11 report Amendment proposal to the MID FASID	Feb 2009 Mar 2009	Ongoing

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CONCLUSIONS AND DECISIONS	FOLLOW-UP	TO BE INITIATED BY	DELIVERABLE	TARGET DATE	REMARKS
<p>CONC. 9/17: TERMS OF REFERENCE OF THE eTOD WORKING GROUP</p> <p>That, the Terms of Reference of the eTOD Working Group be updated as at Appendix 10F to the Report on Agenda Item 10.</p>	<p>Follow up the work programme</p>	<p>eTOD WG AIS/MAP TF</p>	<p>Report of AIS/MAP TF/4</p>	<p>Mar 2008</p>	

AIS/MAP TF/4
Report on Agenda Item 3

REPORT ON AGENDA ITEM 3: STATUS OF IMPLEMENTATION OF AIS/MAP REQUIREMENTS IN THE MID REGION

3.1 Under this agenda item the meeting was presented with an overview of ICAO provisions relevant to the AIS/MAP field.

3.2 The meeting recalled that Table AIS-8 of the MID FASID sets out the requirements of the Integrated Aeronautical Information Package for the MID Region. It was noted, in this regard, that some AIPs are not updated on a regular basis.

3.3 The meeting recognized that the ability to view AIP components electronically is becoming increasingly available, especially as the use of the Internet increases. This allows the user to perform electronic searches for the information of particular interest.

3.4 The meeting was presented with an overview on ICAO requirements pertaining to the AIRAC System. It was, therefore, highlighted that the effectiveness of an AIS is dependent upon timely provision of the required information which relies on the co-operation of all technical services such as route and airspace planners, procedure designers, navaid maintainers, communications, aerodromes, etc. The AIRAC system has proved to be an effective means of regulating and controlling the provision of aeronautical information affecting operation of aircraft. In addition, the AIRAC system has been used as a basic source of information for the updating of the Flight Management Systems.

3.5 With respect to the status of implementation of AIRAC system, the meeting recognized that 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 are not fully adhered to by a number of MID States. The main difficulties seem to be shortage of qualified AIS personnel and lack of coordination between AIS and the technical departments providing the raw material to the AIS for promulgation. In this regard the meeting recalled that MIDANPIRG/10 was of the view that the signature of Service Level Agreements (SLA) between AIS and the data originators will resolve to a large extent the lack of coordination between AIS and the technical departments providing raw data.

3.6 Reference was also made to the MID Basic ANP para. 4.21, 4.22 and 4.26, it was recalled that States should:

- ensure that adequate coordination between AIS and other air navigation services exists to permit effective implementation of the AIRAC system.
- prepare their national regulations so that they well define the duties and responsibilities of those technical services that provide raw AIRAC information to AIS for publication. The technical services involved should be familiar with the AIRAC system and comply with it in accordance with specifications provided in Annexes 11, 14 (both volumes) and 15
- ensure that responsible AIS personnel participate in the country's administrative and technical meetings where airport and air navigation planning systems are discussed, in order that:

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- a) adequate consideration can be given to the AIS production, publication and advance notice of material issued by those meetings; and
- b) such AIS personnel take part in the determination of applicability of changes in the air navigation facilities and procedures, taking into account the required advance notification and cut-off dates relevant to the AIRAC system.

3.7 The meeting raised concern also regarding the provisions of Annex 15 Chapter 6 and Appendix 4 related to AIRAC. The use of the words “significant” and “major” changes leads to different interpretations. The meeting was of view that it would be easier and less ambiguous if Annex 15 would present a comprehensive list of changes for which the use of AIRAC is mandatory or recommended.

3.8 The meeting recalled that MIDANPIRG/10, under Conclusion 10/51, invited States to arrange for advance posting of AIRAC information on the web before dissemination of the official hardcopies of the AIP Amendments/Supplements.

3.9 In connection with the above, the meeting was of view that the ICAO MID Forum could be used by States for the posting of AIS publications, especially the AIRAC information. Accordingly, the meeting invited the ICAO MID Regional Office, in coordination with Bahrain, to investigate such possibility.

3.10 In connection with the above, the meeting noted that in Europe the AIS AGORA forum has proved its usefulness for the exchange of aeronautical information and with regard to the monitoring of the AIRAC adherence, Eurocontrol developed a tool called P-Tracker, which proved also to be an efficient tool.

3.11 With a view to enhance communication between the AIS Community in the MID Region, the meeting noted that MIDANPIRG/10, under Conclusion 10/50, invited States to publish in their AIP (para. GEN 3.1.1) their AIS email address and encouraged the communication by emails in accordance with the ICAO Guidelines on the use of Public Internet for Aeronautical Applications (Doc 9855). It was highlighted that the use of public internet should be limited to the non-time critical aeronautical ground-ground applications (i.e.: the information being transferred over the internet has no immediate effect on an active flight). More specifically, the following elements of the Integrated Aeronautical Information Package can be provided via the internet:

- AIP (including AIP Amendments and Supplements);
- Aeronautical Information Circulars (AIC);
- monthly printed plain-language list of valid NOTAM; and
- NOTAM containing a checklist of valid NOTAM.

3.12 The meeting noted that four (4) States only (Iran, Jordan, Kuwait and Saudi Arabia) are using the email for the dissemination of AIP Supplements, AICs and/or Monthly printed plain-language list of valid NOTAM. The meeting noted also with appreciation that Egypt, Iran and Kuwait have published their AIP on a CD-ROM. The table below gives details about the use of internet for the publication of aeronautical information by MID States:

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	AIS email address	AIS website	Remarks
Afghanistan	afghanaip@auab.aorcentaf.af.mil ramcc@auab.aorcentaf.af.mil	www.ramcc.dtic.mil	Draft version of the AIP available on the web
Bahrain	aisadmin@caa.gov.bh	www.bahrainairport.com	AIP available on the web
Egypt	ais@nansceg.org	www.nansceg.org	NOTAM Summary and AIRAC AMDTs and SUPs on the web
Iran	ais_iran@airport.ir	To be developed	
Iraq		www.ramcc.dtic.mil	Draft version of the AIP available on the web
Israel			
Jordan	ais.hq@carc.gov.jo	www.carc.gov.jo	Draft version of the AIP available on the web
Kuwait	ais1@kuwait-airport.com.kw	www.kuwait-airport.com.kw	
Lebanon	ais@beirutairport.gov.lb		
Oman	Ebriefing@dgcam.gov.om		
Qatar	doha.ais@caa.gov.qa	www.caa.gov.qa	aisadmin@bahrain.gov.bh (AIP maintained by Bahrain)
Saudi Arabia		www.gaca.gov.sa/ATS	NOTAM summary available on the web
Syria			
UAE	ais@gcaa.ae briefing@emirates.net.ae	www.gaca.ae	AIC, SUPs and NOTAM Summary available on the web
Yemen			

3.13 Based on the above, the meeting agreed to the following Draft Conclusions, which are proposed to replace and supersede MIDANPIRG/10 Conclusion 10/51:

DRAFT CONCLUSION 4/I: USE OF THE PUBLIC INTERNET FOR THE ADVANCE PUBLICATION OF AERONAUTICAL INFORMATION

That, in order to improve the timeliness of aeronautical information and in accordance with the ICAO Guidelines on the use of Public Internet for Aeronautical Applications (Doc 9855):

a) *MID States are encouraged to use the internet for the advance publication of the following elements of the Integrated Aeronautical Information Package containing non-time critical aeronautical information (i.e.: posting of the information on the web and/or dissemination by email):*

- *AIP;*
- *AIP Amendments (both AIRAC and non AIRAC);*
- *AIP Supplements (both AIRAC and non AIRAC);*
- *Aeronautical Information Circulars (AIC);*
- *monthly printed plain-language list of valid NOTAM; and*
- *NOTAM containing a checklist of valid NOTAM.*

Note: Appropriate arrangements for the provision of information in paper copy

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form should remain available.

- b) *ICAO, in coordination with Bahrain, investigate the possibility that the ICAO MID Forum be used by States for the posting of AIS publications.*

DRAFT CONCLUSION 4/2: 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, are urged to:

- a) *fully comply with the AIRAC procedures, in accordance with specifications provided in Annexes 11, 14 (both volumes) and 15 as well as the provisions of the MID Basic ANP Chapter VIII;*
- b) *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.*

DRAFT CONCLUSION 4/3: ANNEX 15 PROVISIONS RELATED TO AIRAC

That, ICAO consider to review the current provisions of Annex 15 Chapter 6 and Appendix 4 related to AIRAC by replacing the words “significant” and “major” changes, which lead to different interpretations, by a comprehensive list of changes which necessitate the use of the AIRAC System.

3.14 The meeting recognized that the way in which pre-flight briefing information is currently obtained is influenced by many factors. The type of user and the facilities available at the aerodrome are the main influences. With the current facilities offered, the users are more and more using the products of the commercial data houses which offer an integrated and tailored briefing package.

3.15 Some air incident/accident reports showed that, even when pre-flight briefing information was obtained, it was not always fully used. Pilots are sometimes supplied with so much information that it is not always apparent to them which parts of it are either important or relevant to their flight. It is essential, therefore, to avoid overloading users by providing means whereby they may select the type of information they receive in response to requests.

3.16 Accordingly, the meeting was of view that unless the service provided by the AIS Briefing Offices is improved on a global basis, the use of commercial facilities for the provision of pre-flight briefings will be the only viable solution for pilots and airlines. In this regard, the meeting reiterated the need to comply with MIDANPIRG/9 Conclusion 9/26 “*ENHANCED PRE-FLIGHT INFORMATION SERVICE*” and recognized that the only way to improve the services provided by AIS is the implementation of AIS automation and Quality Management System, and the provision of tailored products meeting the user requirements.

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3.17 Based on the above, the meeting recognized that although the progress achieved in the implementation of AIS/MAP requirements in the MID Region, concern is always expressed about a number of issues, mainly:

- number of AIPs are not regularly updated;
- discrepancies and inconsistencies between the data pertaining to the same facility, service or procedure published in different Sections of the AIP (navaids, reporting points, etc);
- the English language used in a number of AIPs and NOTAMs is ambiguous/confusing and need to be improved;
- number of NOTAMs, AIP Supplements and AICs which have been issued long time ago are still in force when the information contained therein is no more valid or would be more appropriate for inclusion into the AIP;
- a number of AIPs need to be improved in respect of format/presentation (quality of printing, binders too small and old, pages not perforated or perforated in the opposite side, some charts are not clear, etc);
- the system of page numbering differs from State to State and generally is different from the one recommended in Doc 8126, paragraph 5.5.1. Also some States do not comply with Annex 15 Recommendation in para. 4.4.6 related to the use of coloured pages for the AIP Supplements (preferably in yellow), in order to be conspicuous;
- the procedure relative to the AIRAC system is frequently not respected;
- number of aeronautical charts are not yet implemented in some MID States, particularly the En Route Chart and the World Aeronautical Chart — ICAO 1:1 000 000 (WAC); and
- pre-flight briefings are even not available or provided in a way which is not meeting the user requirements.

3.18 The meeting recalled that MIDANPIRG/10 recalled that MIDANPIRG/9 under Conclusion 9/60 tasked the ICAO MID Regional Office, to initiate an Amendment Proposal to the MID Basic ANP and FASID in order to update the AIS, AOP, ATM, CNS and MET regional requirements and reflect the changes made to the FASID Tables and developed Conclusion 10/7 accordingly. It was noted that as a follow up action a proposal for amendment of the ICAO MID Air Navigation Plan (Doc 9708), Volume II (Serial No.: MID 07/01-AIS) has been circulated to concerned States and organizations on 30 May 2007 and approved on 15 July 2007. Accordingly, the meeting reviewed and updated the MID FASID Tables, AIS 1, AIS 2, AIS 4, AIS 6, AIS 7 and AIS 8 as at **Appendix 3A** to the Report on Agenda Item 3.

3.19 Based on the above, the meeting developed the following table which summarizes the status of implementation of AIS/MAP requirements related to the IAIP, AIRAC and aeronautical charts in the MID Region:

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	AIP	AIRAC	NOTAM	Pre-Flight Information	Aeronautical Charts
Afghanistan	<ul style="list-style-type: none"> - AIP not published officially in 3 parts. However Draft version not fully compliant with Annex 15 requirements is available on the web. - Lack of regular amendment 	<ul style="list-style-type: none"> - Lack of implementation of the AIRAC system 	<ul style="list-style-type: none"> - Lack of compliance with Annex 15 and Doc 8126 provisions related to NOTAM format and requirements - No monthly summary of NOTAM 	<ul style="list-style-type: none"> - Non provision of pre-flight information service. 	<ul style="list-style-type: none"> - A number of Aeronautical charts are not produced or non compliant with Annex 4 requirements.
Bahrain	<ul style="list-style-type: none"> - Well updated AIP, available on the web 	<ul style="list-style-type: none"> - AIRAC procedures implemented 	<ul style="list-style-type: none"> - No deficiency identified. 	<ul style="list-style-type: none"> - Pre-flight information service provided with a Central automated system 	<ul style="list-style-type: none"> - No deficiency identified
Egypt	<ul style="list-style-type: none"> - Well updated AIP; available on CD 	<ul style="list-style-type: none"> - AIRAC procedures implemented 	<ul style="list-style-type: none"> - No deficiency identified. 	<ul style="list-style-type: none"> - Pre-flight information service provided with a Central automated system 	<ul style="list-style-type: none"> - No deficiency identified
Iran	<ul style="list-style-type: none"> - Well updated AIP. Electronic version available on CD. 	<ul style="list-style-type: none"> - AIRAC procedures implemented 	<ul style="list-style-type: none"> - No deficiency identified. 	<ul style="list-style-type: none"> - Non provision of pre-flight information service 	<ul style="list-style-type: none"> WAC Chart ICAO 1:1000000 not yet published.
Iraq	<ul style="list-style-type: none"> - AIP not published officially in 3 parts. However Draft version not fully compliant with Annex 15 requirements is available on the web. - Lack of regular 	<ul style="list-style-type: none"> - Lack of implementation of the AIRAC system 	<ul style="list-style-type: none"> - Lack of compliance with Annex 15 and Doc 8126 provisions related to NOTAM format and requirements - No monthly summary of 	<ul style="list-style-type: none"> - Non provision of pre-flight information service. 	<ul style="list-style-type: none"> - A number of Aeronautical charts are not produced or non compliant with Annex 4 requirements.

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	AIP	AIRAC	NOTAM	Pre-Flight Information	Aeronautical Charts
	amendment		NOTAM		
Israel	– AIP generally up-to-date, but not available on an electronic means (CD or website)	– Lack of implementation of the AIRAC system	– No deficiency reported except that related to the monthly summary of NOTAM	– Non provision of pre-flight information service.	– The Enroute chart-ICAO is not produced.
Jordan	– Well updated AIP, available on the web, but not available on a CD..	– AIRAC procedures not fully implemented	– No deficiency identified.	– Pre-flight information service provided with a Local automated system.	– WAC Chart ICAO 1:1000000 not yet published.
Kuwait	– Well updated AIP, available on CD and website.	– AIRAC procedures implemented	– No deficiency identified.	– Pre-flight information service provided with a central automated system	– WAC Chart ICAO 1:1000000 not yet published.
Lebanon	– AIP generally up-to-date, but not available on an electronic means (CD or website)	– AIRAC procedures not fully implemented	– No deficiency identified.	– Pre-flight information service provided with a Central automated system	– WAC Chart ICAO 1:1000000 not yet published.
Oman	– AIP generally up-to-date, and available on a CD	– Lack of implementation of the AIRAC system	– No deficiency identified.	– Non provision of pre-flight information service. Lack of AIS automation	– WAC Chart ICAO 1:1000000 not yet published.
Qatar	– Published with AIP Bahrain. – Well updated AIP, available on the web	– AIRAC procedures implemented	– No deficiency identified.	– Pre-flight information service provided with an automated system	– Aerodrome Chart-ICAO not yet published.

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	AIP	AIRAC	NOTAM	Pre-Flight Information	Aeronautical Charts
Saudi Arabia	<ul style="list-style-type: none"> - AIP generally up-to-date, but not available on an electronic means (CD or website). - Some inconsistencies noted. 	<ul style="list-style-type: none"> - AIRAC procedures implemented 	<ul style="list-style-type: none"> - No deficiency identified. 	<ul style="list-style-type: none"> - AIS Aerodrome Units not established at Int'l Airports - Non provision of pre-flight information service. Lack of AIS automation 	<ul style="list-style-type: none"> - A number of Aeronautical charts are not produced.
Syria	<ul style="list-style-type: none"> - AIP not regularly updated; - AIP not available on an electronic means (CD or website). - Some inconsistencies noted. 	<ul style="list-style-type: none"> - Lack of implementation of the AIRAC system 	<ul style="list-style-type: none"> - Some deficiencies identified (inconsistencies, language proficiency, etc) 	<ul style="list-style-type: none"> - Non provision of pre-flight information service. Lack of AIS automation 	<ul style="list-style-type: none"> - WAC Chart ICAO 1:1000000 not yet published.
UAE	<ul style="list-style-type: none"> - Well updated AIP, but not available on an electronic means (CD or website) 	<ul style="list-style-type: none"> - AIRAC procedures implemented 	<ul style="list-style-type: none"> - No deficiency identified. 	<ul style="list-style-type: none"> - Non provision of pre-flight information service. Lack of AIS automation 	<ul style="list-style-type: none"> - No deficiency identified.
Yemen	<ul style="list-style-type: none"> - AIP updated; - AIP not available on an electronic means (CD or website). - Some inconsistencies noted. 	<ul style="list-style-type: none"> - Lack of implementation of the AIRAC system 	<ul style="list-style-type: none"> - No deficiency identified. 	<ul style="list-style-type: none"> - Non provision of pre-flight information service. Lack of AIS automation 	<ul style="list-style-type: none"> - A number of Aeronautical charts are not produced.

WGS-84 implementation

3.20 The meeting highlighted the requirements for the implementation of WGS-84 and reviewed the status of its implementation in the MID Region. It was noted in this regard that although the implementation of WGS-84 should have been completed since 1998, some MID States have still not fully completed the implementation of the system.

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3.21 It was highlighted that the geoid undulation appears to be a specific domain with low degree of implementation among MID States. However, it was recalled that MIDANPIRG/10 noted that geoid undulation has been implemented recently in Iran, Jordan, Kuwait, Oman and Yemen. The meeting was also informed that work is progressing satisfactorily and approaching final phase in Saudi Arabia for the publication of the geoid undulation values.

3.22 The meeting noted also that, as a pre-requisite for the transition from AIS to AIM, the ATM/SAR/AIS SG/9 meeting, under Draft Conclusion 9/12, urged States that have not yet done so, to give high priority to the implementation of existing Annex 15 SARPs, in particular, WGS-84, Quality Management System and AIS Automation. The meeting noted that as a follow-up action the ICAO MID Regional Office sent State Letter Ref.: AN 8/1.1- 031 dated 22 January 2008 to concerned States asking for an action plan with clear timelines for the implementation/completion of implementation of the different elements of the WGS-84 system. However, the level of replies was unsatisfactory.

3.23 The meeting reviewed the status of implementation of WGS-84 in the MID Region and updated the FASID Table AIS-5 (WGS-84 Requirements) as at **Appendix 3B** to the Report on Agenda Item 3. A simplified Status report of WGS-84 implementation in the MID Region is also presented at **Appendix 3C** to the Report on Agenda Item 3.

3.24 The Status of implementation of WGS-84 in the MID Region can be summarized as follows:

- a) five (5) States have fully implemented WGS-84 including the geoid undulation;
- b) six (6) States have implemented the majority of WGS-84 requirements; however one or two elements (geoid undulation, quality system) are not yet implemented;
- c) two (2) States have partially implemented WGS-84; and
- d) two (2) States have not yet implemented WGS-84.

3.25 The meeting noted with appreciation the information provided concerning WGS-84 implementation in Iraq. It was noted in this regard, that in the current MID Basic ANP and FASID only two international airports are listed (Baghdad and Basrah) and that from the data related to WGS-84 implementation two additional airports are listed (Erbil and Sulaimaniyah). Accordingly, Iraq was requested to coordinate with the ICAO MID Regional Office for the issuance of a proposal for amendment of the MID Basic ANP Table AOP1 in order to enable future amendments of the FASID Tables.

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FASID TABLE AIS-1 – ESTABLISHMENT OF AERODROME AIS UNITS

STATE OR TERRITORY	AIS AERODROME UNITS REQUIRED AT CITY
AFGHANISTAN	KABUL/Kabul
	KANDAHAR/Kandahar
BAHRAIN	BAHRAIN/Bahrain Int'l
EGYPT	ALEXANDRIA/Alexandria Int'l
	ALEXANDRIA/Borg El Arab Int'l
	EL-ARISH/El-Arish Int'l
	ASWAN/Aswan Int'l
	ASYUT/Asyut Int'l
	CAIRO/Cairo Int'l
	HURGHADA/Hurghada
	LUXOR/Luxor
	SHARM-EL-SHEIKH/Sharm El Sheikh Int'l
	ST. CATHERINE/St. Catherine Int'l
	RAS EL NAKAB Taba/Taba Int'l
IRAN, ISLAMIC REPUBLIC OF	BANDAR ABBAS/Bandar Abbas Int'l
	ESFAHAN/ Esfahan -Shahid Beheshti Int'l
	MASHHAD/Shahid Hashemi Nejad Int'l
	SHIRAZ/ Shiraz Shahid Dastghaib Int'l
	TABRIZ/Tabriz Int'l
	TEHRAN/Mehrabad Int'l
	TEHRAN/ E Imam Khomains Int'l
	ZAHEDAN/Zahedan Int'l
IRAQ	BAGHDAD/ Baghdad Int'l
	BASRAH/Basrah Int'l
ISRAEL	BEER-SHEBA/Teyman
	EILAT/Eilat
	HAIFA/Haifa
	JERUSALEM/Atarot
	OVDA/ Ovda Int'l

STATE OR TERRITORY	AIS AERODROME UNITS REQUIRED AT CITY
	TEL AVIV/Ben Gurion
JORDAN	AMMAN/Marka Int'l
	AMMAN/Queen Alia Int'l
	AQABA/ King Hussein Int'l
	JERUSALEM/Jerusalem
KUWAIT	KUWAIT/Kuwait Int'l
LEBANON	BEIRUT/R. B. H – Beirut Int'l
OMAN	Muscat/ Seeb Muscat Intl. Airport
	SALALAH/Salalah
QATAR	DOHA/Doha Int'l
SAUDI ARABIA	DAMMAM/King Fahd Int'l
	JEDDAH/King Abdulaziz Int'l
	MADINAH/Prince Mohammad Bin Abdulaziz
	RIYADH/King Khalid Int'l
SYRIAN ARAB REPUBLIC	ALEPPO/Aleppo Int'l
	BASSEL AL-ASSAD/Latakia
	DAMASCUS/Damascus Int'l
UNITED ARAB EMIRATES	ABU DHABI/Abu Dhabi Int'l
	AL AIN/Al Ain Int'l
	DUBAI/Dubai Int'l
	FUJAIRAH/Fujairah Int'l
	RAS AL KHAIMAH/Ras al Khaima Int'l
	SHARJAH/Sharjah Int'l
YEMEN	ADEN/Aden Int'l
	HODEIDAH / Hodeidah Int'l
	SANA'A / Sana'a Int'l
	TAIZ / Taiz Int'l

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FASID TABLE AIS 2 AERONAUTICAL INFORMATION SERVICES REQUIRED AT AERODROMES

EXPLANATION OF THE TABLE

Column

- 1 Name of the aerodrome or location where aeronautical information services are required
- 2 Designation of the aerodrome:
 RS = international scheduled air transport, regular use
 RNS = international non-scheduled air transport, regular use
 RG = international general aviation, regular use
 AS = international scheduled air transport, alternate use
- 3 ICAO location indicator of the aerodrome.
- 4 Name of the AIS office responsible for the provision of aeronautical information service at the aerodrome concerned indicated in column 1.
- 5 ICAO AFTN address of the responsible AIS office.
- 6 AIS information to be available at the aerodrome:
 AIP+: Includes AIP and Amendments, AIP Supplements, NOTAM, AIC
 L - country in which the aerodrome is located
 S - surrounding countries
 FIL – all countries up to and including the aerodrome of first intended landing
 PIB: Pre-flight Information Bulletins
 P1 – Aerodrome (AD) format
 P2 – Area format, AD format
 P3 – Route format, Area format, AD format
 PREP: Preparation method of PIB
 C – Centralized preparation
 L – Local preparation (at the aerodrome concerned)
- 7 Area of coverage by AFTN routing areas for which aeronautical information/flight documentation is required to be available.
Note.-The AFTN routing areas are shown on FASID Chart MET 1
- 8 Availability of Post-Flight Reporting Forms
- 9 Remarks
 (Indicate where processing of aeronautical information is automated/database).
 A - Automated

3A2-1

<u>Aerodrome where service is required</u>			<u>Responsible AIS Office</u>		<u>AIS information to be provided</u>					<u>Area of coverage</u> <u>By AFTN routing areas</u>	<u>Post Flight Report</u>	<u>Remarks</u>
					<u>AIP+</u>			<u>PIB</u>				
<u>Name</u>	<u>Use</u>	<u>ICAO Loc. Ind.</u>	<u>Name</u>	<u>ICAO loc. Ind.</u>	<u>L</u>	<u>S</u>	<u>F I L</u>	<u>P1 P2 P3</u>	<u>P R E P</u>			
<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>					<u>7</u>	<u>8</u>	<u>9</u>
AFGHANISTAN												
KABUL/Kabul	RS	OAKB										
KANDAHAR/Kandahar	AS	OAKN										
BAHRAIN												
BAHRAIN/Bahrain Intl	RS	OBBI	Bahrain AIS	OB BBYNYX			X	P3	L	O, H, D, L, E, K, U, F, V, Z, Y, R, W, A, N, G	NIL	A
EGYPT												
ALEXANDRIA/Alexandria Intl	RS	HEAX	Alexandria	HEAXZIZX	X			P3	C		X	A
ALEXANDRIA/Borg El Arab Intl	RS	HEBA										
EL-ARISH/El-Arish Intl	AS	HEAR										
ASWAN/Aswan Intl	RS	HESN	Aswan	HESNZIZX	X			P3	C	H, L, U	X	A
ASYUT/Asyut Intl	RS	HEAT	Cairo	HECAZPZX	X			P3		H, L, U	X	
CAIRO/Cairo Intl	RS	HECA	Cairo	HECAZPZX HECAZIZX	X	X	X	P3	C	D, E, G, H, L, O, U, V	X	A
HURGHADA/Hurghada	RS	HEGN	Hurghada	HEGNZIZX	X			P3	C	E, L, O, U	X	A
LUXOR/Luxor	RS	HELX	Luxor	HELXZIZX	X			P3	C	E, F, H, L	X	A
SHARM-EL-SHEIKH/Sharm El Sheikh	RS	HESH	Sharm El Sheikh	HESHZIZX	X			P3	C	E, L, O, U	X	A

<u>Aerodrome where service is required</u>			<u>Responsible AIS Office</u>		<u>AIS information to be provided</u>					<u>Area of coverage</u> <u>By AFTN routing areas</u>	<u>Post Flight Report</u>	<u>Remarks</u>
					<u>AIP+</u>			<u>PIB</u>				
<u>Name</u>	<u>Use</u>	<u>ICAO Loc. Ind.</u>	<u>Name</u>	<u>ICAO loc. Ind.</u>	<u>L</u>	<u>S</u>	<u>F I L</u>	<u>P1 P2 P3</u>	<u>P R E P</u>			
<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>					<u>7</u>	<u>8</u>	<u>9</u>
EILAT/Eilat	RNS	LLET										
HAIFA/Haifa	RS	LLHA										
JERUSALEM/Atarot	RS	LLJR										
OVDA/Intl	RS	LLOV										
TEL AVIV/Ben Gurion	RS	LLBG										
JORDAN												
AMMAN/Marka Intl	AS	OJAM	AMMAN Marka AIS Unit	OJAMYOYX	X	X	X	P3	L	O,E,L,D,G,W,R,V, U,K,Y,C,H		A
AMMAN/Queen Alia Intl	RS	OJAI	AMMAN Queen Alia NOF	OJAIYNYX	X	X	X	P3	L	O,E,L,D,G,W,R,V, U,K,Y,C,H		A
AQABA/King Hussein Intl	RNS	OJAQ	AQABA/Aqaba AIS Unit	OJAQYOYX	X	X		P3	L	O,E,L,D,G,W,R,V, U,K,Y,C,H		A
JERUSALEM/Jerusalem	RS	OJJR										
KUWAIT												
KUWAIT/Kuwait Intl	RS	OKBK	Kuwait - AIS	OKNOYNYX OKNOYOYX	X	X	X	P3	L	O, E, L, H, K, V, W, R, U, Z.		
LEBANON												
BEIRUT/ R. B. H – Beirut Intl	RS	OLBA	BEIRUT	OLBAYNYX	X	X	X	P3	C	O, H, D, L, E, K, U, F, V, Z, Y, R, W, A, N, G	X	A
OMAN												

3A2-4

<u>Aerodrome where service is required</u>			<u>Responsible AIS Office</u>		<u>AIS information to be provided</u>					<u>Area of coverage</u> <u>By AFTN routing</u> <u>areas</u>	<u>Post</u> <u>Flight</u> <u>Report</u>	<u>Remarks</u>
					<u>AIP+</u>			<u>PIB</u>				
<u>Name</u>	<u>Use</u>	<u>ICAO</u> <u>Loc.</u> <u>Ind.</u>	<u>Name</u>	<u>ICAO loc.</u> <u>Ind.</u>	<u>L</u>	<u>S</u>	<u>F</u> <u>I</u> <u>L</u>	<u>P1</u> <u>P2</u> <u>P3</u>	<u>P</u> <u>R</u> <u>E</u> <u>P</u>	<u>7</u>	<u>8</u>	<u>9</u>
<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>					<u>7</u>	<u>8</u>	<u>9</u>
MUSCAT/Seeb Muscat Intl	RS	OOMS	Seeb Intl NOF	OOMSYNYX	X	X	X	P3	L	E, H, K, L, O, V		
SALALAH	AS	OOSA										
QATAR												
DOHA/Doha Intl	RS	OTBD										
SAUDI ARABIA												
DAMMAM/King Fahd Intl	RS	OEDF	Jeddah NOF	OEJDYNYX	X			P3	C	D, E, F, G, H, K, L, O, R, V, W		
JEDDAH/King Abdulaziz Intl	RS	OEJN	Jeddah NOF	OEJDYNYX	X	X	X	P3	C	D, E, F, G, H, K, L, O, R, V, W		
MADINAH/Prince Mohammad Bin Abdulaziz	RS	OEMA	Jeddah NOF	OEJDYNYX	X			P3	C	D, E, F, G, H, K, L, O, R, V, W		
RIYADH/King Khalid Intl	RS	OERK	Jeddah NOF	OEJDYNYX	X			P3	C	D, E, F, G, H, K, L, O, R, V, W		
SYRIAN ARAB REPUBLIC												
ALEPPO/Aleppo Intl	RS	OSAP										
BASSEL AL-ASSAD/Latakia	RS	OSLK										
DAMASCUS/Damascus Intl	RS	OSDI										
UNITED ARAB EMIRATES												

3A2-5

<u>Aerodrome where service is required</u>			<u>Responsible AIS Office</u>		<u>AIS information to be provided</u>					<u>Area of coverage</u> <u>By AFTN routing</u> <u>areas</u>	<u>Post</u> <u>Flight</u> <u>Report</u>	<u>Remarks</u>
					<u>AIP+</u>			<u>PIB</u>				
<u>Name</u>	<u>Use</u>	<u>ICAO</u> <u>Loc.</u> <u>Ind.</u>	<u>Name</u>	<u>ICAO loc.</u> <u>Ind.</u>	<u>L</u>	<u>S</u>	<u>F</u> <u>I</u> <u>L</u>	<u>P1</u> <u>P2</u> <u>P3</u>	<u>P</u> <u>R</u> <u>E</u> <u>P</u>			
<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>					<u>7</u>	<u>8</u>	<u>9</u>
ABU DHABI/Abu Dhabi Intl	RS	OMAA	Abu Dhabi Briefing Office	OMAA YOYX	X			P3	L	O, H, D, L, E, U, F, V, Z, R, W, G	NIL	
AL AIN/Al Ain Intl	RS	OMAL	Al Ain	OMALZTZX	X	X		P3	C	H, O, U, V	X	A
DUBAI/Dubai Intl	RS	OMDB	Dubai AIS	OMDB YOYX OMDBZPZX			X	P3	L	O, H, E, U, V, Z, R, W		
FUJAIRAH/Fujairah Intl	RS	OMFJ	Fujairah AIS	OMFJZPZX		X		P3	L	O, H, D, L, E, U, V, W, K, Y, G, C, B	NIL	A
RAS AL KHAIMAH/Ras al Khaima Intl	RS	OMRK	Ras Al Khaimah	OMRK NYX	X	X	X	P1	L	O	X	NIL
SHARJAH/Sharjah Intl	RS	OMSJ	Sharjah AIS	OMSJ YOYX			X	P3	C	O, H, E, U, V, Z, R, W		
YEMEN												
ADEN/Aden Intl	RS	OYAA	Aden AIS	OYAAZPZX	L		X				NIL	
HODEIDAH/Hodeidah Intl	RS	OYHD	Hodeidah AIS	OYHDYFYX	L	X					NIL	
SANA' A/Sana'a Intl	RS	OYSN	Sana'a AIS	OYSNZPZX	L		X	P3	C	O,H,E,U,V,W	NIL	NIL
TAIZ/ Taiz Intl	RS	OY TZ		OY TZYFYX	L							

AIS/MAP TF/4
Appendix 3A3 to the Report on Agenda Item 3

FASID TABLE AIS-4
AVAILABILITY OF AERONAUTICAL INFORMATION

EXPLANATION OF THE TABLE

FASID Table AIS-4 sets out the requirement for the integrated aeronautical information package from foreign Aeronautical Information Services (AIS) to be available at aerodrome/heliport AIS Units in the MID region, for pre-flight briefing.

The table consists of three parts. Table AIS-4A covers the requirements for the integrated aeronautical information package from States and Territories in the MID region, Table AIS-4B includes the requirements from the EUR region and Table AIS-4C includes the requirements from the ASIA, CAR, NAM, SAM and AFI regions.

For each aerodrome/heliport in the MID region, the requirement is shown by an "X" against the State or Territory from which the integrated aeronautical information package is required.

For each aerodrome/heliport the location indicator and designator of aerodrome/heliport use are listed.

Aerodrome/Heliport use Designation:

- | | | |
|-----|---|---|
| RS | - | international scheduled air transport, regular use; |
| RNS | - | international non-scheduled air transport, regular use; |
| RG | - | international general aviation, regular use; |
| AS | - | international scheduled air transport, alternate use. |

3A3.1-4

AIS-4-A			From MID														
Integrated Aeronautical Information Package TO BE AVAILABLE IN			Afghanistan	Bahrain	Egypt	Iran	Iraq	Israel	Jordan	Kuwait	Lebanon	Oman	Qatar	Saudi Arabia	Syria Arab Rep	United Arab Emirates	Yemen
City/Aerodrome	Use	ICAO Loc. Ind.															
SAUDI ARABIA																	
DAMMAM/King Fahd Intl	RS	OEDF	X	X	X	X	X		X	X	X	X	X		X	X	X
JEDDAH/King Abdulaziz	RS	OEJN	X	X	X	X	X		X	X	X	X	X		X	X	X
MADINAH/Prince Mohammad Bin Abdulaziz	RS	OEMA	X	X	X	X	X		X	X	X	X	X		X	X	X
RIYADH/King Khalid Intl	RS	OERK	X	X	X	X	X		X	X	X	X	X		X	X	X
SYRIAN ARAB REPUBLIC																	
ALEPPO/Aleppo Intl	RS	OSAP															
BASSEL AL-ASSAD/Latakia	RS	OSLK															
DAMASCUS/Damascus Intl	RS	OSDI															
UNITED ARAB EMIRATES																	
ABU DHABI/Intl	RS	OMAA		X	X	X			X	X	X	X		X	X	X	X
AL AIN/Al Ain Intl	RS	OMAL		X	X	X			X			X	X	X			
DUBAI/Dubai Intl	RS	OMDB		X	X	X			X	X	X	X		X	X	X	
FUJAIRAH/Fujairah Intl	RS	OMFJ		X	X	X	X		X	X	X	X	X	X	X	X	
RAS AL KHAIMAH/Ras al Khaima Intl	RS	OMRK		X								X	X			X	
SHARJAH/Sharjah Intl	RS	OMSJ		X	X	X			X	X	X	X		X	X	X	

3A3.1-5

AIS-4-A			From MID														
Integrated Aeronautical Information Package TO BE AVAILABLE IN			Afghanistan	Bahrain	Egypt	Iran	Iraq	Israel	Jordan	Kuwait	Lebanon	Oman	Qatar	Saudi Arabia	Syria Arab Rep	United Arab Emirates	Yemen
City/Aerodrome	Use	ICAO Loc. Ind.															
YEMEN																	
ADEN/Aden Intl	RS	OYAA															
HODEIDAH/Hodeidah Intl	RS	OYHD															
SANA'A/Sana'a Intl	RS	OYSN	X	X	X	X			X	X	X	X	X	X	X	X	
TAIZ/Taiz Intl	RS	OYTZ															

3A3.2-6

AIS-4-B			From EUR																												
Integrated Aeronautical Information Package TO BE AVAILABLE IN			AUSTRIA	Belgium	Bulgaria	Croatia	Cyprus	Czech Rep	Denmark	Finland	France	Germany	Greece	Hungary	Ireland	Italy	Luxembourg	Malta	Netherlands, Kingdom Of	Norway	Poland	Portugal	Romania	Russian Federation	Slovakia	Spain	Sweden	Switzerland	Turkey	Ukraine	United Kingdom
Name	Use	ICAO Loc. Ind.																													
SHARJAH/Sharjah Intl	RS	OMSJ																													
YEMEN																															
ADEN/Aden Intl	RS	OYAA																													
HODEIDAH/Hodeidah Intl	RS	OYHD																													
SANA'A/Sana'a Intl	RS	OYSN				X	X				X	X	X			X			X				X	X				X	X	X	
TAIZ/Taiz Intl	RS	OYTZ																													

AIS/MAP TF/4
Appendix 3A4 to the Report on Agenda Item 3

FASID TABLE AIS-6 — AERONAUTICAL CHART REQUIREMENTS

EXPLANATION OF THE TABLE

Column

- | | |
|----|---|
| 1 | Name of the State, territory or aerodrome for which aeronautical chart is required with the designation of the aerodrome use:

RS — international scheduled air transport, regular use
RNS — international non-scheduled air transport, regular use
RG — international general aviation, regular use
AS — international scheduled air transport, alternate use |
| 2 | Runway designation numbers |
| 3 | Type of each of the runways to be provided. The types of runways, as defined in Annex 14, Volume 1, Chapter I, are:

NINST — non-instrument runway;
NPA — non-precision approach runway
PA1 — precision approach runway, Category I;
PA2 — precision approach runway, Category II;
PA3 — precision approach runway, Category III. |
| 4 | Requirement for the Enroute Chart - ICAO (ENRC), shown by an “X” against the State or territory to be covered. |
| 5 | Requirement for the Instrument Approach Chart –ICAO (IAC), shown by an “X” against the runway designation to be covered. |
| 6 | Requirement for the Aerodrome/Heliport Chart – ICAO (ADC), shown by an “X” against the aerodrome to be covered. |
| 7 | Requirement for the Aerodrome Obstacle Chart –ICAO Type A (AOC-A), shown by an “X” against the runway designation to be covered. |
| 8 | Requirement for the Precision Approach Terrain Chart – ICAO (PATC), shown by an “X” against the runway designation to be covered. |
| 9 | Requirement for the Area Chart – ICAO (ARC), shown by an “X” against the aerodrome to be covered. |
| 10 | Requirement for the Standard Departure Chart-Instrument – ICAO (SID), shown by an “X” against the runway designation to be covered. |
| 11 | Requirement for the Standard Arrival Chart-Instrument – ICAO (STAR), shown by an “X” against the runway designation to be covered. |
| 12 | Requirement for the Visual Approach Chart – ICAO (VAC), shown by an “X” against the aerodrome or runway designation to be covered. |
| 13 | Requirement for the Aerodrome Obstacle Chart – ICAO Type C (AOC-C), shown by an “X” against the aerodrome to be covered. |
| 14 | Remarks. |

Note.- For Columns 4 to 13 use the following symbols:

X- Required but not implemented
 XI- Required and implemented

STATE, TERRITORY OR AERODROME FOR WHICH THE CHART IS REQUIRED			MANDATORY CHARTS					CONDITIONALLY MANDATORY CHARTS					REMARKS
CITY/AERODROME/	RWY No	RWY TYPE	ENRC	IAC	ADC	AOC-A	PATC	ARC	SID	STAR	VAC	AOC-C	
1	2	3	4	5	6	7	8	9	10	11	12	13	14
RS	14 32	NPA PA1		XI		- -							No significant obstacles for RWY 14/32
HECA Cairo RS					XI								
	05L 23R	PA2 PA2		XI XI		XI XI	X X						
	05R 23L	PA2 PA2		XI XI		XI XI	X X						
	16 34	NINST NINST				XI XI							
HEGN Hurghada RS					XI								
	16 34	NPA PA1		XI		- -							No significant obstacles for RWY 16/34
HELX Luxor RS					XI								
	02 20	NPA PA1		XI XI		- -							No significant obstacles for RWY 02/20
HEMA MARSA ALAM/ Marsa Alam RNS					XI								
	15 33	NPA NPA		XI XI		- -							No significant obstacles for RWY 15/33
HEOW SHARK EL OWEINAT/Shark El-Oweinat Int'l AS					XI								
	01 19	NPA NINST		XI		X X							
HEPS PORT SAID/Port Said Int'l AS					XI								
	10 28	NPA NPA		XI		XI XI							
HESC St. Catherine RS					XI								
	17 35	NINST NINST				XI XI							
HESH SHARM EL-SHEIKH/ Sharm-El-Sheikh RS					XI								
	04L 22R	PA1 NINST		XI		X X							
	04R 22L	NPA NINST		XI		X X							
HESN Aswan RS					XI								
	17 35	NPA PA1		XI XI		- -							No significant obstacles for RWY 17/35

3A4-4

STATE, TERRITORY OR AERODROME FOR WHICH THE CHART IS REQUIRED			MANDATORY CHARTS					CONDITIONALLY MANDATORY CHARTS					REMARKS
CITY/AERODROME/	RWY No	RWY TYPE	ENRC	IAC	ADC	AOC-A	PATC	ARC	SID	STAR	VAC	AOC-C	
1	2	3	4	5	6	7	8	9	10	11	12	13	14
HETB RAS EL NAKAB TABA/Taba AS					XI								
	04 22	NPA NINST		XI		XI XI							
IRAN			XI										
OIKB Bandar Abbass Intl RS					XI								
	03R 21L	NPA PA1		XI XI		X X			XI XI	XI XI			
	03L 21R	NINST NINST				X X							
OIFM Esfahan/Shahid Beheshti Intl RS					XI								
	08L 26R	NPA PA1		XI XI		X X			XI XI	XI			
	08R 26L	NPA NPA		XI XI		X X			XI XI	XI			
OIMM Mashhad/Shahid Hashemi Nejad Intl RS					XI								
	13L 31R	NPA PA1		XI XI		X X			XI XI	XI XI			
	13R 31L	NPA PA1		XI XI		X X			XI XI	XI XI			
OISS Shiraz/shahid Dastghaib Intl RS					XI								
	11R 29L	NPA PA1		XI		X X			XI XI	XI			
	11L 29R	NPA PA1		XI		X X			XI XI	XI			
OITT TABRIZ/Tabriz Intl RNS					XI								
	12L 30R	NPA PA1		XI XI		X X			XI XI	XI XI			
	12R 30L	NINST NINST				X X							
OIII TEHRAN/Mehrabad Intl RS					XI								
	11R 29L	NPA PA1		XI XI		X X	XI XI		XI XI	XI XI			
	11L 29R	NPA NPA		XI XI		X X	XI XI		XI XI	XI XI			

STATE, TERRITORY OR AERODROME FOR WHICH THE CHART IS REQUIRED			MANDATORY CHARTS					CONDITIONALLY MANDATORY CHARTS					REMARKS
CITY/AERODROME/	RWY No	RWY TYPE	ENRC	IAC	ADC	AOC-A	PATC	ARC	SID	STAR	VAC	AOC-C	
1	2	3	4	5	6	7	8	9	10	11	12	13	14
OIIE TEHRAN/Imam Khomani Intl					XI			XI					
RS	11L 29R	NPA PA42		XI XI		X X	X		XI XI	XI XI			
OIZH ZAHEDAN/Zahedan Intl					XI								
RS	17 35	NPA PA1		XI		X X			XI XI	XI			
IRAQ			X										
ORBI BAGHDAD/Intl.					XI								The existing charts should be updated.
RS	15L 33R	PA2 PA2		X X		XI XI	X X						
	15R 33L	PA1 PA1		X X		XI XI							
ORMM BASRAH/Basrah Intl.					X								
	14 32	PA2 PA2		X X		XI XI	X X						
ISRAEL			X										
LLET EILAT/Eilat					XI						XI		
RNS	03 21	NPA NINST		XI		XI XI			XI XI				
LLHA HAIFA/Haifa					XI								
RS	16 34	NINST NINST				X X							
LLJR JERUSALEM/Atarot					XI								
RS	12 30	PA1 NPA		XI		XI XI			XI XI				
LLOV OVDA/Intl					XI								
RNS	02L 20R	NINST NPA		XI		XI XI							
LLBG TEL AVIV/Ben Gurion					XI			XI					
RS	03 21	NPA NINST				XI XI			XI XI				
	08 26	NPA PA1		XI		XI XI			XI XI				
	12 30	PA1 NPA		XI XI		XI XI			XI XI		XI		

3A4-6

STATE, TERRITORY OR AERODROME FOR WHICH THE CHART IS REQUIRED			MANDATORY CHARTS					CONDITIONALLY MANDATORY CHARTS					REMARKS
CITY/AERODROME/	RWY No	RWY TYPE	ENRC	IAC	ADC	AOC-A	PATC	ARC	SID	STAR	VAC	AOC-C	
1	2	3	4	5	6	7	8	9	10	11	12	13	14
LLSD TEL AVIV/Sde-Dov AS					XI								
	03 21	NINST NINST				X X			XI XI				
JORDAN			XI										
OJAM AMMAN/Marka Intl AS					XI								
	06 24	NINST PA1		XI XI		XI XI			XI XI	XI XI			
OJAI AMMAN/Queen Alia Intl RS					XI								
	08R 26L	NPA PA2		XI XI		XI XI	X		XI XI	XI XI			
	08L 26R	PA2 PA2		XI XI		XI XI	X X		XI XI	XI XI			
OJAQ AQABA/King Hussein Intl					XI						XI		
	01 19	PA1 NPA		XI XI		XI XI			XI XI				
OJJR JERUSALEM/Jerusalem RS													
	12 30	NPA PA1											
KUWAIT			XI										
OKBK KUWAIT/Kuwait Intl. RS					XI								
	33L 15R	PA2 PA2		XI XI		XI XI	XI XI		XI XI	XI XI			
	33R 15L	PA2 PA2		XI XI		XI XI	XI XI		XI XI	XI XI			
LEBANON			XI										
OLBA R.B.H-BEIRUT Intl. RS					XI								
	17 35	PA1 NINST		XI		XI XI			XI	XI			
	18 36	PA1 NINST				XI XI				XI			
	03 21	PA1 NINST		XI		XI XI			XI XI	XI	XI		

STATE, TERRITORY OR AERODROME FOR WHICH THE CHART IS REQUIRED			MANDATORY CHARTS					CONDITIONALLY MANDATORY CHARTS					REMARKS
CITY/AERODROME/	RWY No	RWY TYPE	ENRC	IAC	ADC	AOC-A	PATC	ARC	SID	STAR	VAC	AOC-C	
1	2	3	4	5	6	7	8	9	10	11	12	13	14
OMAN			X										
OOMS MUSCAT/Seeb Muscat Intl RS	08 26	PA1 PA1		XI XI	XI	XI XI			XI XI	XI XI			
OOSA SALALAH/Salalah AS	07 25	NPA PA1		XI XI	XI	- -			XI XI	XI XI	XI		No significant obstacle for RWY 07/25
QATAR			XI										
OTBD DOHA/Doha Int RS	16 34	NPA1 PA2		XI XI	X	XI XI	XI				XI		
SAUDI ARABIA			X										
OEDF DAMMAM/King Fahd Intl RS	16L 34R	PA1 PA1		XI XI	XI	XI XI	XI XI	XI	XI XI				
	16R 34L	PA1 PA1		XI XI		XI XI	XI XI		XI XI				
OEJN JEDDAH/King Abdulaziz RS	16R 34L	PA2 PA2		XI XI	XI	XI XI	XI XI	XI	XI XI				
	16C 34C	PA2 PA2		XI XI		XI XI	XI XI		XI XI				
	16L 34R	PA1 PA1		XI XI		X X			XI XI				
OEMA MADINAH/Prince Mohammad Bin Abdulaziz RS	17 35	PA1 PA1		XI XI	XI	X X		XI	XI XI				
	18 36	NPA PA1		XI XI		X X			XI XI				
OERK RIYADH/King Khalid Intl RS	15L 33R	PA1 PA1		XI XI	XI	XI XI	XI XI	XI	XI XI				
	15R 33L	PA1 PA1		XI XI		XI XI	XI XI		XI XI				

3A4-8

STATE, TERRITORY OR AERODROME FOR WHICH THE CHART IS REQUIRED			MANDATORY CHARTS					CONDITIONALLY MANDATORY CHARTS					REMARKS
CITY/AERODROME/	RWY No	RWY TYPE	ENRC	IAC	ADC	AOC-A	PATC	ARC	SID	STAR	VAC	AOC-C	
1	2	3	4	5	6	7	8	9	10	11	12	13	14
SYRIA			X										
OSAP ALEPPO/Aleppo Intl. RS					XI								
	09 27	NPA PA1		XI		X X							
OSLK BASSEL AL-ASSAD/Latakia RS					XI								
	17 35	NPA PA1		XI		X X							
OSDI DAMASCUS/Damascus Intl RS					XI						XI		
	05L 23R	NPA PA1		XI XI		XI XI	XI XI		XI XI				
	05R 23L	PA1 NPA		XI XI		X X	XI XI		XI XI				
UNITED ARAB EMIRATES			XI										
OMAA ABU DHABI Intl RS					XI								
	13R 31L	PA1 PA3		XI XI		- -	XI XI		XI XI				Obstacles depicted on the ADC and PATC
	13L 31R	PA3 PA3		XI XI		- -	XI XI		XI XI				
OMAL AL AIN/AI Ain Intl RS					XI								
	01 19	PA1 NPA		XI XI		X X							
OMDB DUBAI/Dubai Intl RS					XI								
	12L 30R	PA3 PA3		XI XI		XI XI	XI XI		XI XI	XI XI			
	12R 30L	PA1 PA1		XI XI		XI XI	XI XI		XI XI	XI XI			
OMFJ FUJAIRAH/Fujairah Intl RS					XI								
	11 29	NPA PA1		XI		XI XI			XI				
OMRK RAS AL KHAIMAH/Ras Al Khaimah Intl RS					XI								
	16 34	NPA PA1		XI XI		X X			XI				
OMSJ SHARJAH/Sharjah Intl RS					XI								Obstacles depicted on the ADC and PATC
	12 30	NPA PA2		XI XI		- -	XI		XI XI	XI XI			

STATE, TERRITORY OR AERODROME FOR WHICH THE CHART IS REQUIRED			MANDATORY CHARTS					CONDITIONALLY MANDATORY CHARTS					REMARKS
CITY/AERODROME/	RWY No	RWY TYPE	ENRC	IAC	ADC	AOC-A	PATC	ARC	SID	STAR	VAC	AOC-C	
1	2	3	4	5	6	7	8	9	10	11	12	13	14
YEMEN			X										
OYAA ADEN/Aden Intl RS					XI			XI					
	08 26	NPA PA1		XI XI		XI XI							
OYHD HODEIDAH/Hodeidah Intl RS					XI			XI			XI		AOC-A issued in AIP AMDT 02/06
	03 21	NPA NPA		XI XI		XI XI							
OYRN MUKALLA/Riyan RS					XI			XI					AOC-A issued in AIP AMDT 02/06
	06 24	NPA NPA		XI		XI XI							
OYSN SANA' A/Sana'a Intl RS					XI			XI					
	18 36	PA1 NPA		XI		XI XI			XI XI	XI XI			
OYTZ TAIZ/Taiz Intl RS					XI						XI		AOC-A issued in AIP AMDT 02/06
	01 19	NPA NPA		X X		XI XI							

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Appendix 3A5 to the Report on Agenda Item 3

FASID Table AIS-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.

State	Sheet number(s)	Remarks
Afghanistan	2336, 2337, 2430, 2431, 2442	
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	<i>Note: Jordan to cover its own territory within Amman FIR</i>
Kuwait	2445	<i>Note: Kuwait to cover its own territory within Kuwait FIR</i>
Lebanon	2426	<i>Note: Lebanon to cover its own territory within Beirut FIR</i>
Oman	2563, 2670	
Qatar		
Saudi Arabia	2446, 2545, 2546, 2564, 2565, 2566, 2668, 2669	
Syrian Arab Republic	2426	<i>Note: Syria to cover its own territory within Damascus FIR</i>
United Arab Emirates		
Yemen	2686, 2687	

- Notes.**
- 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.
 - The responsibility for the production of the WAC sheets: 2548, 2563, and 2670 is not yet assigned to any States.

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Appendix 3A6 to the Report on Agenda Item 3

**FASID TABLE AIS-8 — REQUIREMENTS OF THE
INTEGRATED AERONAUTICAL INFORMATION PACKAGE**

EXPLANATION OF THE TABLE

Column

- 1 Name of the State or territory
- 2 Availability of AIP (see Remarks)
- 3 AIP Amendment issued at regular intervals or publication date
- 4 AIP Amendment - issued in accordance with AIRAC procedures
- 5 AIP Amendment – NIL notification issued when Amendment not published
- 6 AIP Supplement – issued regularly
- 7 AIP Supplement - issued in accordance with AIRAC procedures
- 8 NIL notification when AIP Supplement not issued on the AIRAC effective date previously published
- 9 AIC published as required
- 10 NOTAM issued on regular basis in accordance with the NOTAM format
- 11 Trigger NOTAM issued as required (Annex 15, paragraph 5.1.1.2)
- 12 Checklist of NOTAM issued as required (Annex 15, paragraphs 5.2.8, 5.2.8.1, 5.2.8.2)
- 13 Monthly printed plain language summary of NOTAM issued as required (Annex 15, paragraph 5.2.8.3)
- 14 AIRAC system implemented as required
- 15 NIL notifications issued as required
- 16 Remarks
(Indicate if AIP is available in the restructured format and if not, expected date of implementation)

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State/Territory	AIP	AIP AMENDMENT			AIP SUPPLEMENT			AIC	NOTAM				AIRAC		REMARKS
		REG	AIRAC	NIL	REG	AIRAC	NIL		REG	TRIGGER	CHKLIST	SUMMARY	REG	NIL	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
AFGHANISTAN															Draft AIP available only on the web
BAHRAIN	X	X	X	X		X		X	X	X	X	X	X	X	
EGYPT	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
IRAN ISLAMIC REPUBLIC	X	X	X	X	X	X		X	X	X	X	X	X	X	
IRAQ															Draft AIP available only on the web
ISRAEL	X	X						X	X						
JORDAN	X	X		X	X			X	X	X	X	X		X	
KUWAIT	X	X	X		X	X		X	X	X	X	X			
LEBANON	X	X	X	X				X	X		X	X	X		
OMAN	X	X						X	X		X				
QATAR	X	X	X	X		X		X	X	X	X	X	X	X	
SAUDI ARABIA	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
SYRIAN ARAB REPUBLIC	X							X	X		X				
UNITED ARAB EMIRATES	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
YEMEN	X	X			X	X		X	X	X	X	X			

AIS/MAP TF/4
 Appendix 3B to the Report on Agenda Item 3

FASID TABLE AIS-5 — WGS-84 REQUIREMENTS

EXPLANATION OF THE TABLE

Column

- | | |
|----|--|
| 1 | Name of the State, territory or aerodrome for which WGS-84 coordinates are required with the designation of the aerodrome use:

RS — international scheduled air transport, regular use
RNS — international non-scheduled air transport, regular use
RG — international general aviation, regular use
AS — international scheduled air transport, alternate use |
| 2 | Runway designation numbers |
| 3 | Type of each of the runways to be provided. The types of runways, as defined in Annex 14, Volume 1, Chapter I, are:

NINST — non-instrument runway;
NPA — non-precision approach runway
PA1 — precision approach runway, Category I;
PA2 — precision approach runway, Category II;
PA3 — precision approach runway, Category III. |
| 4 | Requirement for the WGS-84 coordinates for FIR, shown by an “X” against the State or territory to be covered. |
| 5 | Requirement for the WGS-84 coordinates for Enroute points, shown by an “X” against the State or territory to be covered. |
| 6 | Requirement for the WGS-84 coordinates for the Terminal Area, shown by an “X” against the aerodrome to be covered. |
| 7 | Requirement for the WGS-84 coordinates for the Approach points, shown by an “X” against the runway designation to be covered. |
| 8 | Requirement for the WGS-84 coordinates for runways, shown by an “X” against the runway designation to be covered. |
| 9 | Requirement for the WGS-84 coordinates for Aerodrome/Heliport points (e.g. aerodrome/heliport reference point, taxiway, parking position, etc.), shown by an “X” against the aerodrome to be covered. |
| 10 | Requirement for geoid undulation shown by an “X” against the runway threshold to be covered. |
| 11 | Requirement for the WGS-84 Quality System, shown by an “X” against the State or territory to be covered. |
| 12 | Requirement for publication of WGS-84 coordinates in the AIP shown by an “X” against the State or territory to be covered. |
| 13 | Remarks (timetable for implementation) |

Note.- For Columns 4 to 12 use the following symbols:

- X- Required but not implemented
- XI- Required and implemented

WGS-84 Requirements (MID FASID Table AIS-5)

STATE, TERRITORY OR AERODROME FOR WHICH WGS-84 IS REQUIRED			WGS-84 REQUIRED									REMARKS
CITY/AERODROME/	RWY No	RWY TYPE	FIR	ENR	TMA CTA CTZ	APP	RWY	AD/ HEL	GUND	QUALITY SYSTEM	AIP	
1	2	3	4	5	6	7	8	9	10	11	12	13
AFGHANISTAN			X	X						X	X	
(OAKB) KABUL/Kabul					X			X				
RS	11 29	NPA PA1				X X	X X		X X			
(OAKN) KANDAHAR/Kandahar					X			X				
AS	05 23	NPA NPA				X X	X X		X X			
BAHRAIN			XI	XI						XI	XI	
(OBBI) Bahrain Intl.					XI			XI				
RS	12L 30R	PA1 PA1				XI XI	XI XI		XI XI			
RS	12R 30L	NPA NPA				XI XI	XI XI		XI XI			
EGYPT			XI	XI						XI	XI	
HEAR EL-ARISH/El-Arish Int'l					XI			XI				
AS	16 34	NPA NPA				XI XI	XI XI		XI XI			
(HEAT) Asyut					X			XI				
AS	13 31	NINST NPA				XI	XI XI		XI			
(HEAX) Alexandria Int'l					XI			XI				
RS	18 36	NINST NPA				XI	XI XI		XI			
	04 22	NPA NINST				XI	XI XI		XI			
HEAZ CAIRO/Almaza Int'l					XI			XI				
ANS	18 36	NPA NPA				XI XI	XI XI		XI XI			
	05 23	NINST NINST					XI XI					

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STATE, TERRITORY OR AERODROME FOR WHICH WGS-84 IS REQUIRED			WGS-84 REQUIRED									REMARKS
CITY/AERODROME/	RWY No	RWY TYPE	FIR	ENR	TMA CTA CTZ	APP	RWY	AD/ HEL	GUND	QUALITY SYSTEM	AIP	
1	2	3	4	5	6	7	8	9	10	11	12	13
HEBA ALEXANDRIA/Borg El-Arab RS					X			X				
	14 32	NPA PA1				X XI	XI XI		XI XI			
(HECA) Cairo RS					XI			XI				
	05L 23R	PA2 PA2				XI XI	XI XI		XI XI			
	05R 23L	PA2 PA2				XI XI	XI XI		XI XI			
	16 34	NINST NINST				XI XI	XI XI		XI XI			
(HEGN) Hurgada RS					XI			XI				
	16 34	NPA PA1				XI XI	XI XI		XI XI			
(HELX) Luxor RS					XI			XI				
	02 20	NPA PA1				XI XI	XI XI		XI XI			
HEMA MARSA ALAM/ Marsa Alam RNS					XI			XI				
	15 33	NPA NPA				XI XI	XI XI		XI XI			
HEOW SHARK EL OWEINAT/Shark El-Owenat Int'l AS					XI			XI				
	01 19	NPA NINST				XI	XI XI		XI			
HEPS PORT SAID/Port Said Int'l AS					XI			XI				
	10 28	NPA NPA				XI XI	XI XI		XI XI			
(HESC) St. Catherine RS								XI				
	17 35	NINST NINST					XI XI					
(HESH) Sharm-El-Sheikh RS					XI			XI				
	04L 22R	PA1 NINST				XI	XI XI		XI			
	04R 22L	NPA NINST				XI	XI XI		XI			
(HESN) Aswan RS					XI			XI				
	17 35	NPA PA1				XI	XI XI		XI XI			

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STATE, TERRITORY OR AERODROME FOR WHICH WGS-84 IS REQUIRED			WGS-84 REQUIRED									REMARKS
CITY/AERODROME/	RWY No	RWY TYPE	FIR	ENR	TMA CTA CTZ	APP	RWY	AD/ HEL	GUND	QUALITY SYSTEM	AIP	
1	2	3	4	5	6	7	8	9	10	11	12	13
(HETB) Taba					XI	XI		XI				
AS	04 22	NPA NINST					XI XI		XI			
IRAN			XI	XI						XI	XI	
(OIKB) Bandar Abbass/ Bandar Abbas Intl RS	03R 21L	NPA PA1			XI	X X	XI XI	XI	XI XI			
	03L 21R	NINST NINST				X X	XI XI		XI XI			
(OIFM) Esfahan/ Shahid Beheshti Intl RS	08L 26R	NPA PA1			XI	X X	XI XI	XI	XI XI			
	08R 26L	NPA NPA				X X	XI XI		XI XI			
(OIMM) Mashhad/ Shahid Hashemi Nejad Intl RS	13L 31R	NPA PA1			XI	X X	XI XI	XI	XI XI			
	13R 31L	NPA NPA+				X X	XI XI		XI XI			
(OISS) Shiraz/shahid Dastghaib Intl RS	11R 29L	NPA PA1			XI	X X	XI XI	XI	XI XI			
	11L 29R	NPA NPA+				X X	XI XI		XI XI			
(OITT) Tabriz/Tabriz Intl RNS	12L 30R	NPA PA1			XI	X X	XI XI	XI	XI XI			
	12R 30L	NINST NINST				X X	XI XI		XI XI			
(OIII) Tehran/ Mehrabad Intl RS	11R 29L	NPA PA1			XI	X X	XI XI	XI	XI XI			
	11L 29R	NPA NPA				X X	XI XI		XI XI			
(OIII) TEHRAN/Imam Khomeini Intl					XI			XI				

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STATE, TERRITORY OR AERODROME FOR WHICH WGS-84 IS REQUIRED			WGS-84 REQUIRED									REMARKS
CITY/AERODROME/	RWY No	RWY TYPE	FIR	ENR	TMA CTA CTZ	APP	RWY	AD/ HEL	GUND	QUALITY SYSTEM	AIP	
1	2	3	4	5	6	7	8	9	10	11	12	13
RS	11L 29R	NPA PA1				X X	XI XI		XI XI			
(OIZH) Zahedan/Zahedan					XI			XI				
— Intl RS	17 35	NPA PA1				X X	XI XI		XI XI			
IRAQ			X	X						X	X	
(ORBI) Baghdad					X			X				
Intl. RS	15L 33R	PA2 PA2				X X	X X		X X			
	15R 33L	PA1 PA1				X X	X X		X X			
(ORMM) Basrah Intl.					X			X				
RS	14 32	PA2 PA2				X X	X X		X X			
ISRAEL			X	X						X	X	
(LLET) EILAT/Eilat					X			X				
RNS	03 21	NPA NINST				X	X X		X			
(LLHA) HAIFA/Haifa					X			X				
RS	16 34	NINST NINST					X X					
(LLJR) JERUSALEM/Atarot					X			X				
RS	12 30	PA1 NPA				X X	X X		X X			
(LLOV) OVDA/Intl					X			X				
RNS	02L 20R	NINST NPA				X	X X		X			
(LLBG) TEL AVIV/ Ben Gurion					X			X				
RS	03 21	NPA NINST				X	X X		X			
	08 26	NPA PA1				X X			X X			
	12 30	PA1 NPA				X X			X X			
(LLSD) TEL AVIV/ Sde-Dov					X			X				
AS	03 21	NINST NINST					X X					

STATE, TERRITORY OR AERODROME FOR WHICH WGS-84 IS REQUIRED			WGS-84 REQUIRED									REMARKS
CITY/AERODROME/	RWY No	RWY TYPE	FIR	ENR	TMA CTA CTZ	APP	RWY	AD/HEL	GUND	QUALITY SYSTEM	AIP	
1	2	3	4	5	6	7	8	9	10	11	12	13
JORDAN			XI	XI						XI	XI	
(OJAI) Amman/ Queen Alia Intl RS	08R 26L	NPA PA2			XI	XI XI	XI XI	XI	XI XI			
	08L 26R	PA2 PA2				XI XI	XI XI		XI XI			
(OJAM) Amman/Marka Intl AS	24 06	PA1 NINST			XI	XI XI	XI XI	XI	XI			
(OJAQ) Aqaba/King Hussein Intl RNS	01 19	PA1 NPA			XI	XI XI	XI XI	XI	XI XI			
(OJJR) JERUSALEM/ Jerusalem RS	12 30	NPA PA1										
KUWAIT			XI	XI						X	XI	
(OKBK) Kuwait Intl. RS	33L 15R	PA2 PA2			XI	XI XI	XI XI	XI	XI XI			
	33R 15L	PA2 PA2				XI XI	XI XI		XI XI			
LEBANON			XI	XI						X	XI	
(OLBA) R.B.H. Beirut Intl. RS	17 35	PA1 NINST			XI	XI XI	XI XI	XI	X			RWY 35 not used for landing RWY 36 no Land during night
	18 36	PA1 NINST				XI XI	XI XI		X			
	03 21	PA1 NINST				XI XI	XI XI		X			
OMAN			XI	XI						XI	XI	
(OOMS) Muscat/ Seeb Muscat Intl. Airport RS	26 08	PA1 PA1			XI	XI XI	XI XI	XI	XI XI			
(OOSA) Salalah AS	07 25	NPA PA1			XI	XI XI	XI XI	XI	XI XI			
QATAR			XI	XI						X	XI	
(OTBD) Doha Int. Airport RS	34 16	PA2 NPA			XI	XI XI	XI XI	XI	X X			

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STATE, TERRITORY OR AERODROME FOR WHICH WGS-84 IS REQUIRED			WGS-84 REQUIRED									REMARKS
CITY/AERODROME/	RWY No	RWY TYPE	FIR	ENR	TMA CTA CTZ	APP	RWY	AD/ HEL	GUND	QUALITY SYSTEM	AIP	
1	2	3	4	5	6	7	8	9	10	11	12	13
SAUDI ARABIA			XI	XI						X	XI	
(OEDF) DAMMAM/King Fahd Intl RS					XI			XI				
	16L 34R	PA1 PA1				XI XI	XI XI		X X			
	16R 34L	PA1 PA1				XI XI	XI XI		X X			
(OEJN) JEDDAH/King Abdulaziz RS					XI			XI				
	16R 34L	PA2 PA2				XI XI	XI XI		X X			
	16C 34C	PA2 PA2				XI XI	XI XI		X X			
	16L 34R	PA1 PA1				XI XI	XI XI		X X			
(OEMA)MADINAH/Prince Mohammad Bin Abdulaziz RS					XI			XI				
	17 35	PA1 PA1				XI XI	XI XI		X X			
	18 36	NPA PA1				XI XI	XI XI		X X			
(OERK) RIYADH/King Khalid Intl RS					XI			XI				
	15L 33R	PA1 PA1				XI XI	XI XI		X X			
	15R 33L	PA1 PA1				XI XI	XI XI		X X			
SYRIA			X	XI						X	X	
(OSAP) Aleppo Intl. RS					XI			X				
	09 27	NPA PA1				XI XI	XI XI		X			
(OSLK) Bassel Al-Assad RS					X			X				
	17 35	NPA PA1				X X	X X					
(OSDI) Damascus RS					XI			XI				
	05L 23R	NPA PA1				X XI	X XI		X X			
	05R 23L	PA1 NPA				X X	X X		X X			

STATE, TERRITORY OR AERODROME FOR WHICH WGS-84 IS REQUIRED			WGS-84 REQUIRED									REMARKS
CITY/AERODROME/	RWY No	RWY TYPE	FIR	ENR	TMA CTA CTZ	APP	RWY	AD/HEL	GUND	QUALITY SYSTEM	AIP	
1	2	3	4	5	6	7	8	9	10	11	12	13
UNITED ARAB EMIRATES			XI	XI						XI	XI	
(OMAA) Abu Dhabi Int. Airport RS					XI			XI				
	31L 13R	PA3 PA1				XI XI	XI XI		XI XI			
	13L 31R	PA3 PA3				XI XI	XI XI		XI XI			
(OMAL) Al Ain Int. Airport RS					XI			XI				
	01 19	PA1 NPA				XI XI	XI XI		XI XI			
(OMDB) Dubai Int. Airport RS					XI			XI				
	12L 30R	PA3 PA3				XI XI	XI XI		XI XI			
	12R 30L	PA1 PA1				XI XI	XI XI		XI XI			
(OMFJ) Fujairah Int. Airport RS					XI			XI				
	11 29	NPA PA1				XI XI	XI XI		XI XI			
(OMRK) Ras Al Khaimah Int. Airport RS					XI			XI				
	16 34	NPA PA1				XI XI	XI XI		XI XI			
(OMSJ) Sharjah Int. Airport RS					XI			XI				
	12 30	NPA PA2				XI XI	XI XI		XI XI			
YEMEN			XI	XI						X	XI	
(OYAA) Aden Intl RS					XI			XI				
	08 26	NPA PA1				XI XI	XI XI		XI XI			
(OYHD) Hodeidah Intl RS					XI			XI				
	03 21	NPA NPA				XI XI	XI XI		XI XI			
(OYRN) Mukalla/Riyan RS					XI			XI				
	06 24	NPA NPA				XI XI	XI XI		XI XI			
(OYSN) Sanna'a Intl RS					XI			XI				
	18 36	PA1 NPA				XI XI	XI XI		XI XI			
(OYTZ) Taiz Intl RS					XI			XI				
	01 19	NPA NPA				XI XI	XI XI		XI XI			

AIS/MAP TF/4
Appendix 3C 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
AFGHANISTAN	N	N	N	N	N	N	N	N	N	
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	
ISRAEL	N	N	N	N	N	N	N	N	N	
JORDAN	F	F	F	F	F	F	F	F	F	
KUWAIT	F	F	F	F	F	F	F	N	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	N	N	F	
SAUDI ARABIA	F	F	F	F	F	F	N	F	F	GUND implementation under process
SYRIA	N	F	P	P	P	P	N	N	N	
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
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AIS/MAP TF/4
Report on Agenda Item 4

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

4.1 The meeting recalled that MIDANPIRG/10 noted that during the review of MIDANPIRG/9 report by the ICAO Council, it was agreed that the proposal to amend the form used for the identification, assessment and reporting of air navigation deficiencies would be taken into account by the Secretariat at the next revision of the methodology since more experience/feedback is needed from MID Region before global use. The meeting was of the view to continue using the amended form by MIDANPIRG subsidiary bodies as endorsed by MIDANPIRG/9 under Conclusion 9/61 in order to give more time to assess its effectiveness in defining reasons for non elimination of deficiencies in the MID Region.

4.2 The meeting noted that MIDANPIRG/10 developed Conclusion 10/77 related to the elimination of air navigation deficiencies as follows:

CONCLUSION 10/77: ELIMINATION OF AIR NAVIGATION DEFICIENCIES IN THE MID REGION

That,

- a) MID States 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;*
- b) MID States increase their efforts to overcome the delay in mitigating air navigation deficiencies identified by MIDANPIRG and explore ways and means to eliminate deficiencies;*
- c) MID States experiencing difficulties in financing the elimination of safety-related deficiencies may wish to take advantage of the funding opportunity offered by the International Financial Facility for Aviation Safety (IFFAS);*
- d) Users of air navigation facilities and services in the MID Region report to the ICAO MID Regional Office when the remedial action on a deficiency has been taken, and*
- e) ICAO continues to provide assistance to States for the purpose of rectifying deficiencies; and when required, States request ICAO assistance through Technical Co-operation Programme and/or Special Implementation Projects (SIP).*

4.3 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.

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

Deficiencies in the AIS/MAP Field

AFGHANISTAN

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		F H O	Need for implementation of AIRAC requirements	Afghanistan	Dec, 2007 Jan, 2010	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	Afghanistan	Dec, 2007 Dec 2010	B
3	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	Afghanistan	Dec, 2007 Dec, 2009	A
4	ANNEX 4 Para. 7.2		Non-production of the Enroute Chart-ICAO	May, 1995		F H O	Need to produce the Enroute Chart-ICAO	Afghanistan	Dec, 2007 Dec, 2010	A
5	ANNEX 4: Para 3.2		Non-production of Aerodrome Obstacle Chart-ICAO Type A	May, 1995		F H 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)	Afghanistan	Dec, 2007 Dec, 2009	A

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

“H”= Human Resources

“S”= State (Military/political)

“O”= Other unknown causes

AIS/MAP TF/4-REPORT
APPENDIX 4A

4A-2

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
6	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	Afghanistan	Dec, 2007 Dec, 2010	U
7	ANNEX 15: Para 3.7.1		Implementation of WGS-84	Dec, 1997		F H O	Need to implement WGS-84	Afghanistan	Dec, 2007 Dec, 2010	U
8	ANNEX 15: Para 4.2.9 & 4.3.7		Lack of regular and effective updating of the AIP	Jan, 2003		F H O	Need to update the AIP on a regular basis	Afghanistan	Dec, 2007 Dec, 2009	U
9	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.	Afghanistan	Dec, 2007 Dec, 2011	U
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	Afghanistan	Dec, 2007 Dec, 2008	A
11	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	Afghanistan	Dec, 2007 Dec, 2008	A
12	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.	Afghanistan	Dec, 2007 Dec, 2009	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

BAHRAIN

Item No	Identification		Deficiencies			Corrective Action			
	Requirement	Facilities/ Services	Description	Date first reported	Remarks/ Rationale for non-elimination	Description	Executing body	Date of completion	Priority for action

No Deficiencies Reported

⁽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

Item No	Identification		Deficiencies			Corrective Action			
	Requirement	Facilities/ Services	Description	Date first reported	Remarks/ Rationale for non-elimination	Description	Executing body	Date of completion	Priority for action

No Deficiencies Reported

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

“H”= Human Resources

“S”= State (Military/political)

“O”= Other unknown causes

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	F H S	Need to produce the assigned sheets of the World Aeronautical Chart – ICAO 1:1 000 000	Iran + neighboring states	Dec, 2008	B
2	ANNEX 4: Para. 13.2		Non-production of Aerodrome/ Heliport Chart – ICAO	May, 1995		F H	Need to produce Aerodrome/ Heliport Chart – ICAO for all Int'l Aerodromes	Iran	Mar, 2007	A
3	ANNEX 4: Para. 3.2		Non-production of Aerodrome Obstacle Chart-ICAO Type A	May, 1995		F 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, 2009	A
4	ANNEX 15: Para. 3.2		Implementation of a Quality System	Jan, 2003	In progress	F H	Need to introduce a properly organized quality system in conformity with ISO 9000 series of quality assurance standards.	Iran	Dec, 2009	U
5	ANNEX 15: Para. 3.6.5		Lack of AIS automation	Dec, 2007		F H	AIS automation should be introduced with the objective of improving the speed, accuracy, efficiency and cost-effectiveness of aeronautical information services	Iran	Dec, 2009	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

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		F H O	Need to fully comply with the AIRAC procedure	Iraq	Dec, 2007 Jan, 2010	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, 2007 Dec, 2010	B
3	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, 2007 Dec, 2010	A
4	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, 2007 Dec, 2010	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, 2007 Dec, 2010	U
6	ANNEX 15: Para 3.7.1		Implementation of WGS-84	Dec, 1997		F H O	Need to implement WGS-84	Iraq	Dec, 2007 Dec, 2010	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 4.2.9 & 4.3.7		Lack of regular and effective updating of the AIP	Jan, 2003		F H O	Need to update the AIP on a regular basis	Iraq	Dec, 2007 Jan, 2010	U
8	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.	Iraq	Dec, 2007 Dec, 2011	U
9	ANNEX 4: Para. 11.2		Non-production of Instrument Approach Chart-ICAO	Jan, 2003		F H ⊖	Need to produce Instrument Approach Chart-ICAO for all Int'l Aerodromes	Iraq	Dec, 2007 Dec, 2008	A
10	ANNEX 15: Para. 5.2.8.3		Non-production of the monthly printed plain language summary of NOTAM	Jan, 2003		H ⊖	Need to produce the monthly printed plain language summary of NOTAM	Iraq	Dec, 2007 Dec, 2008	A
11	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.	Iraq	Dec, 2007 Dec, 2009	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

ISRAEL

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		H O	Need for implementation of AIRAC requirements	Israel	Dec, 2007	U
2	ANNEX 4: Para. 7.2		Non-production of the Enroute Chart-ICAO	May, 1995		S O	Need to produce the Enroute Chart-ICAO	Israel	Dec, 2007	A
3	ANNEX 15: Para 3.7.1		Implementation of WGS-84	Dec, 1997		H O	Need to implement WGS-84	Israel	Dec, 2007	U
4	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.	Israel	Dec, 2007	U
5	ANNEX 15: Para. 5.2.8.3		Non-production of the monthly printed plain language summary of NOTAM	Jan, 2003		H	Need to produce the monthly printed plain language summary of NOTAM	Israel	Dec, 2007	A
6	ANNEX 15 Para. 8.1		Non provision of pre-flight information service at international airports	Mar, 2004		H O	Need to provide a pre-flight information service at all aerodromes used for international air operations.	Israel	Dec, 2007	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 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.	Jordan	Dec, 2007 Dec, 2008	U
2	ANNEX 15: Para. 6		Lack of implementation of AIRAC System	Mar, 2004		H O	Need to fully comply with the AIRAC procedure	Jordan	Dec, 2007 Dec, 2008	U
3	Doc 8126: Para. 3.2.2 & 3.3		Lack of adequate resources and efficient working arrangements	Jul, 2005		F H	Need to provide AIS (including AIS Briefing Offices) with adequate resources and efficient working arrangements	Jordan	Jan, 2007 Dec, 2008	A
4	ANNEX 4: Para. 16.2		Non-production of World Aeronautical Chart – ICAO 1:1 000 000	Feb, 2008		F H S	Need to produce the assigned sheets of the World Aeronautical Chart – ICAO 1:1 000 000	Jordan	Dec, 2009	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 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	Kuwait	Dec, 2007 Aug, 2008	B
2	ANNEX 15: Para. 3.2		Implementation of a Quality System	Jan, 2003	Work in progress	H O	Need to introduce a properly organized quality system in conformity with ISO 9000 series of quality assurance standards.	Kuwait	Dec, 2007 Dec, 2008	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-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	Lebanon	Dec, 2007	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, 2007	U
3	ANNEX 15:Para. 3.7.2.4		Implementation of geoid undulation referenced to the WGS-84 ellipsoid.	Jan, 2003		F H	Need to implement geoid undulation referenced to the WGS-84 ellipsoid.	Lebanon	Dec, 2007	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		H O	Need to introduce a properly organized quality system in conformity with ISO 9000 series of quality assurance standards.	Oman	Dec, 2007	U
2	ANNEX 15:Para 6.		Lack of implementation of AIRAC System	Mar, 2004		H O	Need to fully comply with the AIRAC procedure	Oman	Dec, 2007	U
3	Doc 8126: Para. 3.2.2 & 3.3		Lack of adequate resources and efficient working arrangements	Jul, 2005		F H	Need to provide AIS (including AIS Briefing Offices) with adequate resources and efficient working arrangements	Oman	Jun, 2008	A
4	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.	Oman	Jun, 2008	A
5	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	Oman	Jun, 2008	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
6	ANNEX 4: Para. 16.2		Non-production of World Aeronautical Chart – ICAO 1:1 000 000	Feb, 2008		F H S	Need to produce the assigned sheets of the World Aeronautical Chart – ICAO 1:1 000 000	Oman	Dec, 2009	B
7	ANNEX 15: Para 4.2.9 & 4.3.7		Lack of regular and effective updating of the AIP	Jan, 2003	(last update of the AIP is dated Oct.06)	F H O	Need to update the AIP on a regular basis	Oman	Dec, 2008	U
8	Doc 8126: Para. 5.10.3 & 6.1.3		Lack of follow up on the validity of NOTAMs	Feb, 2008	Number of NOTAMs, issued more than 3 months ago are still in force	F H O	Need to comply with Doc 8126 provisions related to the maximum period of validity of a NOTAM	Oman	Dec, 2008	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

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 4: Para. 13.2		Non-production of Aerodrome/Heliport Chart - ICAO	May, 1995		H O	Need to produce Aerodrome/Heliport Chart - ICAO for all Int'l Aerodromes	Qatar	Dec, 2007 Mar, 2008	A
2	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	Dec, 2007	U
3	ANNEX 15:Para. 3.7.2.4		Implementation of geoid undulation referenced to the WGS-84 ellipsoid.	Jan, 2003		H	Need to implement geoid undulation referenced to the WGS-84 ellipsoid.	Qatar	Dec, 2007	A
4	ANNEX 15: Para. 8.1		Non-provision of pre-flight information service at international airports	Mar, 2004		H O	Need to provide a pre-flight information service at all aerodromes used for international air operations.	Qatar	Dec, 2007	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

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-production of World Aeronautical Chart – ICAO 1:1000 000	May, 1995		F H S	Need to produce the assigned sheets of the World Aeronautical Chart – ICAO 1:1 000 000	Saudi Arabia	Dec, 2007 Dec, 2008	B
2	ANNEX 4: Para. 7.2		Non-production of the Enroute Chart-ICAO	May, 1995		F O	Need to produce the Enroute Chart-ICAO	Saudi Arabia	Jun, 2007 Dec, 2008	A
3	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.	Saudi Arabia	Mar, 2008 Jun, 2009	U
4	ANNEX 15: Para. 3.7.2.4		Implementation of geoid undulation referenced to the WGS-84 ellipsoid.	Jan, 2003		H	Need to implement geoid undulation referenced to the WGS-84 ellipsoid.	Saudi Arabia	Mar, 2007 Mar, 2008	A
5	ANNEX 4: Para. 3.2		Non-production of Aerodrome Obstacle Chart-ICAO Type A	Mar, 2004	For some RWYs in Saudi Arabia, the Aerodrome Obstacle Chart-ICAO Type A has not been produced	F H 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)	Saudi Arabia	Jun, 2007 Feb, 2008	A
6	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	Dec, 2008	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	Nov, 2007		O	AIS automation should be introduced with the objective of improving the speed, accuracy, efficiency and cost-effectiveness of aeronautical information services	Saudi Arabia	Mar, 2008	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		F H	Need to fully comply with the AIRAC procedure	Syria	Jun, 2007 Jun, 2008	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	Syria	Dec, 2007 Jun, 2008	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	Jun, 2008	U
4	ANNEX 15: Para. 3.7.2.4		Implementation of geoid undulation referenced to the WGS-84 ellipsoid.	Jan, 2003		F H	Need to implement geoid undulation referenced to the WGS-84 ellipsoid.	Syria	Jun, 2008	A
5	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.	Jul, 2005		H	Need to review the AIP for consistency	Syria	Dec, 2007 Dec, 2008	U
6	ANNEX 15: Para 4.2.9 & 4.3.7		Lack of regular and effective updating of the AIP	Jul, 2005		F H O	Need to update the AIP on a regular basis	Syria	Dec, 2007 Apr, 2008	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, 2007	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, 2007 Jun, 2008	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		O	AIS automation should be introduced with the objective of improving the speed, accuracy, efficiency and cost-effectiveness of aeronautical information services	UAE	Jan, 2008 Dec, 2008	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			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 procedures in every stage of data production or data modification process, from survey/origin to distribution to the next intended user should be implemented.	UAE	Dec, 2008	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	Jan, 2007	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	Yemen	Dec, 2007	B
3	ANNEX 4: Para. 7.2		Non-production of the Enroute Chart-ICAO	May, 1995		F H	Need to produce the Enroute Chart-ICAO	Yemen	Jan, 2007	A
4	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.	Yemen	Dec, 2007	U
5	ANNEX 4: Para. 11.2		Non-production of 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	Yemen	Jan, 2007	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	Jan, 2007	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	AIS automation should be introduced with the objective of improving the speed, accuracy, efficiency and cost-effectiveness of aeronautical information services	Yemen	Jun, 2007	A

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

“H”= Human Resources

“S”= State (Military/political)

“O”= Other unknown causes

AIS/MAP TF/4
Report on Agenda Item 5

REPORT ON AGENDA ITEM 5: ELECTRONIC TERRAIN AND OBSTACLE DATA (eTOD)

5.1 The meeting recalled that the eTOD Seminar held in Cairo from 11 to 14 December 2006 addressed different subjects related to the implementation of eTOD and developed six (6) Recommendations. The meeting noted also that MIDANPIRG/10, under Conclusion 10/59, tasked the concerned subsidiary bodies, including the eTOD Working Group, to study the Recommendations of the MID eTOD Seminar and to propose follow-up actions which should be implemented by States and ICAO, as appropriate.

5.2 The meeting was apprised of the outcome of the eTOD WG/1 meeting held in Amman, Jordan, from 2 to 4 July 2007, as reviewed and endorsed by the ATM/SAR/AIS SG/9 meeting.

5.3 The meeting recalled that MIDANPIRG/10, under Decision 10/58, established the eTOD Working Group with a view to, inter-alia, analyze the eTOD requirements and develop a common understanding of these requirements, recommend the way forward the eTOD timely implementation and develop and maintain a MID Region eTOD implementation strategy.

5.4 The meeting noted that the eTOD WG/1 meeting reviewed and analyzed the numerical requirements for terrain and obstacle data for areas 1, 2, 3 and 4 as defined in Annex 15, Appendix 8, Tables A8-1 and A8-2. It was highlighted in this regard that the numerical terrain and obstacle data requirements for Area 2 are defined on the basis of the most stringent application requirement, i.e. determination of contingency procedures for use in the event of an emergency during a missed approach or take-off. It was recognized, however, that some applications listed in paragraph 10.1.1 of Annex 15 could be adequately accommodated with terrain and obstacle data sets that are of lower requirements than those specified in Appendix 8 of Annex 15.

5.5 It was also highlighted that ICAO has published “*GUIDELINES FOR ELECTRONIC TERRAIN, OBSTACLE AND AERODROME MAPPING INFORMATION – DOC 9881*”, which contains a lot of guidance material on electronic Terrain and Obstacle Data (eTOD) as well as on Aerodrome Mapping. However, it was mentioned that although Doc 9881 is a voluminous document containing detailed information of technical nature, some of the requirements contained in Annex 15, Chapter 10, are subject to different interpretations, since Doc 9881 did not bring clear guidance and clarifications related to these issues. Based on the above, the meeting appreciated ICAO’s efforts for developing Doc 9881. However, the development of a more concise document addressing directly to the point the requirements of Annex 15 would be of significant value.

5.6 Concern was raised regarding the following issues:

- the precise technical needs of some of the user applications that will make use of electronic Terrain and Obstacle Data and which led to the ICAO requirements, mainly for area 2, are unclear and as a result, the validation of the user requirements must be carried out. It was mentioned in this respect that the requirements for Area 2 are most important for engine-out and accordingly, it was questioned if 45 km is a logic and cost-effective requirements for a small private aerodrome;

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- the cross-border issue, mainly with regard to area 2, was identified as being in urgent need for further analysis and clarification. It was highlighted in this regard, that Area 2 can exceed Area 1 and the exceeding Area 2 may be part of Area 1 of a neighboring State. The issue of how to collect the data needed within adjacent States was raised and the question of the liability for the data is not addressed when it is provided by a neighboring State;
- at IFR aerodromes/heliports where a terminal control area has not been established, Area 2 shall be the area within a 45-km radius of the aerodrome/heliport reference point. The meeting was of view that 45 km for heliports may be too much; and
- the cost recovery issue is not addressed, i.e. it is not specified if the State can charge for the provision of eTOD, taking into consideration that eTOD does not fall within the content of the State Integrated Aeronautical Information Package (IAIP). In this regard, the meeting was informed that an ICAO World wide Symposium on Enabling the Net Centric Information Environment will be held in Montreal from 2 to 4 June 2008 and that the issue of cost-recovery related to the provision of eTOD would be addressed by this Symposium.

5.7 In addition to the above, the meeting noted with concern that although, WGS 84 and EGM 96 are mandated by Annex 15, some States have not yet fully implemented the requirements, especially those related to geoid undulation.

5.8 The meeting noted that during the eTOD WG/1 meeting, it was concluded that the requirements for areas 1, 3 and 4 are clear enough and that MID States would not face major difficulties to comply with the applicability date of 20 November 2008 for the provision of eTOD for areas 1 and 4. The implementation of the requirements for area 3 by 18 November 2010 is achievable; but, Area 2 is questionable. Many issues have to be addressed and clarified, as soon as possible, with a view to comply with the applicability date of 18 November 2010.

5.9 The meeting noted that MIDANPIRG/10, under Conclusion 10/56, requested States to develop their plans related to the implementation of eTOD requirements and to communicate their implementation roadmap to the ICAO MID Regional Office, prior to 15 June 2007, specifying clearly if they would encounter any difficulty to comply with the dates of applicability. The meeting further noted that, as a follow-up action, the ICAO MID Regional Office sent Letter Ref.: AN 8/2.4-192 dated 29 May 2007 seeking for national plans related to the implementation of eTOD. However, it was noted with concern that very few replies have been received from States. With a view to collect information from States regarding their Action Plan/Roadmap for the implementation of eTOD and to assist them in the implementation process, the meeting noted that the eTOD WG/1 meeting reviewed and endorsed the questionnaire at **Appendix 5A** to the Report on Agenda Item 5, in order to be used for a survey on the implementation of eTOD in the MID Region. The meeting noted that as a follow action the questionnaire was sent to States on 17 July 2007 through State Letter Ref.: AN 8/2.4 - 248. The deadline for reply was 30 October 2007. However, only (2) replies were received from States. Accordingly, the ATM/SAR/AIS SG/9 meeting agreed to the extension of the deadline until 15 January 2008 and agreed to the following Draft Conclusion, which is proposed to replace and supersede MIDANPIRG/10 Conclusion 10/56:

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DRAFT CONCLUSION 9/14: SURVEY ON THE IMPLEMENTATION OF eTOD IN THE MID REGION

That, in order to obtain information from MID States regarding their Action Plan/Roadmap for the implementation of eTOD and the difficulties they might encounter to meet the applicability dates specified in Annex 15:

- a) the questionnaire at Appendix 10B to the Report on Agenda Item 10, be used for a survey on the implementation of eTOD in the MID Region;*
- b) States send their replies to the questionnaire to the ICAO MID Regional Office, prior to 15 January 2008, specifying clearly if they would encounter any difficulty to comply with the dates of applicability; and*
- c) the results of the survey should serve as a basis for the development/update of the MID Region eTOD implementation Strategy/Action Plan.*

5.10 The meeting further noted that a reminder was sent to States on 16 January 2008 through State Letter Ref.: AN 8/2.4 - 017. The deadline for reply was extended one more time to 1 February 2008. However, only (4) replies were received from States. It was also highlighted that some of the received answers contain some inconsistencies/not accurate information.

5.11 The meeting noted that the eTOD WG/1 meeting:

- was apprised of Jordan experience in the preparation for the implementation of eTOD. It was particularly noted with appreciation that, in compliance with MIDANPIRG/10 Conclusion 10/57, Jordan managed the implementation of eTOD as a national project;
- noted the actions taken by Egypt towards the timely implementation of eTOD;
- noted with interest the US experience in the development and maintenance of the FAA's Obstacle Repository System (ORS);
- noted that Jeppesen built a unified terrain database out of the Shuttle Radar Topography Mission (SRTM) data with 90 m postspacing and filled all the identified voids. It was also mentioned that the data is already available and is compliant with ICAO Terrain data quality requirements for area 1; and
- was apprised of the experience of Italy in the implementation of an eTOD programme, which will cover 38 Italian airports with a total cost of Euros 8,700,000. The meeting noted the different phases of the O-CHARTS Project, which includes inter-alia, aerodrome and TMA obstacles and terrain survey and data management, 3D aerodrome/Annex 4-14 model creation and processing and ICAO Obstacle charts automatic production and maintenance.

5.12 The meeting noted that the ATM/SAR/AIS SG/9 meeting reviewed and endorsed the MID Region eTOD Implementation Strategy at **Appendix 5B** to the Report on Agenda Item 5 and agreed, accordingly, to the following Draft Conclusion, which is proposed to replace and supersede MIDANPIRG/10 Conclusions 10/57 and 10/59:

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*DRAFT CONCLUSION 9/15: MID REGION eTOD IMPLEMENTATION
STRATEGY*

That, the MID Region eTOD implementation Strategy is adopted as at Appendix 10C to the Report on Agenda Item 10.

5.13 The meeting recalled that the sixth Recommendation of the MID eTOD Seminar, reproduced here-after, is pertaining to the development of provisions in the Basic ANP to include the new eTOD requirements as well as a new FASID Table in which detailed planning of eTOD implementation by States are reflected:

RECOMMENDATION 6: ANP REQUIREMENTS RELATED TO eTOD

ICAO should develop an amendment to the Basic Air Navigation Plans (ANP) for all ICAO Regions to include new eTOD requirements and introduce new table in the Facilities and Services Implementation Documents (FASIDs) in which detailed planning of eTOD implementation by States together with an indication of the implementation timelines, will be reflected.

5.14 The meeting noted that the ATM/SAR/AIS SG/9 meeting reviewed and endorsed the Draft FASID Table at **Appendix 5C** to the Report on Agenda Item 5 and agreed to the following Draft Conclusion:

DRAFT CONCLUSION 9/16: DRAFT FASID TABLE RELATED TO eTOD

That, ICAO consider to include the Draft FASID Table at Appendix 10E to the Report on Agenda Item 10 into the MID FASID, Part VIII (AIS), with necessary amendments, as appropriate.

5.15 The meeting reviewed the eTOD WG Terms of Reference as at **Appendix 5D** to the Report on Agenda Item 10. It was highlighted that the work of the eTOD Working Group shall be carried out mainly through exchange of correspondence (email, facsimile, Tel, etc) between its Members. In this regard, the meeting was of view that States should make use of the ICAO MID Forum for the exchange of information and sharing of experience related to eTOD. Accordingly, the ATM/SAR/AIS SG/9 meeting agreed to the following Draft Decision:

*DRAFT DECISION 9/17: TERMS OF REFERENCE OF THE eTOD WORKING
GROUP*

That, the Terms of Reference of the eTOD Working Group be updated as at Appendix 10F to the Report on Agenda Item 10.

5.16 The meeting noted with interest the presentation provided by EUROCONTROL related to eTOD activities in the European region. It was noted that the challenges that States in the European region are facing are as follows:

- Complex requirement matrix
- Timescales involved
- Lack of common understanding of requirements
- high potential costs
- Responsibility for implementation not determined
- Resources in States

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- Data availability
- Volume of Data required (Area 2)
- Acquisition methods
- Survey equipment availability.

5.17 It was also mentioned that few European States made considerable progress. Accordingly an ad-hoc eTOD Working Group was established in order to:

- clarify the existing eTOD requirements in ICAO SARPs;
- understand how these align with the user requirements;
- establish a workable way forward; and
- develop guidance material to support implementation.

5.18 The meeting noted that EUROCONTROL sent a letter to ICAO HQ informing that European States may face in all possibilities a delay of two years or more in the implementation of the eTOD requirements.

5.19 Based on the above the meeting supported the ATM/SAR/AIS SG/9 Draft Conclusions and Decision emanating from the eTOD WG/1 meeting. It was confirmed that MID States would not face major difficulties to comply with the applicability date of 20 November 2008 for the provision of eTOD for areas 1 and 4. However, concern was raised regarding the cost-recovery and property rights related to eTOD. Concern was also raised regarding Amendment 34 to Annex 15 where it was requested that a page pocket may be used in the AIP to include the Aerodrome Terrain and Obstacle Chart — ICAO (Electronic) on appropriate electronic media. In this regard the meeting urged States that will not be able to comply with Annex 15 provisions related to eTOD to file a difference to ICAO.

5.20 The meeting was informed that it's expected that the issue of cost-recovery related to eTOD would be addressed by the ICAO World wide Symposium on Enabling the Net Centric Information Environment, which will be held in Montreal from 2 to 4 June 2008. In addition, the meeting noted with appreciation that the ICAO MID Regional Office is in the process of coordinating with EUROCONTROL and Egypt to organize a MID AIM Seminar which will be hosted by Egypt (NANSC) sometimes in October 2008. The provision of eTOD will be one of the agenda items of this seminar.

5.21 In connection with the above, the meeting was of view that the eTOD WG should continue its activity with a view to harmonize, coordinate and support the eTOD implementation on a regional basis. However, the meeting urged States:

- to reply to the questionnaire at **Appendix 5A** to the Report on Agenda Item 5 to enable the eTOD WG to carry out necessary analysis; and
- to contribute actively to the eTOD WG meetings by sharing the experience gained in the process of eTOD implementation (national plans, business cases, theoretical studies of candidate techniques for data acquisition, awareness and training programmes, etc).

5.22 The meeting agreed that the eTOD WG/2 meeting be held during the first half of 2009. The exact date and venue will be coordinated between the ICAO MID Regional Office and the Rapporteur of the eTOD WG.

**ICAO MIDDLE EAST REGIONAL OFFICE
SURVEY ON IMPLEMENTATION OF ELECTRONIC TERRAIN AND
OBSTACLE DATA (eTOD) IN THE MID REGION**

Introduction:

The purpose of this questionnaire on implementation of electronic Terrain and Obstacle Data (eTOD) in the MID Region is to collect information from States regarding their Action Plan/Roadmap for the implementation of the eTOD provisions as specified in Annex 15 and if they will be able to meet the applicability dates (20 November 2008 and 18 November 2010). The results of this survey could be used for the development/update of the MID Region eTOD implementation Strategy/Action Plan.

NAME OF STATE	DATE

Focal point: Who in your State could we contact for further clarification concerning eTOD implementation?

Name:	
Organization:	
Title:	
Telephone:	
Fax:	
e-mail:	

		YES	NO
1	Has your State established a high level framework (regulation, assignment of responsibilities, etc) for the implementation of eTOD?		
2	Has your State established a national eTOD Programme for the implementation of eTOD requirements, as per Annex 15 requirements?		
3	Has your State secured necessary resources for the implementation of eTOD? If, Yes, please give details about the estimated budget:		
4	Has your State developed an Action Plan/Roadmap with clear timelines for the implementation of eTOD?		

		YES	NO
5	<p>Please specify the expected date of implementation of:</p> <p>a) Terrain data for Area 1:</p> <p>b) Terrain data for Area 2:</p> <p>c) Terrain data for Area 3:</p> <p>d) Terrain data for Area 4:</p> <p>e) Obstacle data for Area 1:</p> <p>f) Obstacle data for Area 2:</p> <p>g) Obstacle data for Area 3:</p>		
6	<p>Who are the different parties/Administrations in your State involved in the implementation eTOD (AIS, Aerodromes, Military, National Geographic and Topographic Administrations/Agencies, etc)?</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p>		
7	<p>Has your State assigned the responsibility for the collection of Terrain data related to Areas 1 to 4?</p> <p>If Yes, please specify:</p> <p>a) Area 1:</p> <p>b) Area 2:</p> <p>c) Area 3:</p> <p>d) Area 4:</p>		
8	<p>Has your State made any assessment as to who should be responsible for the payment of Terrain data collection related to Areas 1 to 4?</p> <p>If Yes, please specify:</p> <p>a) Area 1:</p> <p>b) Area 2:</p> <p>c) Area 3:</p> <p>d) Area 4:</p>		
9	<p>Has your State assigned the responsibility for the collection of Obstacle data within Areas 1 to 3?</p> <p>If Yes, please specify:</p> <p>a) Area 1:</p> <p>b) Area 2:</p> <p>c) Area 3:</p>		
10	<p>Has your State made any assessment as to who should be responsible for the payment of Obstacle data collection related to Areas 1 to 3?</p> <p>If Yes, please specify:</p> <p>a) Area 1:</p> <p>b) Area 2:</p> <p>c) Area 3:</p>		

		YES	NO
11	<p>Is there any existing Terrain database available in your State? If, Yes: a) In which format the data is available/provided to users? b) Does the data available meet the requirements of Annex 15 for Areas 1 to 4?</p>		
12	<p>Is there any existing Obstacle database available in your State? If, Yes: a) In which format the data is available/provided to users? b) Does the data available meet the requirements of Annex 15 for Areas 1 to 3?</p>		
13	<p>Has your State made any assessment of the candidate techniques that could be used for Terrain and Obstacle Data acquisition? If, Yes: a) was that based on a cost-benefit analysis? b) Which is/are the retained technique(s)? </p>		
14	<p>Has your State made any assessments as to which level of detail obstacle data should be collected? If, Yes, please give details: </p>		
14	<p>Has your State developed a case study for a representative aerodrome? If, Yes, please give details: </p>		
15	<p>Have you published in your AIP (AD 2.10) the description of obstacles separated into Area 2 and Area 3? If, No, when do you intend to revise the AIP to separate the obstacles in this manner? </p>		
16	<p>Any further comments (difficulties encountered, suggestions, etc): </p>		

MID REGION eTOD IMPLEMENTATION STRATEGY

Considering:

- a) the new provisions introduced by Amendment 33 to Annex 15 related to eTOD; and
- b) the guidance material contained in Doc 9881 (Guidelines for electronic Terrain, Obstacle and Aerodrome Mapping Information); and

Recognizing that:

- i) significant safety benefits for international civil aviation will be provided by in-flight and ground-based applications that rely on quality electronic Terrain and Obstacle Data; and
- ii) the implementation of eTOD requirements is a challenging costly and cumbersome task of cross-domain nature;

The MID Region eTOD implementation strategy is detailed below:

- 1) the eTOD implementation should be in compliance with ICAO provisions contained in Annex 15 and Doc 9881;
- 2) the eTOD implementation should be based on national plans/roadmaps;
- 3) eTOD implementation should be managed by each State as a national eTOD programme supported by necessary resources, a high level framework and a detailed planning including priorities and timelines for the implementation of the programme;
- 4) States should adopt/follow a collaborative approach involving all concerned parties in the implementation of eTOD provisions and establish a multi-disciplinary team defining clearly the responsibilities and roles of the different Administrations within and outside the Civil Aviation Authority in the implementation process (AIS, Aerodromes, Military, National Geographic and Topographic Administrations/Agencies, etc);
- 5) eTOD requirements should be analyzed and a common understanding of these requirements should be developed;
- 6) States should make an inventory and evaluate the quality of existing terrain and obstacle data sources and in the case of data collection, consider carefully the required level of details of collected terrain and obstacle data with particular emphasis on obstacle data and associated cost;
- 7) States should carry out theoretical studies of candidate techniques for data acquisition (photogrammetry, LIDAR, etc) based on a Cost-Benefit Analysis and supported by case study for a representative aerodrome;
- 8) in the development of their eTOD programme, States should take into consideration the requirements for update/maintenance of data, especially the obstacle data;

- 9) States, while maintaining the responsibility for data quality and availability, should consider to which extent provision of electronic terrain and obstacle data could be delegated to national geodetic Institutes/Agencies, based on Service Level Agreement reflecting such delegation. Collaboration between States and data providers/integrators should also be considered;
- 10) ICAO and States should undertake awareness and training programmes to promote and expedite the eTOD implementation;
- 11) implementation of eTOD provisions should be considered as a global matter, which necessitates coordination and exchange of experience between States, ICAO and other national/international organizations involved;
- 12) to the extent possible, States should work co-operatively especially with regard to the cross-border issue, for the sake of harmonization and more efficient implementation of eTOD; and
- 13) States encountering difficulties for the implementation of eTOD may seek assistance from ICAO, through a TCB project, and/or from other States.

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FASID TABLE AIS-X — eTOD REQUIREMENTS

EXPLANATION OF THE TABLE

Column

- 1 Name of the State, territory or aerodrome for which electronic Terrain and Obstacle Data (eTOD) are required with the designation of the aerodrome use:
 - RS — international scheduled air transport, regular use
 - RNS — international non-scheduled air transport, regular use
 - RG — international general aviation, regular use
 - AS — international scheduled air transport, alternate use
- 2 Runway designation numbers
- 3 Type of each of the runways to be provided. The types of runways, as defined in Annex 14, Volume 1, Chapter I, are:
 - NINST — non-instrument runway;
 - NPA — non-precision approach runway
 - PA1 — precision approach runway, Category I;
 - PA2 — precision approach runway, Category II;
 - PA3 — precision approach runway, Category III.
- 4 Requirement for the provision of Terrain data for Area 1, shown by an “X” against the State or territory to be covered.
- 5 Requirement for the provision of Terrain data for Area 2 (TMA), shown by an “X” against the aerodrome to be covered.
- 6 Requirement for the provision of Terrain data for Area 2 (45 Km radius from the ARP), shown by an “X” against the aerodrome to be covered.
- 7 Requirement for the provision of Terrain data for Area 3, shown by an “X” against the aerodrome to be covered.
- 8 Requirement for the provision of Terrain data for Area 4, shown by an “X” against the runway threshold to be covered.
- 9 Requirement for the provision of Obstacle data for Area 1, shown by an “X” against the State or territory to be covered.
- 10 Requirement for the provision of Obstacle data for Area 2 (TMA), shown by an “X” against the aerodrome to be covered.
- 11 Requirement for the provision of Obstacle data for Area 2 (45 Km radius from the ARP), shown by an “X” against the aerodrome to be covered.
- 12 Requirement for the provision of Obstacle data for Area 3, shown by an “X” against the aerodrome to be covered.
- 13 Remarks (timetable for implementation)

Note: For Columns 4 to 12 use the following symbols:

- X- Required but not implemented
- XI- Required and implemented

STATE, TERRITORY OR AERODROME FOR WHICH eTOD IS REQUIRED			TERRAIN DATA REQUIRED					OBSTACLE DATA REQUIRED			REMARKS	
CITY/AERODROME	RWY No	RWY TYPE	Area 1	Area 2		Area 3	Area 4	Area 1	Area 2			Area 3
				TMA	45 Km				TMA	45 Km		
1	2	3	4	5	6	7	8	9	10	11	12	13
(HETB) Taba				X		X			X		X	
AS	04 22	NPA NINST										
IRAN			X					X				
(OIKB) Bandar Abbass/ Bandar Abbas Intl RS	03R 21L	NPA PA1		X		X			X		X	
	03L 21R	NINST NINST										
(OIFM) Esfahan/ Shahid Beheshti Intl RS	08L 26R	NPA PA1		X		X			X		X	
	08R 26L	NPA NPA										
(OIMM) Mashhad/ Shahid Hashemi Nejad Intl RS	13L 31R	NPA PA1		X		X			X		X	
	13R 31L	NPA PA1										
(OISS) Shiraz/shahid Dastghaib Intl RS	11R 29L	NPA PA1		X		X			X		X	
	11L 29R	NPA PA1										
(OITT) Tabriz/Tabriz Intl RNS	12L 30R	NPA PA1		X		X			X		X	
	12R 30L	NINST NINST										
(OIII) Tehran/ Mehrabad Intl RS	11R 29L	NPA PA1		X		X			X		X	
	11L 29R	NPA NPA										
(OIII) TEHRAN/Emam Khomeini Intl RS	11L 29R	NPA PA1		X		X			X		X	

STATE, TERRITORY OR AERODROME FOR WHICH eTOD IS REQUIRED			TERRAIN DATA REQUIRED				OBSTACLE DATA REQUIRED			REMARKS		
CITY/AERODROME	RWY No	RWY TYPE	Area 1	Area 2		Area 3	Area 4	Area 1	Area 2		Area 3	
				TMA	45 Km				TMA			45 Km
1	2	3	4	5	6	7	8	9	10	11	12	13
JORDAN			X					X				
(OJAI) Amman/ Queen Alia Intl RS				X		X			X		X	
	08R 26L	NPA PA2					X					
	08L 26R	PA2 PA2				X X						
(OJAM) Amman/Marka Intl AS				X		X			X		X	
	24 06	PA1 NINST										
(OJAQ) Aqaba/King Hussein Intl RNS					X	X				X	X	
	01 19	PA1 NPA										
(OJJR) JERUSALEM/ Jerusalem RS					X	X				X	X	
	12 30	NPA PA1										
KUWAIT			X					X				
(OKBK) Kuwait Intl. RS				X		X			X		X	
	33L 15R	PA2 PA2					X X					
	33R 15L	PA2 PA2					X X					
LEBANON			X					X				
(OLBA) Beirut Intl. RS				X		X			X		X	
	17 35	PA1 NINST										
	18 36	PA1 NINST										
	03 21	PA1 NINST										
OMAN			X					X				
(OOMS) Muscat/Seeb RS				X		X			X		X	
	26 08	PA1 PA1										
(OOSA) Salalah AS												
	07 25	NPA PA1										
QATAR			X					X				
(OTBD) Doha Int. Airport RS				X		X			X		X	
	34 16	PA2 NPA					X					

STATE, TERRITORY OR AERODROME FOR WHICH eTOD IS REQUIRED			TERRAIN DATA REQUIRED				OBSTACLE DATA REQUIRED			REMARKS		
CITY/AERODROME	RWY No	RWY TYPE	Area 1	Area 2		Area 3	Area 4	Area 1	Area 2		Area 3	
				TMA	45 Km				TMA			45 Km
1	2	3	4	5	6	7	8	9	10	11	12	13
UNITED ARAB EMIRATES			X					X				
(OMAA) Abu Dhabi Int. Airport				X		X			X		X	
	31L 13R	PA3 PA1					X					
	13L 31R	PA3 PA3					X X					
(OMAL) Al Ain Int. Airport RS				X		X			X		X	
	01 19	PA1 NPA										
(OMDB) Dubai Int. Airport RS				X		X			X		X	
	12L 30R	PA3 PA3					X X					
	12R 30L	PA1 PA1										
(OMFJ) Fujairah Int. Airport RS				X		X			X		X	
	11 29	NPA PA1										
(OMRK) Ras Al Khaimah Int. Airport RS				X		X			X		X	
	16 34	NPA PA1										
(OMSJ) Sharjah Int. Airport RS				X		X			X		X	
	12 30	NPA PA2					X					
YEMEN			X					X				
(OYAA) Aden Intl RS				X		X			X		X	
	08 26	NPA PA1										
(OYHD) Hodeidah Intl RS				X		X			X		X	
	03 21	NPA NPA										
(OYRN) Mukalla/Riyan RS				X		X			X		X	
	06 24	NPA NPA										
(OYSN) Sanna'a Intl RS				X		X			X		X	
	18 36	PA1 NPA										
(OYTZ) Taiz Intl RS				X		X			X		X	
	01 19	NPA NPA										

**MID REGION ELECTRONIC TERRAIN AND OBSTACLE DATA WORKING GROUP
(eTOD WG)**

A) TERMS OF REFERENCE

With a view to harmonize, coordinate and support the eTOD implementation activities on a regional basis, the MID Region eTOD Working Group shall:

- 1) analyse the eTOD requirements and develop a common understanding of these requirements (clarify the needs in terms of data format, temporality, cross-border harmonisation and develop associated guidelines as required);
- 2) recommend the way forward the eTOD timely implementation;
- 3) develop and maintain a MID Region eTOD implementation strategy;
- 4) guide the development and support the roll-out of an awareness campaign for eTOD implementation within MID States;
- 5) carry out a theoretical study of candidates techniques for electronic Terrain and Obstacle Data acquisition including a cost benefit analysis;
- 6) develop a high level MID Region business case for eTOD implementation;
- 7) carry out a study case for a representative aerodrome from the MID Region;
- 8) assist States in the development of mandate/policy pertaining to the implementation of eTOD requirements;
- 9) develop an action plan for the implementation of eTOD requirements in the MID Region;
- 10) monitor the cost-conscious and timely implementation of eTOD requirements in the MID Region;
- 11) monitor and review latest developments pertaining to eTOD; and
- 12) develop its work programme within the scope of its Terms of Reference.

B) COMPOSITION

The eTOD Working Group will be composed of Experts nominated by Middle East Provider States from different technical areas within and outside the Civil Aviation Authority (AIS/MAP, Aerodrome, Military, Procedure Designers, ATC, Navigators, surveyors, National Geographic Administration/Agency, etc).

ICAO, IATA and IFALPA are Observers.

Other representatives from industry and user Organisations having a vested interest in Aeronautical Information Services and eTOD in particular could participate in the work of this Working Group.

C) WORKING ARRANGEMENTS

The eTOD Working Group shall report to the AIS/MAP Task Force.

The work of the eTOD Working Group shall be carried out mainly through exchange of correspondence (email, facsimile, Tel, etc) between its Members. The Working Group shall meet as required and at least once a year. The convening of the Working Group meetings should be initiated by the Rapporteur in coordination with the Members of the Group and ICAO MID Regional Office.

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REPORT ON AGENDA ITEM 6: QUALITY MANAGEMENT SYSTEM (QMS)

6.1 The meeting recalled that as of 1 January 1998:

“Each Contracting State shall take all necessary measures to introduce a properly organized quality system containing procedures, processes and resources necessary to implement quality management at each function Stage. The execution of such a quality management shall be made demonstrable for each function stage, when required” (Annex 15, Chapter 3 paragraph 3.2.1, refers).

6.2 Reference was made also to paragraph 3.2.2 of Annex 15 which recommends that the quality system established should be in conformity with the International Organization for Standardization (ISO) 9000 series of quality assurance standards, and certified by an approved organization.

6.3 The meeting recognized that availability and timeliness of aeronautical information will always be important; however, quality must be re-emphasized, especially in support of those systems that now rely and will rely in the future on navigation data contained in on-board databases. As GNSS technology and Performance Based Navigation (RNP/RNAV) concepts evolve and as systems become dependent on data in databases, especially those systems applying point-to-point navigation techniques, the quality of data will assume a greater role within the aviation community. For example, the quality of pathpoints to support precision GNSS approaches will be absolutely critical to flying a successful final approach segment in RNP airspace.

6.4 The meeting recalled that MIDANPIRG/10 was of the view that the implementation of quality system within AIS and particularly the signature of Service Level Agreements (SLA) between AIS and the data originators will resolve to a large extent the lack of coordination between AIS and the technical departments providing raw data. MIDANPIRG/10 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.

6.5 It was recalled that MIDANPIRG/9 developed Conclusion 9/29 related to a survey on the implementation of quality system within MID States' AISs. Based on the results of the survey carried out in the MID Region and the outcome of the 5 missions to States conducted within the framework of a SIP on implementation of QMS within MID States' AISs, the meeting noted with concern that only three States in the MID Region have implemented a Quality Management System. The meeting noted with concern that the majority of MID States have not made satisfactory progress in the implementation of quality system. The lack of awareness about quality and the need/requirements for the implementation of a QMS for AIS/MAP Services was further noted. The need for the harmonization of the AIS/MAP training programmes at regional/global level was also highlighted and guidelines from ICAO have been requested. In this respect, the meeting was informed that the English version of Doc 7192 Part E-3 *“AERONAUTICAL INFORMATION SERVICES PERSONNEL TRAINING MANUAL PRELIMINARY EDITION – 2005”* is available on the ICAO NET website at: <http://www.icao.int/cgi/icaonet.pl>.

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6.6 Taking into consideration the findings of the SIP mentioned above and with a view to expedite the process of implementation of QMS in MID States' AISs, the meeting reiterated the need to comply with MIDANPIRG/8 Conclusion 8/32 "PROPER STATUS OF AIS" and urged States, that have not yet done so, to implement the methodology at **Appendix 6A** to the Report on Agenda Item 6. MIDANPIRG/10 agreed also to the establishment of a QMS Implementation Action Group with a view to support the implementation of QMS in compliance with the ISO 9000 requirements within MID States' AISs and developed accordingly, the following Conclusion and Decision:

*CONCLUSION 10/54: METHODOLOGY FOR THE IMPLEMENTATION OF QMS WITHIN
MID STATES' AISs*

*That, States, that have not yet implemented a QMS within their AIS, are urged to
apply the methodology at Appendix 5.4A to the Report on Agenda Item 5.4.*

DECISION 10/55: ESTABLISHMENT OF A QMS IMPLEMENTATION ACTION GROUP

*That, the QMS implementation Action Group is established with Terms of Reference
as at Appendix 5.4B to the Report on Agenda Item 5.4.*

6.7 The meeting noted that as a follow up action, the ICAO MID Regional Office sent State Letter AN 8/4.1 - 317 dated 18 September 2007 to concerned States asking them to inform the ICAO MID Office, before 30 October 2007, about the status of implementation of QMS in their AIS, specifying clearly if they encountered/are encountering any difficulty to comply with Annex 15 provisions related to quality system and/or to apply any item/action listed in the methodology for the implementation of QMS as endorsed by MIDANPIRG/10. Those States that have not yet implemented a QMS were requested to communicate their implementation plan to the ICAO MID Regional Office, showing clearly the implementation dates of the different phases of the project (as detailed in the methodology). Noting that only three (3) States replied to the request of the MID Office, a reminder was sent to States on 16 January 2008 (Ref.: AN 8/4.1 – 016). However, the level of replies was still far from expectations (2 more replies received). The status of implementation of QMS in the MID Region is summarized as follows:

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

6.8 The meeting noted also that MIDANPIRG/10 raised concern about the qualification and training of the AIS/MAP personnel in the MID Region particularly the AIS Briefing Offices staff and regarding the status of AIS in general within MID States' Civil Aviation Authorities.

6.9 Reference was made to the MID Basic ANP Chapter 8, para. 2.5 and 2.8 “to enable the AIS/MAP services to function efficiently and in accordance with the defined requirements, sufficient funds should be allocated by States in their budgets that will ensure that all the administrative and operational requirements of AIS/MAP are met including the availability of sufficient and properly qualified personnel with all the required facilities, equipment and material”; and “AIS and MAP personnel should be accorded a status comparable to that assigned to technical personnel of other air navigation services”.

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6.10 Recognizing the importance of AIS as an essential foundation block of the future ATM operational concept and the safety implication of the non-provision of timely and high quality aeronautical information, and taking into consideration Annex 15 requirements for the evaluation and maintenance of the competence/skill of the AIS staff, MIDANPIRG/10 was of view that AIS/MAP personnel has to be licensed. Accordingly, the meeting agreed to the following Conclusion:

CONCLUSION 10/53: LICENSING OF THE AIS/MAP PERSONNEL

That, recognizing the importance of AIS and the safety implication of the non-provision of timely and high quality aeronautical information, and taking into consideration Annex 15 requirements for the evaluation and maintenance of the competence/skill of the AIS staff, ICAO consider the introduction of the licensing of the AIS/MAP personnel as a Recommended Practice in Annex 1.

6.11 The meeting noted that the Air Navigation Commission (ANC) during its review of the MIDANPIRG/10 report and especially Conclusion 10/53, recalled that a similar Conclusion was formulated by GREPECAS/13 and that the Commission, during its review of the report of GREPACS/13, recognized that the competency of personnel involved in safety critical activities was paramount, but that such competencies could be achieved without licensing.

6.12 The meeting noted that EUROCONTROL through the Controlled and Harmonized Aeronautical Information Network “CHAIN”, supported the European States in meeting ICAO requirements related to QMS (awareness campaigns, development of guidelines, development of Computer Based Training “CBT”, etc). It was highlighted in this regard that the main objective were to:

- support States to establish system-wide traceable processes;
- improve accuracy and quality of aeronautical navigational data with focus on data integrity;
- enhance data management by establishing common procedures/processes to enable interoperability; and
- enhance the transfer of aeronautical information between origination and publication.

6.13 The participants were provided with the CHAIN CD-ROM containing all the deliverables. It was also noted that more information about CHAIN and its deliverables is available on the CHAIN website at: www.eurocontrol.int/chain. The meeting encouraged States to take full benefit from the CHAIN deliverables (SLA Guide & Template, originator index, Standard Input Forms “SIF”, etc). It was underlined that for the implementation of the CHAIN solutions, a stepwise approach has to be followed. However, the meeting recognized that CHAIN is not a single solution to a single problem. In the contrary, to improve the quality of aeronautical information and implement the required QMS many actors have to be to be involved, each having ‘a duty of care’.

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6.14 The meeting reviewed the Terms of Reference of the QMS Implementation Action Group as at **Appendix 6B** to the Report on Agenda Item 6. The meeting re-iterated MIDANPIRG/10 Conclusion 10/54 related to the Methodology for the implementation of QMS within MID States' AISs and urged those States, that have not yet done so, to implement the required QMS in accordance with the guidance provided by both the Methodology for the implementation of QMS agreed by MIDANPIRG/10 and the CHAIN deliverables. Accordingly, the meeting agreed to the following Draft Conclusion which is proposed to replace and supersede MIDANPIRG/10 Conclusion 10/54:

DRAFT CONCLUSION 4/4: IMPLEMENTATION OF QMS WITHIN MID STATES' AISs

*That, in accordance with Annex 15 provisions, States, that have not yet done so, are urged to implement/complete the implementation of a QMS within their AIS, before December 2009, based on the methodology for the implementation of QMS at **Appendix 6A** to the Report on Agenda Item 6 and the EUROCONTROL CHAIN deliverables.*

METHODOLOGY FOR THE IMPLEMENTATION OF QMS WITHIN MID STATES' AISs

With a view to expedite and foster the implementation of Quality Management Systems (QMS) within MID States AISs, the following methodology is adopted. States are urged to:

- a) Set up a project structure relative to the implementation of QMS (project team, managing Committee, etc) and appoint a quality manager.
- b) Appoint quality representatives from various areas of activity.
- c) Define the roles and responsibilities of the Project Team Members.
- d) Secure a financial commitment for the project.
- e) Increase the workforce awareness about quality management and the importance of customer satisfaction.
- f) Allocate necessary resources in order to implement, maintain and improve the quality system taking into consideration the customer requirements.
- g) Select a consultant to guide the process, assist in the correct interpretation of ISO 9000 requirements and ensure that the internal Team is kept on track for compliance.
- h) Determine the quality system framework/scope and decide if there is any permissible exclusion.
- i) Undertake quality system and English language proficiency training.
- j) Train internal auditors with a view to carry out internal audits of the system and participate in the process of development, implementation and continual improvement of the QMS.
- k) Motivate the AIS personnel, encourage the teamwork and get everybody involved in writing down how he carries out his parts of the AIS/MAP activities.
- l) Establish a mechanism/procedure to ensure that the competence/skill of the AIS staff is regularly evaluated and meet the requirements. A licensing system could be envisaged for this purpose.
- m) Establish a continuous dialogue with the end users and identify their requirements with a view to provide them with value-added, defect-free and high quality products that are timely and competitively priced.

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Appendix 6B to the Report on Agenda Item 6

**MID REGION QUALITY MANAGEMENT SYSTEM IMPLEMENTATION
ACTION GROUP (QMS AG)**

A) TERMS OF REFERENCE

With a view to support the implementation of Quality Management System in compliance with the ISO 9000 requirements within MID States' AISs, the MID Region QMS Action Group shall:

- 1) identify the difficulties that MID States could have to comply with Annex 15 requirements pertaining to quality system;
- 2) develop a common understanding of ISO 9000 requirements and develop associated guidelines as required;
- 3) foster the implementation of the methodology adopted in the MID Region for the implementation of QMS within Aeronautical Information Services;
- 4) guide the development and support the roll-out of an awareness campaign for QMS implementation within MID States; and
- 5) monitor the implementation of QMS within MID States' AISs.

B) COMPOSITION

The QMS AG will be composed of the following Experts:

State	Member's Name and Title	Member's Contact Details
Bahrain * <i>(Rapporteur of the AG)</i>	Mr. Abdul Nasser A. Al-Emadi Supervisor Aeronautical Information & Quality Coordinator	Fax: (973) 17 323 876 Tel: (973) 17329 183 Mobile: (973) 3969 6707 Email: abdulnasser@caa.gov.bh
Jordan	Mrs. Hanan Qabartai Chief AIS HQ	Tel: (962) 6 4892282 ext. 3525 Fax: (962) 6 4891266 Mobile: (962)796768012 Email: ais.hq@carc.gov.jo
Egypt	Mr. Mahfouz Mostafa Ahmed Chief AIS HQ, Cairo	Fax: (20) 2 2267 8882/5 Tel: (20) 2 2267 9009 Mobile: (20) 10 8555079 Email: mahfouz.moustafa@nansceg.org
Saudi Arabia	Mr. Gharman Abdel Aziz El Shahri Chief of Charting Office	Fax: (966) 6405000 Ext. 2302 Tel: (966) 640 5000 Ext 2300 Mobile: (966) 504 700 111 Email: abu_bander1@yahoo.com
Yemen	Mr. Hussein Al -Sureihi Director of AIS-HQ	Fax: (967-1) 345 527 Tel: (967-1) 346652/3 Mobile: (967) 77777 6898 Email: jaber777768@yahoo.com

C) WORKING ARRANGEMENTS

The QMS AG shall report to the AIS/MAP Task Force.

The work of the QMS AG shall be carried out mainly through exchange of correspondence (email, facsimile, Tel, etc) between its Members.

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REPORT ON AGENDA ITEM 7: AIS AUTOMATION

7.1 The meeting highlighted the pressing need for AIS automation, which should be introduced with the objective of improving the overall speed, accuracy, efficiency, and cost-effectiveness of the aeronautical information service in the region. In this regard, the importance of aeronautical information and charts services in the context of the CNS/ATM systems was underlined and the need to further develop AIS/MAP to support the new global ATM operational concept was pointed out. AIS automation will provide timely and accurate aeronautical information and contribute to improved safety, increased efficiency and greater cost-effectiveness to users.

7.2 The meeting recalled that the 11th Air Navigation Conference, Montreal 22 Sep. – 3 Oct. 2003, has recognized that, in the context of the CNS/ATM concept, AIS has become a crucial and critical component of the ATM systems and has to be further developed to support the global ATM operational concept. The ANC/11 recognized that an important premise of the global ATM operational concept is the provision and share of timely, accurate and quality-assured information on a system-wide basis. The extensive sharing of information encourages collaborative decision-making, thereby allowing air traffic management to optimize efficiency in the conduct of its operations. It was therefore agreed that there was an urgent need to migrate to a digital environment, which called for agreement on a common data exchange model to enable interoperability at the system level. Accordingly, Recommendation 1/8 was developed as follows:

Recommendation 1/8 — Global aeronautical information management and data exchange model

That ICAO:

- a) when developing ATM requirements, define corresponding requirements for safe and efficient global aeronautical information management that would support a digital, real-time, accredited and secure aeronautical information environment;*
- b) urgently adopt a common aeronautical information exchange model, taking into account operational systems or concepts of data interchange, including specifically, AICM/AIXM, and their mutual interoperabilities; and*
- c) develop, as a matter of urgency, new specifications for Annexes 4 and 15 that would govern provision, electronic storage, on-line access to and maintenance of aeronautical information and charts.*

7.3 The meeting noted that MIDANPIRG/9 and MIDANPIRG/10 recognized that one of the major challenges of the MID Region is in the automation of AIS. The objective is to ensure that the right information reaches the end-user where and when required. This will provide the basis for improved decision making by all participants of the ATM community and thus, will contribute overall to increased aviation safety and performance. Accordingly MIDANPIRG/10 re-iterated the following MIDANPIRG/9 Conclusions:

CONCLUSION 9/26: ENHANCED PRE-FLIGHT INFORMATION SERVICE

That, with a view to avoid overloading pilots with aeronautical information, which are either not important or not relevant to their flight, States are encouraged to:

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- a) *refrain from retaining NOTAMs in force for indefinite periods;*
- b) *implement in their automated pre-flight information systems:*
 - i) *a selection functionality based on the ICAO NOTAM Selection Criteria, in order to enable the selection of particular information in the Pre-flight Information Bulletins (PIBs); and*
 - ii) *an update briefing functionality in order to enable the notification of updates following an initial briefing.*

CONCLUSION 9/27: APPROACH TO AIS AUTOMATION

That, with a view to ensure progressive implementation of automated AIS systems in accordance with the AIS Manual (Doc 8126) and the MID Basic Air Navigation Plan provisions, States, which have not yet introduced automation within their Aeronautical Information Services, are urged to:

- a) *plan to initially automate their NOTAM and pre-flight information services; or*
- b) *arrange for the provision of automated services on their behalf on the basis of bilateral or multilateral agreements with States or other non-governmental organizations.*

Note: In case a State has an AIS automation plan for, it should be ensured that the automated NOTAM and pre-flight information system to be implemented is modular, expandable and based on data exchange concept to support further developments and applications.

CONCLUSION 9/28: HARMONIZATION OF AIS, MET AND FPL INFORMATION

That, in any approach to AIS automation, States should take the necessary measures to enable users to access both AIS and MET information from a common interface based on the flight plan entry, to support combined AIS/MET/FPL pre-flight briefing.

7.4 The status of implementation of AIS automation in the MID Region can be summarized as follows:

	AIS Database	NOTAM System (NOF)	Briefing (AIS AD Units)	AIP Production (Text)	Charts Production	eAIP
Afghanistan	– No			– Manual	– Manual	– No eAIP is available
Bahrain*	– No	– Automated System	– Automated System	– Manual	– Manual	– No eAIP is available
Egypt	– Yes	– Automated System (Central)	– Automated System (Central)	– Automated	– Manual	– No eAIP is available
Iran	– No	– Semi-automated	– No	– Manual	– Manual	– No eAIP is available

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	AIS Database	NOTAM System (NOF)	Briefing (AIS AD Units)	AIP Production (Text)	Charts Production	eAIP
Iraq	– No			– Manual	– Manual	– No eAIP is available
Israel	– No	– Automated System	– Automated System in Ben –Gurion Int'l Airport	– Manual	– External company	– No eAIP is available
Jordan	– No	– Semi-automated	– Semi-automated	– Manual	– Manual	– No eAIP is available
Kuwait	– No	– Automated	– Automated	– Manual	– Manual	– No eAIP is available
Lebanon	– No	– Automated	– Automated	– Semi-automated	– Manual	– No eAIP is available
Oman	– No	– Semi-automated	– Semi-automated	– Manual	– Manual	– No eAIP is available
Qatar*	– No	– Automated System	– Automated	– Manual	– Manual	– No eAIP is available
Saudi Arabia	– No	– Automated System (not yet fully operational)	– Automated System (not yet fully operational)	– Still processed manually (Automated System not yet fully operational)	– Manual	– No eAIP is available
Syria	– No	– Semi-automated	– Semi-automated	– Manual	– Manual	– No eAIP is available
UAE	– No	– Semi-automated	– Semi-automated	– Manual	– Manual	– No eAIP is available
Yemen	– No	– Semi-automated	– Semi-automated	– Manual	– Manual	– No eAIP is available

7.5 The meeting recalled that, taking into consideration that the development of a global eAIP provisions by ICAO might take time, MIDANPIRG/10 invited States that have not yet done so, to publish their IAIP in PDF/HTML format on a CD-ROM without discontinuing the provision of the information in hardcopy and agreed accordingly to the following Conclusion:

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CONCLUSION 10/52: ELECTRONIC AIP (eAIP)

That,

- a) pending the development of Global eAIP provisions, MID States, that have not yet done so, publish their Integrated Aeronautical Information Package in PDF/HTML format on a CD-ROM, without discontinuing the provision of the information in hardcopy; and*
- b) in order to prevent proliferation of eAIP formats, ICAO consider developing necessary specifications and clear provisions related to the eAIP content, structure, presentation and format.*

7.6 In this regard, the meeting noted that with a view to overcome the limitations of the paper-based AIS which is a source of integrity errors, incoherence and distribution delays, many activities have been going on since many years to increase and to standardise the use of automation in AIS. It was recalled that by 1998, in the quest for improved quality, efficiency and economy, some European States had started to publish their Aeronautical Information Publications (AIPs) in electronic format. The isolated development undertaken by some States, however, resulted in an unnecessary duplication of effort, incompatibility problems and divergent implementations. The diverse technical solutions resulted in different ways of browsing/navigating the AIP content on screen. The consequence of this was that users had to become accustomed to different styles, navigation structures and presentation formats when browsing a variety of AIPs.

7.7 To address the lack of a common publishing standard, the meeting noted that EUROCONTROL developed an electronic AIP (eAIP) specification with the aim of harmonizing the publication and consultation of the AIP in electronic format, in the drive towards paperless AIS and the potential this has in achieving required integrity of data, enhanced data selection, distribution and reduced costs.

7.8 The meeting noted that the EUROCONTROL eAIP specification is compatible with the ICAO requirements for AIP content and structure, as laid down in Annex 15, and enforces a strict application of these requirements. It provides a standard way to:

- publish the content of an AIP (including AIP Amendments (AMDT), AIP Supplements (SUP) and Aeronautical Information Circulars (AIC)) in a structured electronic format; and
- visualise the content of an AIP on a computer screen, using Web technology.

7.9 It was recognized that the eAIP is an enabler for Aeronautical Information Management (AIM): information content is separated from presentational aspects and the user can select and further process data directly from the eAIP in electronic format, according to his needs. All electronic media, whether on-line or off-line - Internet, intranet, CD-ROM and DVD can be supported.

7.10 It was highlighted that the EUROCONTROL eAIP is not a software tool. It is a concept and a technical specification. It is a foundation on which aeronautical information users and industry can define and build the tools they need in order to exploit the "electronic AIP" concept to its full potential.

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7.11 The meeting noted that eAIP has advantages for both producers and users. Some of the most important advantages for users of an eAIP are listed below:

- ease of browsing, facilitated by the HTML technology;
- may be easily archived;
- **the ability to visualize/trace changes** (both in text and graphics);
- proven authenticity of the document (if digitally signed by the issuing AIS);
- no maintenance effort (no time spent on page replacement at every amendment);
- easily accessible - it can be made available to the whole company (no need to go to the library); and
- no postal delays (if distributed through the Internet).

7.12 Some of the advantages for the producers (AIS offices) are:

- improved AIP product, with increased consistency, integrity and usability;
- HTML and PDF produced from the same source;
- facilitates the production of derived products (Visual Flight Rules (VFR) Guide, etc.);
- may be easily archived;
- ability to guarantee the integrity and authenticity of the document by digital signatures;
- the majority of users do not need to subscribe to paper amendments;
- technological leap forward for AIS;
- reduced cost for internal copies; and
- easier to create integrated regional AIP.

7.13 The meeting noted that the use of the eXtensible Markup Language (XML) for the EUROCONTROL eAIP Specification guarantees that the eAIP is a truly electronic document. The information content is completely separated from its presentation, which, in turn, may be tailored to support every target media. It was underlined that the central component of the eAIP Specification is the eAIP Document Type Definition (DTD). This is complemented by additional rules, style sheets, security considerations, etc.

7.14 The meeting noted that a series of eAIP Manuals and proof of concept tools are available on the EUROCONTROL website at: www.eurocontrol.int/eaip and encouraged States to use this documentation for the development of their eAIPs.

7.15 It was highlighted that, to a certain extent, the eAIP can be used for computer-to-computer data exchange. However, the eAIP Specification does not offer the same capabilities for structured aeronautical data exchange as the Aeronautical Information Exchange Model (AIXM). The essential difference between the two is that AIXM models the aeronautical information, while the eAIP models the AIP document. AIXM is primarily intended for computer-to-computer aeronautical data exchange. The eAIP is primarily intended to provide the AIP content for publication in various formats and on various media, according to users' needs.

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7.16 The meeting noted that 11 European States have already developed their eAIP based on the EUROCONTROL eAIP specification and 3 additional States are in the process of development of their eAIP.

7.17 The meeting was informed also about the future enhancements of the EUROCONTROL eAIP specification, which are expected to be available by the end of 2008 (DTD support for bilingual editing in a single XML source, annotation of eAIP with PERM NOTAMs, etc).

7.18 Based on the above, the meeting agreed to the following Draft Conclusion, which is proposed to replace and supersede MIDANPIRG/10 Conclusion 10/52:

DRAFT CONCLUSION 4/5: ELECTRONIC AIP (eAIP)

That,

- a) pending the development of Global eAIP provisions, MID States, that have not yet done so, are invited to publish their eAIP based on the EUROCONTROL eAIP specifications; and*
- b) in order to prevent proliferation of eAIP formats, ICAO give high priority to the development of necessary specifications and clear provisions related to the eAIP content, structure, presentation and format, taking into consideration the EUROCONTROL eAIP specification.*

7.19 The meeting recalled that AIXM was originally developed by EUROCONTROL for the needs of the European AIS Database (EAD), which represents a single reference for quality-assured aeronautical data for the States of the European Civil Aviation Conference (ECAC), allowing each State to use this data to provide its AIS services. It became operational on 6 June 2003. AIS data providers and data users, civil and military, are currently migrating to EAD and using its services.

7.20 It was noted that the Aeronautical Information Exchange Model (AIXM) has been derived from the Aeronautical Information Conceptual Model (AICM), which provides a formal description of the information/data managed by AIS. AICM was developed starting from the content of the ICAO Annexes (with particular emphasis on Annex 15) but it also takes into consideration the real world, the information of the AIPs and other relevant documents and industry standards, such as the ARINC 424 Specification. Both AICM and AIXM need a continuous update in order to reflect the changing requirements for aeronautical data.

7.21 The meeting noted that the current version of AIXM (version 5.0) which is a joint development between EUROCONTROL and the United States Federal Aviation Administration (FAA), in close consultation with States and other Organizations has a number of key concepts:

- a temporality model, including support for the temporary information contained in NOTAM;
- alignment with ISO standards for geospatial information;
- support for latest industry and ICAO requirements for aeronautical data including, obstacles, terminal procedures and airport mapping databases; and
- modular and extensible to support current and future aeronautical information messaging requirements and additional data attributing requirements.

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7.22 The meeting noted that, in accordance with Recommendation 1/8 of the ANC/11 and the first Recommendation of the Global AIS Congress (Madrid, June 2006), AIXM 5 is intended to be a global standard for international exchange of aeronautical information.

7.23 It was also noted that more information about AIXM is available on the AIXM website at: (www.aixm.aero).

7.24 The meeting was informed about the Europe-Middle East ATM Coordination (EMAC) mechanism/activities, especially with regard to the exchange of aeronautical information. In this regard, it was recognized that regional ATM cooperation between neighboring States is an essential element to ensure cost-effective implementation of ATS facilities and interfacing between CNS/ATM systems and to advance harmonization and integration of various air navigation system components, thus improving safety, efficiency and capacity and effectively managing the continuing development of Air Navigation Service (ANS).

7.25 Appreciating the benefits of regional ATM cooperation, the meeting noted that the Transport Ministers of Cyprus, Egypt, Jordan, Lebanon and Syria signed on 4 February 2003 the Protocol establishing a Europe-Middle East coordination mechanism for Air Traffic Management with the overall objective to increase the collective performance of ATM systems in the Middle East region, while satisfying the users' need at the lowest possible costs and enhancing the safety of air navigation in the region.

7.26 Taking into account the ICAO policies and guidelines, the EUROCONTROL strategies and programmes as well as particular concerns of its Members, the EMAC overall objective is to enhance the collective capacity and performance of ATM systems in the Middle East Region through regional co-operation between the EMAC and the European Region. Integral part of this objective is to satisfy the users' needs at the lowest possible costs and without compromising the highest possible level of safety.

7.27 Based on the overall EMAC objective as well as the collective experience of ICAO and EUROCONTROL, the existing global and regional ATM programmes, the following was initially considered as potential areas of cooperation:

- safety;
- airspace structure and route network;
- Air Traffic Flow Management (ATFM);
- Air Traffic Control (ATC);
- **exchange of Aeronautical Information;**
- Training & Seminars; and
- Route charges.

7.28 Based on the above areas of potential co-operation, the participating EMAC States have identified the following actions:

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- Safety: provision of support for the adoption of the ICAO and EUROCONTROL standards of ATM Safety Management and Regulation;
- Airspace structure: study the airspace structure and make proposals how to optimize routes, airspace structures and common procedures;
- ATFM: establishment of the appropriate infrastructure for the creation of “Flow Management Positions” in all the ACCs of the EMAC States and provision of appropriate training to flow management controllers;
- ATC: study the possibilities to improve ground/ground voice and data communications between neighboring Centres (ACCs) in EMAC in order to attain more efficient provision and use of ATM communications;
- **Exchange of Aeronautical Information: establishment of the appropriate infrastructure regarding the connection and utilization of the “European AIS Database (EAD)”**;
- Training & Seminars: provision of training and organization of seminars on issues relating the overall “Action Plan”; and
- Route charges: Currently, Cyprus & Egypt are part of the EUROCONTROL Route Charges Collection Scheme. The extension of this scheme to the rest of the EMAC States is considered.

7.29 With regard to the exchange of aeronautical information, the objective is to strengthen the cooperation between the EMAC States and EUROCONTROL with the financial support of European Commission and the EUROMED Aviation Project and the assistance of ICAO for the improvement of the provision of Aeronautical Information Services. The extension of the European Aeronautical Information Database (EAD) to cover other EMAC States (Egypt, Jordan, Lebanon and Syria) is identified as a major project/initiative. In this respect, close coordination with EUROCONTROL is required in order to identify the necessary actions (infrastructure/equipments, training, institutional issues, etc) for the implementation of the project.

7.30 The meeting noted that EAD is representing currently the World’s largest Aeronautical Information System- a centralized reference database of quality assured aeronautical information for the States of the European Civil Aviation Conference (ECAC) and, simultaneously, a fully integrated Aeronautical Information Services (AIS) solution. EAD allows aeronautical information providers, including AIS Organizations from Civil Aviation Authorities, air navigation service providers and military administrations in the European Civil Aviation Conference (ECAC) area to enter and maintain their data in a central repository. At the same time, EAD enables data users, such as aircraft operators, private pilots and the general public, to retrieve and download AIS data from the system in real-time.

7.31 It was noted also that EAD enhances the quality of aeronautical data by using international standards and rigorous data checking procedures, including in-depth validation and verification. Two main types of clients use EAD: the Data Providers and data Users. The data providers use the database to directly maintain and distribute their own aeronautical information. They retain full control of and intellectual property rights over the information they input into EAD; while the Data Users are able to consult and download data or publications, and generate reports from EAD. The Services/components offered by the EAD are the followings:

- SDO – Maintenance, download and reporting of static data;
- INO – Creation and retrieval of NOTAM;

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- PAMS – Publication and Consultations of aeronautical documents;
- AIP – AIP production;
- CHART – Chart production; and
- PIB – Generation of Pre-Flight Information Bulletins.

7.32 In connection with the above, the meeting noted that EAD offers a number of benefits to both Data Providers and Data Users, especially:

- a reliable source of aeronautical information;
- improved data quality enabled by constant data checking, including NOTAM validation and cross-boarder data coherence verification;
- ensure data integrity based on cyclic redundancy checks (CRC);
- a secure channel for timely and efficient electronic distribution of aeronautical information to all users;
- reduced workload throughout the complete AIS process;
- reduced investment costs in the development and maintenance of local systems by both AIS Units and airspace users; and
- increased availability of data through easy access.

7.33 The meeting noted that more information about EAD is available on the EUROCONTROL and EAD websites at: www.eurocontrol.int/ead and www.ead.eurocontrol.int.

7.34 The meeting noted that more than 100 clients are using the EAD among them:

- 16 European States are fully migrated to EAD;
- 13 European States are partially migrated to EAD;
- 10 European States are committed to migrate to EAD; and
- A number of non-European States and Data Providers.

7.35 The meeting noted that during the EMAC Steering Committee meeting of June 2006, EAD was presented including two migration scenarios:

- direct connection to EAD system; and
- regional replica of the EAD.

7.36 It was highlighted that the first scenario “direct connection to EAD” (endorsed by EMAC) offers the following advantages:

- full EAD functionality, quality and service;
- low cost; and
- fast implementation.

7.37 The regional replica of the EAD offers the following advantages:

- possibility to implement local/regional requirements;
- less network dependency (communication issue); and

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- lower network cost.

7.38 The meeting noted that among the EMAC States, Cyprus is already connected to the EAD since December 2007 and that during the EUROMED meeting held in Brussels in November 2007, Egypt and Jordan reconfirmed their interest to be connected to the EAD.

7.39 The meeting noted that EUROCONTROL is willing to fully support States to further progress the connection of their AIS to the EAD.

7.40 Iran showed interest to be a member of EMAC or at least to be connected to the EAD.

7.41 In view of the above and recognising the operational need for AIS automation, the meeting noted that many States are in the process of designing and implementing, individually or on a regional basis, reference aeronautical information databases. The undertaking by States of such developments in isolation could be an unnecessary duplication of effort, which is likely to lead into incompatibility problems. While some States have already automated their AIS, others are still in the process of doing so, or are in the planning stage. Consequently, the meeting was of view that it is highly desirable that all AIS systems be automated along the same or similar lines in order to ensure compatibility. Accordingly, the meeting encouraged the EMAC States to take appropriate actions in order to initiate formal coordination with EUROCONTROL to take advantage of EAD and agreed to the establishment of an AIS Automation Action Group with Terms of Reference (TOR) as at **Appendix 7A** to Report on Agenda Item 7.

7.42 Based on the above the meeting agreed to the following Draft Conclusion and Decision:

DRAFT CONCLUSION 4/6: EXTENSION OF THE EAD TO THE EMAC STATES

That, the EMAC States are encouraged to initiate formal coordination with EUROCONTROL and take appropriate actions in order to be connected to the European AIS Database (EAD).

DRAFT DECISION 4/7: ESTABLISHMENT OF AN AIS AUTOMATION ACTION GROUP

*That, the AIS Automation Action Group is established with Terms of Reference as at **Appendix 7A** to the Report on Agenda Item 7.*

7.43 The meeting noted with appreciation that Egypt is participating in the EUROCONTROL xNOTAM trial that is taking place between February and July 2008 and invited Egypt to present the feedback of this participation to the upcoming ATM/SAR/AIS Sub Group and/or AIS/MAP Task Force meetings.

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MID REGION AIS AUTOMATION ACTION GROUP (AISA AG)

A) TERMS OF REFERENCE

With a view to foster and harmonize the implementation of AIS Automation in the MID Region, the AIS Automation Action Group shall:

- 1) ensure that AIS systems in the MID Region be automated along the same or similar lines in order to ensure compatibility and monitor the implementation process;
- 2) monitor technical and operational developments related to AIS automation in other regions, including AIXM, eAIP, EAD, etc, and consider how the MID Region could take benefit from these developments;
- 3) develop a common understanding of the aeronautical information conceptual and exchange models;
- 4) foster the development of eAIP by MID States;
- 5) study the necessary communication infrastructure necessary for the exchange of aeronautical information in the MID region; and
- 6) develop a cohesive and comprehensive AIS Automation Plan for the MID Region.

B) COMPOSITION

The composition of the AISA AG is as follows:

State	Member's Name and Title	Member's Contact Details
Egypt	Mr. Moataz Abd El Aziz El Naggar Director of AIS Publications	Email: mizo_air2000@yahoo.com Tel: +20 10 72 08 848 Fax: +20 2 22 67 88 82
	Ahmed Allam AIS Specialist	Email: ahmedallam71@hotmail.com Tel: +2010 16 95 200 Fax: +20 2 22 67 88 82
Iran <i>*(Rapporteur of the Group)</i>	*Mr. Abbas Niknejad Superior expert of AIS (D.G. of ATM)	Email: abbas.niknejad@gmail.com Tel: +(9821) 66025108 Fax: +(9821) 44649269
	Mr. Bahman Bagheri Chief of COM office (D.G. of COM&NAV)	Email: bagheri_com@yahoo.com Tel: Fax:
	Mr. Javad Pashaie Chief of Iran AIS	Email: ais_iran@airport.ir Tel: Fax:
Oman	Mr. Saud Humaid Al-Adhoobi Airspace Management	Email: saud@dgcam.gov.om Tel: (968) 99 321 664 Fax: (968) 24 519 523

State	Member's Name and Title	Member's Contact Details
Qatar		Email: Tel: Fax:
Saudi Arabia	Mr. Abdulrahman Batouk Communication & Computer Engineer (Automation Engineering Branch, GACA)	Email: arbatouk@gmail.com Tel: (966) 555664381 Fax: (966-2) 671 9041
	Mr. Ibrahim Alshaia Air Traffic Controller	Email: I_Alshaya@yahoo.com Tel: (966) 555613191 Fax: (966-2) 640 1477

Note: The Members of the Action Group should be from both the AIS Operational and Engineering sides (Communication issues).

C) WORKING ARRANGEMENTS

The AISA AG shall report to the AIS/MAP Task Force.

The work of the AISA AG shall be carried out mainly through exchange of correspondence (email, facsimile, Tel, etc) between its Members.

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REPORT ON AGENDA ITEM 8: LATEST DEVELOPMENTS IN THE AIS/MAP FIELD

Aeronautical Information Management (AIM)

8.1 The meeting recalled that the 11th Air Navigation Conference (ANC/11) held in Montreal in 2003 endorsed the ATM Operational Concept and recognized that in the global ATM system environment envisioned by the operational concept, aeronautical information service (AIS) would become one of the most valuable and important enabling services. As the global ATM system foreseen in the operational concept was based on a collaborative decision-making (CDM) environment, the timely availability from authorized sources of high quality electronic aeronautical, meteorological, airspace and flow management information would be necessary. The extensive sharing of information encourages collaborative decision-making, thereby allowing air traffic management to optimize efficiency in the conduct of its operations. The ANC/11 stressed out that aeronautical information services (AIS) and meteorological services (MET) are subsets of the ATM information requirements and therefore, would need to be fully addressed when developing ATM requirements.

8.2 To ensure the cohesion and linkages between different components of the operational concept and to accomplish the role of AIS, the ANC/11 recognized the need for the interchange and management of aeronautical information to be used by different services and users, while taking into account interoperability of existing and future systems.

8.3 The meeting recalled that the Global AIS Congress held in Madrid in 2006 agreed that, in order to prevent diverging developments in the future and realising the safety critical nature of aeronautical information, it is considered essential that ICAO takes the lead at the global level with regard to the transition from AIS to AIM. The Congress agreed that the EUROCONTROL Document “From AIS to AIM – a Global Strategy” made available to the Congress constituted a firm basis for further debate, which could assist ICAO in facilitating global change.

8.4 The recommendations of the Congress are at **Appendix 8A** to the Report on Agenda Item 8.

8.5 The meeting noted that to maintain the momentum for change, a “mini Global AIS Congress” was held in Brussels in June 2007 with the main theme “Global AIM”. Two more “mini-Congresses” are planned possibly ahead of a second main Congress in 2010, i.e.: “Quality AIM Congress” would be held in Singapore from 17 to 19 June 2008 and “Implementing AIM Congress” would be held in South Africa in the spring of 2009. In this regard and with a view to keep pace with the developments related to the transition from AIS to AIM, the meeting encouraged States to attend the here-abovementioned AIS Congresses.

8.6 The meeting recalled that in September 2007, Portugal presented WP/51 to the 36th Session of the Assembly on behalf of forty-three Contracting States, comprising the European Community and its member States, members of the European Civil Aviation Conference and EUROCONTROL. The paper discussed the need for a strategic evolution towards AIM. It outlined the general support expressed at the Global AIS Congress, the progress achieved, and recommendations directed at achieving a uniform and efficient AIM structure to support all phases of flight. The Assembly supported WP/51 and recognized the need for ICAO to support the recommendations of the Global AIS Congress together with the need for further coordination and transparency.

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8.7 The meeting noted that the most important changes to move from AIS to AIM are the transition from a product-centred service to the provision and management of data in an interoperable form sufficient for end use, and the broadening of scope in terms of information coverage. In this respect, in order to satisfy user requirements for Gate-to-Gate operations, an enlarged scope of aeronautical information would be needed. Accordingly, MET, FIS, ATM system status, demand and capacity management, etc, are all of concern to AIM alongside the other traditional AIS information categories.

8.8 Accordingly, the traditional product-centered provision of Aeronautical Information has to be replaced by a data-centered and systems-oriented solution, in which timely and reliable data are made available for use in applications that perform the required tasks.

8.9 Though the transition from a product-centric (current AIS) to a data centric (AIM) service is essential, it is foreseen that AIM will still have to cater for the provision of traditional AIS products during the transition phase.

8.10 The meeting recognized that the transition from AIS to AIM will raise a number of legal and institutional issues which should be resolved. In this regard, the meeting noted that an ICAO World Wide Symposium on Enabling the Net Centric Information Environment will be held in Montreal from 2 to 4 June 2008. It's expected that this Symposium will address, inter-alia, the legal and institutional issues related to the transition from AIS to AIM.

8.11 In line with Recommendation 7 of the Global AIS Congress and as a pre-requisite for the transition to AIM, the meeting agreed that States that have not yet done so, should give high priority to the implementation of existing Annex 15 SARPs in particular WGS-84, Quality Management System and Automation.

8.12 Recognizing that not all States or regions can transition immediately to AIM, the meeting was of view that implementation should be evolutionary, based on regional needs. The plans of all States and regions need to be aligned to ensure, to the greatest extent possible, that solutions are internationally harmonized and integrated and do not unnecessarily impose multiple equipment carriage requirements in the air components of the ATM system, or multiple systems on the ground.

8.13 The meeting noted with appreciation the work done within the framework of EUROCONTROL related to AIM and agreed that this represents a very good basis for the development of AIM related SARPs and Guidance Material. However, it was noted that a number of issues have to be clarified/refined during the process of development of AIM related SARPs and Guidance Material, inter-alia, a clear definition of AIM, scope of AIM and related legal and institutional issues i.e.: responsibility, liability issues, etc.

8.14 Based on the above the meeting agreed with the ATM/SAR/AIS SG/9 meeting that the creation of a global forum (multi-disciplinary group) with the leadership of ICAO is necessary to show ICAO commitment to follow up on the Recommendations of the Global AIS Congress. This will provide also global participation and transparency in the development of AIM related SARPs and guidance material. Accordingly, the meeting fully supported the Draft Conclusions and Decision developed by the ATM/SAR/AIS SG/9, in this respect:

*DRAFT CONCLUSION 9/11: STRATEGY/ROADMAP FOR THE GLOBAL TRANSITION
FROM AIS TO AIM*

That, with a view to expedite the transition from AIS to AIM in a global and harmonized manner:

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- a) *ICAO consider the creation of a multi-disciplinary group in order to, inter-alia:*
- i) *develop a global strategy/roadmap for the transition from AIS to AIM; and*
 - ii) *prepare new AIM related SARPs and guidance material based on the AIM documents developed by EUROCONTROL, in line with the Recommendations of the Global AIS Congress; and*
- b) *States and international organizations (EUROCONTROL, IATA, etc) support the activities of the above-mentioned multi-disciplinary group and participate actively in the development of the AIM strategy/roadmap and related SARPs and guidance material.*

DRAFT CONCLUSION 9/12: PRE-REQUISITES FOR THE TRANSITION TO AIM

That, as a pre-requisite for the transition from AIS to AIM, States that have not yet done so, are urged to give high priority to the implementation of existing Annex 15 SARPs, in particular, WGS-84, Quality Management System and automation.

DRAFT DECISION 9/13: PLANNING FOR THE TRANSITION FROM AIS TO AIM

That, based on the ICAO Global ATM Operational Concept and in support of the Global Plan Initiative (GPI-18: Aeronautical Information), the AIS/MAP Task Force include in its work programme the development of an action plan/strategy for the transition from AIS to AIM in the MID Region.

8.15 The meeting was of view that the AIS/MAP Task Force should review the AIS parts of the MID Basic ANP in order to introduce/develop planning material related to the transition from AIS to AIM and agreed accordingly to the following Draft Decision:

DRAFT DECISION 4/8: DEVELOPMENT OF PLANNING MATERIAL FOR THE TRANSITION FROM AIS TO AIM

That, based on the ICAO Global ATM Operational Concept and in support of the Global Plan Initiative (GPI-18: Aeronautical Information), the AIS/MAP Task Force carry out a review of the AIS parts of the MID Basic ANP in order to introduce/develop planning material related to the transition from AIS to AIM.

MID Region AIS/MAP Timelines

8.16 The meeting recalled that MIDANPIRG/10 under Conclusion 10/61 endorsed the updated MID Region AIS/MAP Timelines.

8.17 The meeting noted also that the ATM/SAR/AIS SG/9 meeting, based on the outcome of the eTOD WG/1 meeting, reviewed and updated the timelines related to eTOD.

8.18 Based on the above, the meeting reviewed and updated the MID Region AIS/MAP Timelines at **Appendix 8B** to the Report on Agenda Item 8.

MID Region strategy for the implementation of the Global Plan Initiatives (GPIs)

8.19 The meeting recalled that, MIDANPIRG/10 under Conclusion 10/13 endorsed the MID Region Strategy for the Implementation of the Global Plan Initiatives (GPIs). The meeting noted that the GPIs were considered for the first time by the CNS/ATM/IC SG/3 in February 2007, and that more detailed work regarding implementation, which will include review of tasks under each GPI identified for the MID Region, refinement of target dates and update of the status of implementation, was going to be carried out by the MIDANPIRG subsidiary bodies.

8.20 Furthermore, MIDANPIRG/10 noted that, on advice from the ICAO Council, all Bureaux and Regional Offices have initiated development of their own Operational Plans in which critical tasks are broken down into smaller, contributing tasks. Accordingly, there would have to be a transition process in which ultimately PIRGs and their subsidiary bodies would need to develop project proposals. In this regard, the meeting noted that in support of the evolution from a system-based approach to a performance-based approach to planning and implementation of air navigation, MIDANPIRG/10, under Conclusion 10/14 approved the projects proposed by its subsidiary bodies related to the AGA, AIS, ATM, and CNS fields. It was highlighted that in the AIS/MAP field the following two projects were endorsed:

- a) improvement of the quality and efficiency of aeronautical information services provided by MID States; and
- b) provision of eTOD by MID States;

8.21 The meeting noted that some developments related to the ICAO business plan and GPIs are going on in ICAO Headquarters. In this regard, it was noted that an interactive online planning system for business plan known as ICAO Knowledge Sharing Network (IKSN) is under development. As part of this effort, the operational plans of the regional programmes are being embedded in the IKSN, which will result in a unified approach to managing all regional projects. The meeting further noted that the outcome of PIRG meetings is considered very significant and would be analysed in a structured manner in order to address the issues raised therein by including it in the work programme at ICAO headquarters, through the IKSN.

8.22 The meeting noted that, based on the above, the ATM/SAR/AIS SG/9 meeting reviewed the list of actions/tasks and projects related to the ATM/SAR and AIS/MAP fields and the associated GPIs (Attachment to the MID Strategy for the implementation of GPIs) and agreed that further work on the review of the MID Region strategy for the implementation of GPIs be carried out by the CNS/ATM/IC Sub-Group.

8.23 The meeting was of view that the actions, tasks and target dates relevant to the AIS/MAP field in the attachment to the strategy for the implementation of GPIs need to be refined and updated with a view to be proposed to the ATM/SAR/AIS SG/10 and the CNS/ATM/IC SG/4 meetings. Accordingly, the meeting reviewed and updated the list as at **Appendix 8C** to the Report on Agenda Item 8.

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Amendment 34 to Annex 15 and 54 to Annex 4

8.24 The meeting noted that Amendment 34 to Annex 15 and Amendment 54 to Annex 4 were adopted by the Council on 2 March 2007. The Amendments and the Resolution of Adoption were sent to States on 30 March 2007. Both Amendments became applicable on 22 November 2007.

8.25 The meeting noted that the main issues to be highlighted in Amendment 34 to Annex 15 are the following:

- A new requirement for inclusion of the new Aerodrome Terrain and Obstacle Chart -ICAO (Electronic) in the AIP. In this regard, the Aerodrome Terrain and Obstacle Chart — ICAO (Electronic) shall, when available for designated international aerodromes/ heliports, form part of the AIP, or be distributed separately to recipients of the AIP.

Note: a page pocket may be used in the AIP to include the Aerodrome Terrain and Obstacle Chart — ICAO (Electronic) on appropriate electronic media.

- The amendment of the "Instructions for completion of the NOTAM Format Item B" in Appendix 6, allow for inclusion of an effective date-time ahead of the NOTAM origination date in Item B) for NOTAMR and NOTAMC. It's to be noted that previously, in the cases of NOTAMR and NOTAMC, the date-time group is the actual date and time of the NOTAM origination.
- New requirements for provision of information in the AIP regarding Automatic Dependent Surveillance - Broadcast (ADS-B), Automatic Dependent Surveillance - Contract (ADS-C), Controller-Pilot Data Link Communications (CPDLC) and VOLMET data link service (D-VOLMET) and related definitions. The amendment also refines and aligns terminology regarding datalink applications.

8.26 The main changes introduced by Amendment 54 to Annex 4 are the following:

- The amendment deletes the Aerodrome Obstacle Chart - ICAO (Type C) and replaces it with a new Aerodrome Terrain and Obstacle Chart - ICAO (Electronic). The new chart combines existing specifications of the aeronautical obstacle chart Types A, B and C with terrain and obstacle data specifications contained in Annex 15. Associated definitions, and provisions allowing that the Aerodrome Terrain and Obstacle Chart - ICAO (Electronic) may be made available in lieu of the Aerodrome Obstacle Charts - ICAO Types A and B, and the Precision Approach Terrain Chart - ICAO, have been introduced in Annex 4, Chapters 1, 3, 4 and 6, respectively.
- Introduction of new definitions for minimum en-route altitude and minimum obstacle clearance altitude, and new provisions for the inclusion of these two elements on the Enroute Chart - ICAO, Area Chart - ICAO, Standard Arrival Chart - Instrument (STAR) - ICAO, and Standard Departure Chart - Instrument (SID) - ICAO.

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- New or amended provisions relating to aeronautical database requirements to support navigation database coding, aeronautical data quality requirements for approach gradients and angles, cautionary notes for steep angle approaches, and the portrayal of essential fixes and points on the Instrument Approach Chart - ICAO. The new provisions will improve the efficiency and safety of flight operations by standardizing minimum altitude portrayal, removing ambiguities between charted instrument procedures and associated navigation databases, and updating the Instrument Approach Chart – ICAO.

8.27 The meeting noted that no State from the Region informed ICAO of any disapproval of the provisions introduced by Amendment 34 to Annex 15 and Amendment 54 to Annex 4 or any differences that would exist on 22 November 2007 between the national regulations or practices and the provisions of Annex 15 and Annex 4, as amended by Amendment 34 to Annex 15 and Amendment 54 to Annex 4.

Harmonization of the Publication of the Latitude and Longitude Coordinates

8.28 The meeting noted that the requirements for the publication of the geographical coordinates of a facility on the ground or a point/position in the air in term of Latitude and Longitude could be found in many ICAO Annexes and Documents. It was noted that in some cases the format in which the Lat and Long should be published is not specified and in other cases the Format is specified (Example: nnnn[N/S]nnnn[E/W]. However, the meeting noted that some differences exist in the provisions related to the publication of Latitude and Longitude:

a) Latitude:

- Degrees and Minutes: ddmm[N/S] or [N/S]ddmm;
- Degrees, Minutes and Seconds: ddmms[N/S] or [N/S]ddmms; and
- Degrees, Minutes and tenths of minutes: ddmm.t[N/S] or [N/S]ddmm.t

b) Longitude:

- Degrees and Minutes: dddmm[E/W] or [E/W]dddmm;
- Degrees, Minutes and Seconds: dddmms[E/W] or [E/W]dddmms;
- Degrees, Minutes and tenths of minutes: dddmm.t[E/W] or [E/W]dddmm.t

8.29 Reference was made to Annex 15, para. 3.2.7 and Annex 4 para. 2.17.2 “*States shall ensure that the order of publication resolution of aeronautical data shall be that as specified in Appendices 1 and 7*” (of Annex 15); and “*States shall ensure that the order of chart resolution of aeronautical data shall be that as specified for a particular chart and as presented in a tabular form in Appendix 6*” (of Annex 4). However, it was noted that many States are not complying with the provisions of Annexes 4 and 15 related to the format and publication resolution of Latitude and Longitude.

8.30 Based on the above the meeting agreed to the following Draft Conclusion:

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***DRAFT CONCLUSION 4/9: HARMONIZATION OF THE PUBLICATION OF
LATITUDE AND LONGITUDE COORDINATES***

That, in order to prevent proliferation of the formats used in the publication of the geographical coordinates in form of Latitude and Longitude:

- a) States are urged to comply with the provisions of Annexes 4 and 15 related to the format and publication resolution of Latitude and Longitude; and*
- b) ICAO consider the review and harmonization of the different provisions related to the subject contained in the different ICAO Annexes and Documents.*

**GLOBAL AIS CONGRESS
MADRID, SPAIN, 27-29 JUNE 2006**

RECOMMENDATIONS

Recommendation 1: ICAO adopt the AICM/AIXM as the standard aeronautical information conceptual model and the standard aeronautical information exchange model, and

- develop appropriate means of compliance, and
- global mechanisms to manage and develop the AICM/AIXM.

Recommendation 2: ICAO should evolve the AIM Concept and associated performance requirements and develop a road map to plan, manage and facilitate on a world-wide basis the transition from AIS to AIM.

Recommendation 3: ICAO instigate an urgent review of Annex 4 and Annex 15 in accordance with the recommendation of the 11th Air Navigation Conference.

Recommendation 4: ICAO should incorporate transition activities into the Global Air Navigation Plan in order to ensure broad-based development of AIS/AIM capabilities across all ICAO Regions

Recommendation 5: ICAO should, as a matter of urgency address legal and institutional issues including those associated with an expansion of service from AIS to AIM that could constrain the adoption and implementation of AIM.

Recommendation 6: States working in close coordination with international organisations should support ICAO in any activity to accommodate the transition from AIS to AIM.

Recommendation 7: Recognising the critical nature of aeronautical information in the present and future ATM systems, States should give high priority to the implementation of existing Standards such as WGS-84 and Quality Management Systems and should, if necessary, request assistance from ICAO or if appropriate international organisations to do so.

Recommendation 8: Recognising the social dimension associated with change, ICAO working with States and international organisations determine the required Staff Profile(s) for AIM and determine appropriate skills and competencies and amend existing guidance material and develop new guidance and training material, under the Trainair programme perhaps, to assist States and other AIS organisations in the transition process.

Recommendation 9: ICAO should promote open access to information.

Recommendation 10: That ICAO consider as a matter of priority how a Global Forum could be established.

Middle East Region
AIS/MAP IMPLEMENTATION PLAN
Updated Timelines

TIMELINES:



Global



Regional



National

Middle East — Aeronautical Information Services Implementation		2000	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16
Global	Provision of Terrain Data for Area 4									■	■	■	■	■	■	■	■	■
MID Region										■	■	■	■	■	■	■	■	■
States	Afghanistan																	
	Bahrain																	
	Egypt																	
	Iran, Islamic Rep. of													■	■	■	■	■
	Iraq																	
	Israel																	
	Jordan									■	■	■	■	■	■	■	■	■
	Kuwait									■	■	■	■	■	■	■	■	■
	Lebanon																	
	Oman																	
	Qatar																	
	Saudi Arabia									■	■	■	■	■	■	■	■	■
	Syrian Arab Republic																	
	United Arab Emirates									■	■	■	■	■	■	■	■	■
	Yemen																	

MID REGION STRATEGY FOR THE IMPLEMENTATION OF THE GLOBAL PLAN INITIATIVES (GPIs)

Considering:

- a) the ICAO strategic objectives;
- b) the ICAO Business Plan;
- c) the Global Air Traffic Management Operational Concept;
- d) the revised Global Air Navigation Plan and associated GPIs; and
- e) the outcome of ALLPIRG/5 meeting; and

Recognizing that:

- i) the evolution continues from a systems-based to a performance-based approach to planning and implementation of the air navigation infrastructure; and
- ii) the Global Air Navigation Plan is a significant component in the development of regional and national plans and that, together with the global ATM operational concept, it provides an effective architecture for achieving a safe, harmonized, interoperable, and seamless Global ATM system.

The MID Region strategy for the implementation of the Global Plan Initiatives (GPIs) is detailed below:

- A) the MID Region implementation plan should:
 - 1) be evolutionary and consistent with the Global Air Navigation Plan taking into consideration the region priorities;
 - 2) cope with the development of an ATM Performance framework;
 - 3) satisfy performance needs just in time and at minimal cost;
 - 4) provide States with clearer objectives for the implementation of ATM and supporting CNS systems;
 - 5) identify the GPIs that would be most effective in achieving the objectives of the region while ensuring continuation of the work already accomplished;
 - 6) take into account the Initiatives across regions, to align work programmes and to develop national and regional plans that facilitate achieving a Global ATM system;
- B) the GPIs status of implementation in the MID Region is at **Attachment 1**;
- C) the progress achieved and the challenges identified in the implementation of GPIs should be monitored and reviewed on a regular basis; and
- D) taking into consideration the above, the implementation plan should be considered as a living document, which should be updated on a regular basis.

GLOBAL AIR NAVIGATION PLAN: GLOBAL INITIATIVES

Table 1. Global Plan Initiatives (GPIs) and their relationships to the major groupings

GPI		En-route	Terminal Area	Aerodrome	Supporting Infrastructure	Related Operational Concept Components
GPI-1	Flexible use of airspace	X	X			AOM, AUO
GPI-2	Reduced vertical separation minima	X				AOM, CM
GPI-3	Harmonization of level systems	X				AOM, CM, AUO
GPI-4	Alignment of upper airspace classifications	X				AOM, CM, AUO
GPI-5	RNAV and RNP (Performance-based navigation)	X	X	X		AOM, AO, TS, CM, AUO
GPI-6	Air traffic flow management	X	X	X		AOM, AO, DCB, TS, CM, AUO
GPI-7	Dynamic and flexible ATS route management	X	X			AOM, AUO
GPI-8	Collaborative airspace design and management	X	X			AOM, AUO
GPI-9	Situational awareness	X	X	X	X	AO, TS, CM, AUO
GPI-10	Terminal area design and management		X			AOM, AO, TS, CM, AUO
GPI-11	RNP and RNAV SIDs and STARs		X			AOM, AO, TS, CM, AUO
GPI-12	Functional integration of ground systems with airborne systems		X		X	AOM, AO, TS, CM, AUO
GPI-13	Aerodrome design and management			X		AO, CM, AUO
GPI-14	Runway operations			X		AO, TS, CM, AUO
GPI-15	Match IMC and VMC operating capacity		X	X	X	AO, CM, AUO
GPI-16	Decision support systems and alerting systems	X	X	X	X	DCB, TS, CM, AUO
GPI-17	Data link applications	X	X	X	X	DCB, AO, TS, CM, AUO, ATMSDM
GPI-18	Aeronautical information	X	X	X	X	AOM, DCB, AO, TS, CM, AUO, ATMSDM
GPI-19	Meteorological systems	X	X	X	X	AOM, DCB, AO, AUO
GPI-20	WGS-84	X	X	X	X	AO, CM, AUO
GPI-21	Navigation systems	X	X	X	X	AO, TS, CM, AUO
GPI-22	Communication infrastructure	X	X	X	X	AO, TS, CM, AUO
GPI-23	Aeronautical radio spectrum	X	X	X	X	AO, TS, CM, AUO, ATMSDM

ABBREVIATIONS:

Airspace Organization and Management	AOM
Demand and Capacity Balancing	DCB
Aerodrome Operations	AO
Traffic Synchronization	TS
Conflict Management	CM
Airspace User Operations	AUO
ATM Service Delivery Management	ATMSDM

DECISION SUPPORT AND IMPROVEMENT OF SITUATIONAL AWARENESS

GPI-9: SITUATIONAL AWARENESS
GPI-16: DECISION SUPPORT AND ALERTING SYSTEMS
GPI-17: DATA LINK APPLICATIONS
GPI-19: METEOROLOGICAL SYSTEMS

Strategic Objectives	Actions	Description/Tasks	Target Date	Initiated by	Status	Benefits
A, D	Implement an IFPS in the MID Region	<ul style="list-style-type: none"> -Develop a feasibility study; - Define the legal framework for the MID IFPS; - Commitment of States through the signature of MOU; - Agreement on a funding mechanism; - Implementation and operation of the MID IFPS 	2010	Bahrain, States, ICAO	-	<ul style="list-style-type: none"> - Reduce the number of occurrences of non-receipt of FPLs and associated ATS messages; - Improved planning and coordination between adjacent Centres; - Improved safety and efficiency.
A, D	Improve surveillance and air/ground data link services	<ul style="list-style-type: none"> - Implement ATS data link surveillance technologies, ADS-B, CPDLC, etc., where applicable ; - Exchange of radar data between adjacent Centres, - Implement automation in coordination tasks between adjacent Centres/Sectors 	2010	ICAO, States, Users		<ul style="list-style-type: none"> - Improvement in safety; - Reduced workload for both pilots and controllers; - Improved efficiency.

AIS/MAP TF/4-REPORT
APPENDIX 8C
ATTACHMENT 1

8C-A1-3

Strategic Objectives	Actions	Description/Tasks	Target Date	Initiated by	Status	Benefits
A	Implement operations decision support and alerting systems	<ul style="list-style-type: none"> - Implement ground air electronic warnings, as needed for short and for long term conflict predictions: + ACAS II + MSAW + DAIW - Implement D-ATIS, where applicable. 	2009	ICAO, States		<ul style="list-style-type: none"> - Improved safety; - Reduction in risk of CFIT;
A	Provision of eTOD	- Promote the awareness about the requirements for the provision of electronic Terrain and Obstacle Data (eTOD);	2008	ICAO, States		<ul style="list-style-type: none"> - Improved safety; - Reduction in risk of CFIT;
		- Analyse eTOD requirements develop a common understanding of the requirements (needs in terms of data format, temporality, cross-border harmonisation, etc);	2008	ICAO States		
		- Develop a MID Region eTOD implementation strategy and action plan;	2008	ICAO States		
		- Harmonize, coordinate and support the eTOD implementation activities on a regional basis;	2009	ICAO		
		- Provide Terrain and Obstacle data for area 1.	2009	States		
		- Provide Terrain data for area 4.	2009	States		
		- Provide Terrain and Obstacle data for area 2.	2011	States		
		- Provide Terrain and Obstacle data for area 3.	2011	States		

8C-A1-4

A, D	Provision of MET information	<ul style="list-style-type: none"> – Implement D-VOLMET, where applicable; – Provision of OPMET information from automated ground-based meteorological systems (automated low-level wind shear alerts and RWY wake vortex reports, hazardous weather phenomena). 	2010	States		<ul style="list-style-type: none"> – Improved safety; – Improved efficiency.
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ENHANCEMENT OF MID STATES' TMA MANAGEMENT

- GPI-1: FLEXIBLE USE OF AIRSPACE**
GPI-5: RNAV AND RNP (PERFORMANCE-BASED NAVIGATION)
GPI- 8: COLLABORATIVE AIRSPACE DESIGN AND MANAGEMENT
GPI-10: TERMINAL AREA DESIGN AND MANAGEMENT
GPI-11: RNP AND RNAV STANDARD INSTRUMENT DEPARTURES (SIDS) AND STANDARD TERMINAL ARRIVALS (STARS)
GPI-12: FUNCTIONAL INTEGRATION OF GROUND SYSTEMS WITH AIRBORNE SYSTEMS
GPI-20: WGS-84
GPI-21: NAVIGATION SYSTEMS

Strategic Objectives	Actions	Description/Tasks	Target Date	Initiated by	Status	Benefits
A, C, D	Improve TMA capacity and efficiency	-Collaboration with users on TMA design and management;	2010	ICAO, States, Users		<ul style="list-style-type: none"> - Improvement in safety - Increased airspace capacity and efficiency; - Efficient flight trajectories; - Reduction in CFIT; - Reduced fuel consumption; - Reduced environmental impact.
		-Increased accommodation of user-preferred flight profiles;				
		-Remove, as much as possible, permanent restricted airspace close to airports and carry out strategic coordination and dynamic interaction with the military to improve TMA capacity;				
		-Monitor the implementation of WGS-84 until complete implementation of the system by all States	2009	ICAO		
		- Develop MID Region PBN Strategy;				

8C-A1-6

Strategic Objectives	Actions	Description/Tasks	Target Date	Initiated by	Status	Benefits
		<ul style="list-style-type: none"> – Develop and implement optimized RNP and RNAV SIDs, STARs and approach procedures in accordance with the PBN concept, taking into consideration aircraft capabilities; 				
		<ul style="list-style-type: none"> – Develop and implement GNSS procedures for Non-Precision Approaches and approaches with vertical guidance (APV). 				
C, D	Plan for the implementation of Continuous descent procedures and unrestricted climb departure procedures	<ul style="list-style-type: none"> – Enable optimal application of advanced technologies including FMS based arrival procedures; – Develop a plan for the implementation of continuous descent procedures; – Develop a plan for the implementation of unrestricted climb departure procedures. 	2011	States, Users, ICAO		<ul style="list-style-type: none"> – Efficient flight trajectories; – Increased airspace efficiency; – Reduced fuel consumption; – Reduced environmental impact.

**IMPROVEMENT OF THE QUALITY AND EFFICIENCY OF AERONAUTICAL INFORMATION SERVICES
 PROVIDED BY MID STATES**

GPI-18: AERONAUTICAL INFORMATION

Strategic Objectives	Actions	Description/Tasks	Target Date	Initiated by	Status	Benefits
A, D	Provide timely and quality assured aeronautical information to users	- Improve the compliance with the AIRAC system;	2009	States,		- Improved safety; - Improved planning and management of flights; - Efficient use of airspace.
		- Advance posting of the AIRAC information on the web;	2009	States		
		- Use of email to enhance the communication between the AIS community in the MID Region;	2008	States		
		- Monitor the implementation of AIS automation in the MID Region in order to ensure availability, sharing and management of electronic aeronautical information;	2011	ICAO States		
		- Monitor the implementation of QMS until complete implementation of the requirements by all MID States;	2010	ICAO States		
		- Plan for the transition from AIS to AIM and develop necessary planning and guidance materials.	2010	ICAO States		

AIS/MAP TF/4
Report on Agenda Item 9

REPORT ON AGENDA ITEM 9: FUTURE WORK PROGRAMME

9.1 The meeting recalled that MIDANPIRG/10, under Decision 10/62 endorsed the Terms of Reference and Work Programme of the AIS/MAP Task Force.

9.2 The meeting noted that the ATM/SAR/AIS SG/9 meeting addressed the issue of transition from AIS to AIM and under Draft Decision 9/13 agreed that the AIS/MAP Task Force includes in its Work Programme the development of an action plan/strategy for the transition from AIS to AIM in the MID Region.

9.3 Accordingly, the meeting reviewed and updated the Terms of Reference and Work Programme of the AIS/MAP Task Force and agreed to the following Draft Decision, which is proposed to replace and supersede MIDANPIRG/10 Decision 10/62:

DRAFT DECISION 4/10: 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 9A** to the Report on Agenda Item 9.*

9.4 Taking into consideration the Work Programme of the Task Force, and noting that MIDANPIRG/11 is tentatively scheduled for early 2009, the meeting agreed that the AIS/MAP TF/5 meeting be held back-to-back with the eTOD WG/2 meeting in the first half of 2009. The venue will be Cairo, unless a State is willing to host the meeting.

9.5 In accordance with the ICAO Business plan and the requirements for performance monitoring, the meeting developed a follow-up action plan as at **Appendix 9B** to the Report on Agenda Item 9.

AIS/MAP TF/4
Appendix 9A to the Report on Agenda Item 9

**MIDANPIRG
AERONAUTICAL INFORMATION SERVICES AND AERONAUTICAL CHARTS
TASK FORCE (AIS/MAP/TF)**

1. TERMS OF REFERENCE

The AIS/MAP Task Force shall:

- 1) examine the Status of implementation of the ICAO requirements in the field of AIS/MAP;
- 2) identify and review those specific deficiencies related to AIS/MAP and recommend action to be taken to eliminate them;
- 3) prepare amendments to relevant MID Basic ANP and FASID, as appropriate;
- 4) assist States to implement a quality system for aeronautical information in an expeditious manner;
- 5) monitor and review latest developments in the AIS/MAP field; ~~and~~
- 6) foster the integrated improvement of aeronautical information services through proper training and qualification of the personnel performing technical duties in this aeronautical activity;
- 7) monitor the eTOD implementation activities in the MID Region;
- 8) assist States in the transition from AIS to AIM.

The AIS/MAP Task Force shall report to the ATM/SAR/AIS Sub-Group at each Sub-Group meeting.

2. WORK PROGRAMME

Ref	Tasks	Priority	Target Completion Date
1	Identify reasons that hinder States from implementation and adherence to the AIRAC System and suggest ways and means, which would facilitate adherence to the AIRAC System.	A	(1)
2	Analyze the status of implementation of WGS-84 in the MID Region and recommend measures to be taken to improve the situation.	A	(1)
3	Review the status of implementation of ICAO requirements pertaining to the Integrated Aeronautical Information Package and aeronautical charts in the MID Region.	A	(1)

⁽¹⁾ Continuous Task

Ref	Tasks	Priority	Target Completion Date
4	Foster the standardized production of aeronautical charts in the MID Region, identifying the obstacles that some States could have in adjusting to the specifications of ICAO Annex 4 and recommend possible course of action to be taken by those States in order to comply with the requirements.	A	2007 ⁽¹⁾
5	Foster the implementation of Quality System within the Aeronautical Information Services in the MID Region, identifying the difficulties that States could have to comply with the specifications of ICAO Annex 15.	A	2007 ⁽¹⁾
6	Recommend possible course of action to be taken by each State in order to comply with ICAO requirements pertaining to Quality system.	A	2007 2009
7	Develop a Quality assurance/management Plan for the MID Region to orient/assist States in the implementation of Quality Management System in accordance with ISO 9001-2000.	B	2007
8	Monitor and review technical and operating developments in the area of automation and AIS databases.	A	(1)
9	Develop a cohesive Air Navigation Plan for AIS Automation in the MID Region taking into consideration the outcome of the 11th Air Navigation Conference.	B	2008
10	Carry out studies for the harmonization and automated processing of AIS, MET and FPL products in the MID Region;	A	2008
11	Prepare amendments to relevant MID Basic ANP and FASID, as appropriate.	A	(1)
12	Highlight the importance of giving AIS its proper status in the Civil Aviation Administrations.	A	(1)
13	Identify the AIS/MAP training resources available in the MID Region.	B	2008 2009
14	Propose an AIS/MAP training action plan for the MID Region	B	2008 2009
15	Address the issue of AIS/MAP personnel licensing and recommend action, as appropriate	B	2007
16	Harmonize, coordinate and support the eTOD implementation activities on a regional basis.	A	2008 ⁽¹⁾
17	Ensure that the planning and implementation of AIM in the region, is coherent and compatible with the 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).	A	2010
18	ensure that the link between planned activities, organizational cost and performance assessment is well established	A	2010

⁽¹⁾ Continuous Task

3. PRIORITIES

- A High priority tasks, on which work should be speeded up.
- B Medium priority tasks, on which work should begin as soon as possible, but without detriment to priority A tasks.
- C Tasks of lesser priority, on which work should begin as time and resources allow, but without detriment to priority A and B tasks.

4. COMPOSITION

MIDANPIRG Provider States + IATA + IFALPA + IFATCA

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

AIS/MAP TF/4
Appendix 9B to the Report on Agenda Item 9

DRAFT FOLLOW-UP ACTION PLAN

CONC/DEC NO. --- STRATEGIC OBJECTIVE	TITLE OF CONCLUSION/DECISION	TEXT OF CONCLUSION/DECISION	FOLLOW-UP ACTION	TO BE INITIATED BY	DELIVERABLE	TARGET DATE
Draft Conc. 4/1	Use of the Public Internet for the Advance Publication of Aeronautical information	That, in order to improve the timeliness of aeronautical information and in accordance with the ICAO Guidelines on the use of Public Internet for Aeronautical Applications (Doc 9855): a) MID States are encouraged to use the internet for the advance publication of the following elements of the Integrated Aeronautical Information Package containing non-time critical aeronautical information (i.e.: posting of the information on the web and/or dissemination by email): AIP; AIP Amendments (both AIRAC and non AIRAC); AIP Supplements (both AIRAC and non AIRAC); Aeronautical Information Circulars (AIC);	Comply with the Conclusion	States AIS/MAP TF ICAO and Bahrain	Feed back from States and users Feasibility study	2009 Dec 2008

CONC/DEC NO. --- STRATEGIC OBJECTIVE	TITLE OF CONCLUSION/DECISION	TEXT OF CONCLUSION/DECISION	FOLLOW-UP ACTION	TO BE INITIATED BY	DELIVERABLE	TARGET DATE
		<p>monthly printed plain-language list of valid NOTAM; and NOTAM containing a checklist of valid NOTAM.</p> <p>Note: Appropriate arrangements for the provision of information in paper copy form should remain available.</p> <p>b) ICAO, in coordination with Bahrain, investigate the possibility that the ICAO MID Forum be used by States for the posting of AIS publications</p>				
Draft Conc. 4/2	Improvement of the adherence to the AIRAC System	<p>That, in order to improve the adherence to the AIRAC System, States, that have not yet done so, are urged to:</p> <p>a) fully comply with the AIRAC procedures, in accordance with specifications provided in Annexes 11, 14 (both volumes) and 15 as well as the provisions of the MID Basic ANP Chapter VIII;</p> <p>b) organize awareness campaigns involving AIS and all technical Departments providing the raw data to the AIS for promulgation; and</p>	Comply with the Conclusion	States	-Awareness campaigns -SLAs	Dec 2008

CONC/DEC NO. --- STRATEGIC OBJECTIVE	TITLE OF CONCLUSION/DECISION	TEXT OF CONCLUSION/DECISION	FOLLOW-UP ACTION	TO BE INITIATED BY	DELIVERABLE	TARGET DATE
		c) arrange for the signature of Service Level Agreements (SLA) between AIS and the data originators.				
Draft Conc. 4/3	Annex 15 Provisions related to AIRAC	That, ICAO consider to review the current provisions of Annex 15 Chapter 6 and Appendix 4 related to AIRAC by replacing the words “significant” and “major” changes, which lead to different interpretations, by a comprehensive list of changes which necessitate the use of the AIRAC System.	Comply with the Conclusion	ICAO HQ	Amendment to Annex 15	TBD
Draft Conc. 4/4	Implementation of QMS within MID States’ AISs	That, in accordance with Annex 15 provisions, States, that have not yet done so, are urged to implement/complete the implementation of a QMS within their AIS, before December 2009, based on the methodology for the implementation of QMS at Appendix 6A to the report on agenda item 6 and the EUROCONTROL CHAIN deliverables.	Comply with the Conclusion	States	QMS	Dec 2009

CONC/DEC NO. --- STRATEGIC OBJECTIVE	TITLE OF CONCLUSION/DECISION	TEXT OF CONCLUSION/DECISION	FOLLOW-UP ACTION	TO BE INITIATED BY	DELIVERABLE	TARGET DATE
Draft Con. 4/5	electronic AIP (eAIP)	That, a) pending the development of Global eAIP provisions, MID States, that have not yet done so, are invited to publish their eAIP based on the EUROCONTROL eAIP specifications; and b) in order to prevent proliferation of eAIP formats, ICAO give high priority to the development of necessary specifications and clear provisions related to the eAIP content, structure, presentation and format, taking into consideration the EUROCONTROL eAIP specification	Comply with the Conclusion	States ICAO HQ	eAIP Annex 15 provisions related to eAIP	Dec 2009 TBD
Draft Conc. 4/6	Extension Of The EAD To The EMAC States	That, the EMAC States are encouraged to initiate formal coordination with EUROCONTROL and take appropriate actions in order to be connected to the European AIS Database (EAD)	Follow up coordination	EMAC States Eurocontrol ICAO	Migration to the EAD	TBD
Draft Dec 4/7	Establishment of an AIS Automation Action Group	That, the AIS Automation Action Group is established with Terms of Reference as at Appendix 7A to the Report on Agenda Item 7	Follow-up the activities of the Action Group	AIS/MAP TF ICAO	- Feedback from the Action Group	Mar. 2009

CONC/DEC NO. --- STRATEGIC OBJECTIVE	TITLE OF CONCLUSION/DECISION	TEXT OF CONCLUSION/DECISION	FOLLOW-UP ACTION	TO BE INITIATED BY	DELIVERABLE	TARGET DATE
Draft Dec. 4/8	Development of Planning Material for the transition from AIS to AIM	That, based on the ICAO Global ATM Operational Concept and in support of the Global Plan Initiative (GPI-18: Aeronautical Information), the AIS/MAP Task Force carry out a review of the AIS parts of the MID Basic ANP in order to introduce/develop planning material related to the transition from AIS to AIM.	Comply with the Conclusion	AIS/MAP TF ICAO	PFA to the MID Basic ANP	Mar 2009
Draft Conc. 4/9	Harmonization of the publication of Latitude and Longitude Coordinates	That, in order to prevent proliferation of the formats used in the publication of the geographical coordinates in form of Latitude and Longitude: a) States are urged to comply with the provisions of Annexes 4 and 15 related to the format and publication resolution of Latitude and Longitude; and b) ICAO consider the review and harmonization of the different provisions related to the subject contained in the different ICAO Annexes and Documents.	Comply with the Conclusion	States ICAO HQ	Feedback from States Development of necessary amendments	Mar 2009 TBD

CONC/DEC NO. --- STRATEGIC OBJECTIVE	TITLE OF CONCLUSION/DECISION	TEXT OF CONCLUSION/DECISION	FOLLOW-UP ACTION	TO BE INITIATED BY	DELIVERABLE	TARGET DATE
Draft Dec. 4/10	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 9A to the Report on Agenda Item 9	Follow up the work programme	AIS/MAP TF	Report of AIS/MAP TF/5	Jun 2009

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AIS/MAP TF/4
Report on Agenda Item 10

REPORT ON AGENDA ITEM 10: ANY OTHER BUSINESS

10.1 Nothing has been discussed under this Agenda Item.

AIS/MAP TF/4
Attachment A to the Report

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