INTERNATIONAL CIVIL AVIATION ORGANIZATION

**REPORT OF THE TENTH MEETING OF
THE MIDDLE EAST AIR NAVIGATION PLANNING AND
IMPLEMENTATION REGIONAL GROUP**

MIDANPIRG/10

(Doha, Qatar, 15-19 April 2007)

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

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PART I - HISTORY OF THE MEETING

1. PLACE AND DURATION

1.1   The Tenth Meeting of the Middle East Air Navigation Planning and Implementation Regional Group (MIDANPIRG/10) was held at the Sharq Village & Spa in Doha, Qatar, from 15 –19 April 2007.

2. OPENING

2.1   Mr. Mohamed R. Khonji, ICAO Regional Director, Middle East Office, Cairo, thanked the Qatari Government through Mr. A. Aziz M. Al Noaimi, Chairman of the Board and Director of Civil Aviation Authority of Qatar for hosting the meeting and the generosity provided to all the participants. He further welcomed Mr. Abdullah N. Al Subai, Director Administration and Finance, from Qatar Civil Aviation Authority who on behalf of Mr. Al Noaimi, attended the opening session, Mr. Abdullah N. Al Harthy, Chairperson of MIDANPIRG and all participants.

2.2   In his opening remarks, Mr. Khonji indicated that the Middle East (MID) Region being at the crossroads between three Continents of Africa, Asia and Europe, plays an important role in air navigation safety. He further expressed his gratitude to MID region experts who have contributed to the implementation strategies, recommendations and projects which enhance safety and efficiency in the region. From this meeting it will be evident that a new era has begun for MIDANPIRG, which all participants would note. Mr. Khonji, highlighting that ICAO is embarking on a new way of doing business such as development of an ICAO Business Plan along with performance measures for the Organization designed to translate the Strategic Objectives of the Organization into action plans and ensure a link between planned activities, organizational cost and performance assessment.

2.3   Mr. Khonji passed his special thanks to United Arab Emirates (UAE) for hosting most if not all of the RVSM related meetings, seminars and the Middle East Central Monitoring Agency (MECMA) until June 2004. He also thanked all States participating in the MID RMA Project, and Bahrain for hosting the MID RMA. Mr. Khonji also talked about the 36th Session of the Assembly to be held at ICAO Headquarters in Montreal, Canada, from 18 to 28 September 2007. Finally, Mr. Khonji wished the meeting all the success.

2.4   Mr. Al Noaimi, ably represented by Mr. Al Subai, welcomed all participants to Doha, Qatar, wishing that MIDANPIRG/10 would be a successful meeting. He indicated that, civil aviation is a vital feature of today's community and a very strong tool for improving an advancement of international modern community. It is the main source of economic activities for many States. Civil aviation is not limited to enrich the economy but also infrastructure, culture, education and peace and luxury all over the world.

2.5   Mr. Al Noaimi further pointed out that current civil aviation is in a new era governed by new policies, open skies, lifting barriers on services keeping in mind the increase in number of air passengers. He also talked briefly on ways and means of controlling air navigation through satellites stressing on advanced control and training in order to guarantee highest standard of safety. Finally, Mr. Al Noaimi requested the meeting to put public interest as first priority to help improve aviation services in the MID Region.

2.6   Mr. Abdullah N. Al-Harthy, Chairperson of MIDANPIRG thanked the Qatari Civil Aviation Authority for hosting the meeting, welcoming all delegates to MIDANPIRG, and wishing them a fruitful meeting.

2.7   Mr. Vladimir D. Zubkov, Chief Planning and Global Coordination Office, ICAO Montreal addressed the meeting and provided a summary of the ICAO Headquarters activities in relation to the restructuring and administrative issues of ICAO Secretariat at both Headquarters and Regional Offices. He indicated that there are pressing needs to reduce costs, to include in the structure of the Organization several new functions, strategic and Business Planning being one of them. One of the key changes is better coordination of work between the Secretariat.

2.8   Mr. Zubkov mentioned the development of new budget for the next triennium 2008-2010 which is expected to be very tight giving some information on this issue. He also brought to the attention of the meeting the set of ICAO's Strategic Objectives which would guide the work programme into 21st century and the development of the Business Plan which would translate these Strategic Objectives into action with a firm link between planned activities, organizational costs and performance assessment. One of the important elements of the Business Plan is the scope of the ICAO's partners who's involvement in these activities is important, listing ICAO's key partners. Finally, Mr. Zubkov informed the meeting about the ALLPIRG/5 meeting and the Global Plan and its Initiatives (GPIs).

3.   ATTENDANCE

3.1   The meeting was attended by a total of 75 participants, which included experts from 13 States and 4 Organizations. The list of participants is at pages 7-24.

4.   OFFICERS AND SECRETARIAT

4.1   Mr. Mohamed R. M. Khonji, ICAO Middle East Regional Director acted as the Secretary of the Meeting, assisted by the following ICAO MID Regional Officers:

Mrs. N. Abdel Hady	-	Regional Officer, Aerodrome and Ground Aids
Mr. M. Smaoui	-	Regional Officer, Aeronautical Information Charts/Meteorology
Mr. R. A. Gulam	-	Regional Officer, Communications, Navigation and Surveillance
Mr. S. Machobane	-	Regional Officer, Air Traffic Management and Search and Rescue

4.2   The meeting was also supported by Mr. V. D. Zubkov, Chief Planning and Global Coordination Office and Mr. H. Pretorius, Planning and Global Coordination Officer from ICAO Headquarters in Montreal.

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5. LANGUAGE

5.1   The discussions were conducted in English. Documentation was issued in English.

6. AGENDA

6.1   The following Agenda was adopted:

STRATEGIC OBJECTIVE	AGENDA ITEM
A, C, D and E	Agenda Item 1: Adoption of the Provisional Agenda
A, C, D and E	Agenda Item 2: Follow-up on the outcome of MIDANPIRG/9 meeting 2.1 Review of action taken by the ANC and the Council on the report of MIDANPIRG/9 2.2 Review status of MIDANPIRG/9 Conclusions and Decision
A, C, D and E	Agenda Item 3: Global, inter and intra-regional activities 3.1 Outcome of and follow-up on the DGCA Conference (DGCA/06) 3.2 Outcome of and follow-up on ALLPIRG/5 3.3 ICAO Business Plan
D	Agenda Item 4: Procedural/Managerial issues 4.1 Developments in the MID Regional Office 4.2 TOR of PIRGs 4.3 Increasing the efficiency of MIDANPIRG 4.4 Review and update of MIDANPIRG Procedural Handbook
A, C, D and E	Agenda Item 5: Regional Air Navigation Planning and Implementation Issues 5.1 Global Plan and CNS/ATM 5.2 AOP 5.3 ATM/SAR 5.4 AIS/MAP 5.5 CNS 5.6 MET 5.7 Traffic Forecasting
A and D	Agenda Item 6: Air Navigation Safety and Deficiencies
D	Agenda Item 7: Future Work Programme
_	Agenda Item 8: Any other business

7. CONCLUSIONS AND DECISIONS – DEFINITION

7.1   The MIDANPIRG records its actions in the form of Conclusions and Decisions with the following significance:

> a)   **Conclusions** deal with matters that, according to the Group's terms of reference, merit directly the attention of States, or on which further action will be initiated by the Secretary in accordance with established procedures; and

> b)   **Decisions** relate solely to matters dealing with the internal working arrangements of the Group and its Sub-Groups

8. LIST OF CONCLUSIONS AND DECISIONS

DECISION 10/1:   *MIDANPIRG Steering Group (MSG)*

DECISION 10/2:   *REVISED MIDANPIRG ORGANIZATIONAL STRUCTURE*

CONCLUSION 10/3:   *PRESENTATION OF WORKING PAPERS (WPS) TO MIDANPIRG*

DECISION 10/4:   *PAPERLESS MEETINGS*

CONCLUSION 10/5:   *SECONDMENT OF NATIONAL EXPERTS TO THE MID REGIONAL OFFICE*

DECISION 10/6:   *ADOPTION OF MIDANPIRG PROCEDURAL HANDBOOK,
                          THIRD EDITION – APRIL 2007*

CONCLUSION 10/7:   *MID BASIC ANP AND FASID (DOC 9708)*

CONCLUSION 10/8:   *EGNOS STUDIES IN THE MID REGION*

CONCLUSION 10/9:   *REVISED STRATEGY FOR THE IMPLEMENTATION OF GNSS IN THE MID
                          REGION*

CONCLUSION 10/10:   *COORDINATION OF GNSS ACTIVITIES*

DECISION 10/11:   *REVISED TERMS OF REFERENCE AND WORK PROGRAMME FOR
                          the GNSS Task Force*

CONCLUSION 10/12:   *PARTICIPATION IN THE GNSS TF MEETINGS*

CONCLUSION 10/13:   *MID REGION STRATEGY FOR THE IMPLEMENTATION OF THE GLOBAL
                          PLAN INITIATIVES (GPIS)*

CONCLUSION 10/14:   *IMPLEMENTATION OF WORK PROGRAMME IN SUPPORT OF STRATEGIC
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CONCLUSION 10/15:   *MID REGION STRATEGY FOR THE IMPLEMENTATION OF ADS-B*

CONCLUSION 10/16:   *FANS 1/A ACTIVITIES IN THE MID REGION*

CONCLUSION 10/17:   *SURVEY RELATIVE TO THE IMPROPER HANDLING OF FPLS AND
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MIDANPIRG/10
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PART II: REPORT ON AGENDA ITEMS

AGENDA ITEM 1:   ADOPTION OF THE PROVISION AGENDA

PART II: REPORT ON AGENDA ITEMS

REPORT ON AGENDA ITEM 1:   ADOPTION OF THE PROVISIONAL AGENDA

1.1   The meeting was presented with the Provisional Agenda, and was informed that this time the Provisional Agenda was established on the basis of incorporating the latest ICAO Strategic Objectives 2005-2010 and also ICAO Business Planning. The common way of presenting the MIDANPIRG subsidiary bodies reports for review and approval was changed. Instead the presentation of the Provisional Agenda focuses on issues related to different procedural/managerial, technical, implementation issues that require appropriate performance monitoring and action planning.

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

1.3   The Terms of Reference (TOR) of MIDANPIRG are at **Appendix 1A** to the Report on Agenda Item 1.

TERMS OF REFERENCE FOR THE MIDDLE EAST AIR NAVIGATION PLANNING AND IMPLEMENTATION REGIONAL GROUP (MIDANPIRG)

1. **THE TERMS OF REFERENCE OF THE GROUP ARE:**

   a)   continuous and coherent development of the Middle East Regional Air Navigation Plan and other relevant regional documentation in a manner that is harmonized with adjacent regions, consistent with ICAO SARPs and reflecting global requirements;

   b)   facilitating the implementation of air navigation systems and services as identified in the Middle East Regional Air Navigation Plan with due observance to the primacy of air safety and security; and

   c)   identification of and addressing specific deficiencies in the air navigation field.

2. **IN ORDER TO MEET THE TERMS OF REFERENCE THE GROUP SHALL:**

   a)   review, and propose when necessary, the target dates for implementation of facilities, services and procedures to ensure the coordinated development of the Air Navigation System in the Middle East Region**;**

   b)   assist the ICAO Middle East Regional Office in fostering the implementation of the Middle East Regional Air Navigation Plan;

   c)   in line with the Global Aviation Safety Plan (GASP), ensure the conduct of any necessary system performance monitoring, identify specific deficiencies in the Air Navigation field, especially in the context of safety and security, and propose corrective action**;**

   d)   ensure the development and implementation of an action plan by States to resolve identified deficiencies, where necessary;

   e)   promote, support and facilitate the regional implementation of AVSEC provisions;

   f)   develop amendment proposals for the update of the Middle East Regional Air Navigation Plan necessary to satisfy any changes in the requirements, thus removing the need for regular regional air navigation meetings;

   g)   monitor implementation of air navigation facilities and services and where necessary, ensure interregional harmonization, taking due account of cost/benefit analysis, business case development, environmental benefits and financing issues;

h) review and monitor human resources planning and training issues and ensure that the human resources development capabilities in the region are compatible with the Middle East Regional Air Navigation Plan;

i) review the Statement of Basic Operational Requirements and Planning Criteria and recommend to the Air Navigation Commission such changes to them as may be required in the light of developments;

j) invite financial institutions, as required, on a consultative basis in the planning process;

k) ensure close cooperation with relevant organizations and State grouping to optimize the use of available expertise and resources;

l) conduct the above activities in the most efficient manner possible with a minimum of formality and documentation and call meetings of the MIDANPIRG, through the Secretary and the Chairperson, when it is necessary to do so; and

m) invite senior officials of the State, as required, to seek the endorsement of regional air navigation plans, expeditious implementation of air navigation systems elements and the resolution of air navigation deficiencies.

AGENDA ITEM 2:   **FOLLOW-UP ON THE OUTCOME OF MIDANPIRG/9 MEETING**

REPORT ON AGENDA ITEM 2:   FOLLOW-UP ON THE OUTCOME OF MIDANPIRG/9 MEETING

2.1   **REVIEW OF ACTION TAKEN BY THE ANC AND THE COUNCIL**
       ON THE REPORT OF MIDANPIRG/9

2.1.1   The meeting was presented with actions taken by the Air Navigation Commission and the Council on the Report of the Ninth Meeting of the Middle East Air Navigation Planning and Implementation Regional Group (MIDANPIRG/9) held in Cairo, Egypt, from 11 to 15 April 2005. The meeting noted the specific actions taken by the ANC, the Council and Secretariat on Conclusions and Decisions of the meeting.

2.1.2   The meeting noted that in accordance with the revised practice, PIRG reports will not be presented to the Council unless the Commission deems it necessary for the Council to take action on any of the Conclusions of the report

2.2   **REVIEW STATUS OF MIDANPIRG/9 CONCLUSIONS AND DECISIONS**

2.2.1   At each MIDANPIRG meeting, an update on the status of the Conclusions and Decisions emanating from the previous MIDANPIRG meeting is carried out, highlighting follow-up actions taken by concerned parties.

2.2.2   The attention of the meeting was drawn to the outcome of the Third MIDANPIRG Member States (MMS/3) meeting held in Jeddah, from 4 to 6 September 2006. It was highlighted in particular that the MMS/3 had raised concern about the important number of MIDANPIRG Conclusions/Decisions and was of view that review of these Conclusions/Decisions consumes a lot of time. Accordingly, the meeting agreed that each MIDANPIRG subsidiary body should review the MIDANPIRG Conclusions/Decisions related to its Terms of Reference (TOR) and decide whether to maintain, remove or replace these Conclusions/Decisions with more up-to-date ones.

2.2.3   The meeting noted that the summary of discussion of the MMS/3 meeting is available on the ICAOMID Website: www.icao.int/mid.

2.2.4   The meeting noted with appreciation that, a new working methodology, started with the 8th meeting of the ATM/SAR/AIS Sub-Group held in Muscat, Oman, 20-23 November 2006, in which the follow-up action plan had become part of each meeting of MIDANPIRG and its subsidiary bodies.

2.2.5   Based on the above, the meeting noted the status of MIDANPIRG/9 Conclusions and Decisions and the follow up actions taken as at **Appendix 2A** to the Report on Agenda Item 2 and agreed to review these Conclusions and Decisions under the appropriate Agenda Items, during which a final decision regarding their status would be taken.

MIDANPIRG/10
Appendix 2A to the Report on Agenda Item 2

FOLLOW-UP ACTION ON MIDANPIRG/9 CONCLUSIONS/DECISIONS

CONCLUSIONS AND DECISIONS	FOLLOW-UP	REMARKS
DECISION 9/1: REVISED STATEMENT OF BORPC FOR REGIONAL AIR NAVIGATION PLANNING AND IMPLEMENTATION That, the revised Statement of BORPC for the regional air navigation planning and implementation be incorporated into the MID Basic Air Navigation Plan (ANP).	Actioned	
CONCLUSION 9/2: MANDATORY IMPLEMENTATION OF CERTIFICATION OF INTERNATIONAL AERODROMES That, MID States: a) having slow rate of progress or have not yet started the implementation of certification of aerodromes be urged to do so; and to provide information on their implementation plans for Certification of Aerodromes and actions already taken before 12 May 2005; b) be encouraged to exchange information and experience in implementing certification of aerodromes in the MID region and worldwide; and c) may seek assistance to implement their safety programmes to benefit from the ICAO Technical Cooperation Bureaux Programme if required	Ongoing	Replaced and superseded by MIDANPIRG/10 Conc. 10/19

CONCLUSIONS AND DECISIONS	FOLLOW-UP	REMARKS

CONCLUSION 9/3: REDUCTION OF BIRD STRIKE HAZARDS TO AIRCRAFT OPERATIONS ON OR IN THE VICINITY OF MID AIRPORTS
 	
That,
 	
  a) an integrated approach be developed by State authorities to control Birds Hazards at airports; and
 	
  b) operating agencies be urged to advise concerned States of bird strikes occurring or noticed on any of flight phases (especially in departure from airports).
	Ongoing	To be actioned by States
		
		Action by Operating Agencies

~~**DECISION 9/4:** CONDUCT A SURVEY ON THE READINESS OF MID AERODROMES TO ACCOMMODATE NEW LARGER AEROPLANES~~
 	
~~That,~~
 	
  ~~a) A questionnaire be developed and circulated to all MID States and IATA, on the readiness of MID States accommodation of NLA operations at their existing aerodromes, as contained in Appendix 5B to the report on Agenda Item 5, and~~
 	
  ~~b) Available responses to the questionnaire be analysed by next AOP SG/5 meeting.~~
	Actioned	

CONCLUSION 9/5: CONTROL OF OBSTACLES AT AND AROUND AERODROMES
 	
That, MID States be urged to:
 	
  a) comply with ICAO Annex 14 and associated documents (relevant Annexes, PANS-OPS, Guidance Manuals,…etc) governing the control of obstacles at and around aerodromes;
 	
  b) apprise relevant national authorities of the importance of coordinating with CAAs/Airport Operators, the control of construction heights at and around airports for safe operations of aircraft as per ICAO specifications and national regulations; and
 	
  c) extend every national efforts to develop necessary measures including legislations to expedite the implementation of Annex 14 provisions and other related ICAO specifications.
	Ongoing	To be actioned by States

CONCLUSIONS AND DECISIONS	FOLLOW-UP	REMARKS
CONCLUSION 9/6: **RNAV/RNP IMPLEMENTATION STRATEGY FOR THE MID REGION** That, the Phase 2 implementation strategy for the RNAV/RNP implementation in the MID Region be as follows: a) where feasible, the MID Region will consider the establishment of RNAV/RNP areas instead of RNP/RNAV routes with a view to make maximum flexible use of airspace; b) the lower limit of the RNAV/RNP areas will be progressively reduced from FL285 to FL195, where feasible, taking into account VHF coverage capability and its incidence on the agreed target level of safety; c) unidirectional routes will be established, if practicable, in lieu of the present bi-directional routing network with a view to introduce parallel/flexible routes in an B-RNAV environment; d) plan for a smooth transition towards satellite-based air navigation taking into consideration the requirements of the Global CNS/ATM Implementation Plan; and e) the military authorities be involved in the planning process.	Ongoing	

CONCLUSIONS AND DECISIONS	FOLLOW-UP	REMARKS
CONCLUSION 9/7: **IMPLEMENTATION OF T-RNAV** That, taking into account the fact that regulatory criteria, along with guidance on procedure and airspace design, ATC training material and information material for various categories of operational staff has been issued in the European Region: a) MID States are encouraged to introduce airworthiness and operational approval criteria equivalent to JAA TGL-10 in order that MID-based operators can benefit from T-RNAV procedures currently being implemented in Europe; b) MID Regional Supplementary Procedures be updated to encompass provisions for introduction of T-RNAV. This provision be framed in such a manner that States may proceed with implementation at a time and manner suited to their prevailing requirements; c) MID States intending to implement T-RNAV provide prior notice through an Aeronautical Information Circular setting out the aircraft and operational approval criteria, RNAV procedure design principles and ATC operational procedures; and d) operators be consulted and given the longest possible lead time when T-RNAV is to be implemented.	Ongoing	New developments related to RNP/RNAV and PBN To be reviewed by RVSM/PBN TF/1 Meeting

CONCLUSIONS AND DECISIONS	FOLLOW-UP	REMARKS
CONCLUSION 9/8: IMPLEMENTATION OF THE ATS SAFETY MANAGEMENT PROGRAMMES IN THE MID REGION That, a) in accordance with the provisions of Annex 11(Chapter 2 paragraph 2.26), States shall implement systematic and appropriate ATS safety management programme (SMS) with a view to ensure that: i) the established level of safety applicable to the provision of ATS within an airspace or at an aerodrome is met; and ii) safety-related enhancements be implemented whenever necessary; b) with a view to ensure that the activities necessary for the implementation of safety management programmes be carried out in a timely manner, adequate budgetary provisions be made; c) sustained cooperation and co-ordination with adjacent States/service providers be made in the process; and d) States explore ways and means of establishing a mechanism for setting up the standards, monitoring requirements and criteria for the regional implementation of ATS safety management programmes.	Ongoing	Replaced and superseded by MIDANPIRG/10 Conclusion 10/81
CONCLUSION 9/9: MONITORING REQUIREMENTS IN RESPECT OF B-RNAV That, a) taking into account, conclusive reports indicating that the region has gained enough confidence on the reliability/maturity of the system established for the safe implementation and post-implementation of B-RNAV in the MID region, the monitoring mechanism as established by MECMA be discontinued; and b) the discontinuation of the monitoring mechanism for RNP5/B-RNAV does not absolve States of their responsibilities in ensuring that, within the framework of safety management programmes, appropriate measures are taken for ensuring that:	Actioned	

CONCLUSIONS AND DECISIONS	FOLLOW-UP	REMARKS
i) the agreed level of safety is met and continues to be met; and ii) prompt remedial actions be taken in case any adverse trend is noted.		
CONCLUSION 9/10: ESTABLISHMENT OF RNAV SIDS AND STARS IN THE MID REGION That, in accordance with the requirements of the MID CNS/ATM implementation plan, States develop RNAV SIDs and STARs.	Ongoing	
CONCLUSION 9/11: REQUIREMENTS FOR MONITORING That, a) operators having met the monitoring requirements as tabulated in Appendix 5F to the report on Agenda Item 5 for a given fleet/type of aircraft will be accepted as having satisfied the requirements for the Middle East Region. In case of Middle East operators, documentation for monitoring shall be provided to the MID Regional Monitoring Agency; b) for non-MID operators, about whose approval status doubt exist, documentation for monitoring shall be provided to the Regional Monitoring Agency; and c) the Regional Monitoring Agency will update the table in the light of data and experience gained in other Regions.	Actioned	

CONCLUSIONS AND DECISIONS	FOLLOW-UP	REMARKS
~~CONCLUSION 9/12: MONITORING OF SAFETY IN THE MID REGION~~ ~~That,~~ a) ~~having considered the requirements set out in Annex 11, Doc 9574, Doc 9613, the draft SMS manual for ATS and the draft RMA Handbook, concerning various forms of monitoring, namely:~~ i) ~~system performance monitoring is necessary to ensure that the implementation and continued operation of RVSM meet the safety objectives;~~ ii) ~~navigation performance monitoring is required to ensure safety objectives are met in the implementation and continued operation of RNP/RNAV; and~~ iii) ~~States are required to carry out continuous monitoring and regular assessment of the safety level achieved in conjunction with implementation of ATS safety management (SMS).~~ b) ~~noting ICAO policy that States be assisted in meeting their responsibilities based, on or related to, monitoring and assessment by a regional monitoring agency (RMA), whose tasking, inter alia, shall include collection and analysis and compilation of data necessary for identification of hazards and trends in safety; and~~ c) ~~safety-related requirements be addressed through establishment of an RMA with personnel possessing the technical skills and experience required to carry out the main functions summarized under items i) through iii) above.~~	Actioned	

CONCLUSIONS AND DECISIONS	FOLLOW-UP	REMARKS
~~CONCLUSION 9/13:~~ ~~MID REGIONAL MONITORING AGENCY (MID RMA) RE-ESTABLISHMENT~~ ~~That, taking into account the urgency of the matter and with the firm commitment of all MID Region States:~~ ~~a) the MID Regional Monitoring Agency (MID RMA) be re-established for carrying out RVSM and eventually, RNP and RNAV related duties and responsibilities in the MID Region;~~ ~~b) the MID RMA is to be operational as soon as possible; and~~ ~~c) the Action Plan for the setting up of the MID RMA, the revised duties and responsibilities and guiding principles are at Appendices 5C, 5D, and 5E, to the Report on Agenda Item 5.~~ ~~Note: Appendices in item c) above are not yet finalized. They are subject to further changes, pending the agreement on funding mechanism, modalities and organizational structure.~~	Actioned	
~~CONCLUSION 9/14:~~ ~~PROVISION OF UP-TO-DATE INFORMATION TO THE MID RVSM APPROVALS REGISTRY~~ ~~That,~~ ~~a) considering the requirement for a correct and up-to-date registry of RVSM approvals of operators and aircraft in the on-going safety efforts related to RVSM operations within the Middle East Region; States are reminded to provide to the MID RMA* regular updates to the regional database of operator and aircraft approvals; and~~ ~~b) Until the MID RMA* is established and becomes functional, States forward to the ICAO Regional Office any relevant information likely to have a negative impact on the safety of air navigation in the Region.~~ ~~* MID RMA to be established~~	Ongoing	Replaced and superseded by MIDANPIRG/10 Conclusions 10/35 and 10/40

CONCLUSIONS AND DECISIONS	FOLLOW-UP	REMARKS
~~CONCLUSION 9/15:~~ ~~EXCLUSION FROM MID RVSM AIRSPACE OF AIRCRAFT AND OPERATORS NOT REGISTERED AS BEING RVSM APPROVED~~ ~~That, considering the on-going requirement for safety assurance related to RVSM operations within the Middle East Region:~~ ~~a)~~ ~~operators for whom positive approval data has not been received, be excluded from MID RVSM airspace with immediate effect until approval status, supported by data from an approved monitoring service provider, has been received;~~ ~~b)~~ ~~MID RVSM provider States, States of Registry and adjacent RMAs be informed about the exclusion; and~~ ~~c)~~ ~~Taking into account the economic impact on RVSM approved flights from adjacent FIRs which are being systematically excluded from the RVSM airspace as a result of non receipt or improper filing of flight plans, concerned FIRs/Centres be invited to consider the matter on a bilateral basis.~~	Actioned Ongoing	Replaced and superseded by MIDANPIRG/10 Conclusion 10/37
~~CONCLUSION 9/16:~~ ~~REGION-WIDE TRAFFIC SAMPLE AS BASIS FOR FOLLOW-UP AGAINST INCORRECT FLIGHT PLAN FILING~~ ~~That, considering the need to identify operators who are filing flight plans incorrectly indicating RVSM approval status, traffic samples from all MID RVSM States will be required as the basis for a survey and regulatory action against fraudulent filing of flight plans.~~	Ongoing	Replaced and superseded by MIDANPIRG/10 Conclusion 10/17
~~CONCLUSION 9/17:~~ ~~METHODOLOGY TO ERADICATE MULTIPLE REPETITIONS AND NON-RECEIPT OF ATS MESSAGES~~ ~~That, the MID Region adopts the working methodology as described in Appendix 5G to the report on Agenda Item 5 in order to identify and remedy the inconsistencies related to the multiple repetitions and non-receipt of ATS messages.~~	Ongoing	Replaced and superseded by MIDANPIRG/10 Conclusion 10/17

CONCLUSIONS AND DECISIONS	FOLLOW-UP	REMARKS
~~CONCLUSION 9/18: ESTABLISHMENT OF AN INTEGRATED INITIAL FPL PROCESSING SYSTEM (IFPS) IN THE MID REGION~~ ~~That,~~ ~~a) the concept of establishment of an Integrated Initial Flight Plan Processing System (IFPS) in the MID Region is supported by MID States; and~~ ~~b) a feasibility study for the Implementation of an IFPS in the MID Region be carried out.~~ ~~Note: this study will be led by Bahrain with the cooperation of all concerned parties, in coordination with ICAO.~~	Ongoing	Replaced and superseded by MIDANPIRG/10 Conclusion 10/18
~~CONCLUSION 9/19: REPORTING OF ATS INCIDENTS~~ ~~That,~~ ~~a) reporting of incidents/accidents will be in accordance with provisions of Annex 13-Aircraft Accident and Incident Investigation and Procedures for Air Navigation Services-Air Traffic Management (PANS-ATM, Doc 4444); and~~ ~~b) States share information on ATM accidents and incidents.~~	Ongoing	Replaced and superseded by MIDANPIRG/10 Conclusion 10/80

CONCLUSIONS AND DECISIONS	FOLLOW-UP	REMARKS
DECISION 9/20: DISCONTINUATION OF THE ATS INCIDENT ANALYSIS TASK FORCE That, in view of the lack of support and enthusiasm from States to provide relevant and comprehensive data on ATS Incidents in the region: a) MIDANPIRG dissolves the ATS Incident Analysis Task Force; b) the ATM/SAR/AIS Sub-Group be requested to follow-up on the ATS incident trends in the region and its impact on safety of air navigation; and c) IATA continues to update the ATM/SAR/AIS Sub-Group on ATS incident trends noted within the framework of its safety enhancement mechanisms.	Actioned	
DECISION 9/21: ASSIGNMENT OF SSR CODES IN THE MID REGION That, a) the updated list of SSR codes assignment system for domestic and transit purposes for the MID Region indicated at Appendix 5H to the report on Agenda Item 5 replaces the existing requirements indicated in the MID FASID Document; and b) taking into account acute shortage of SSR codes being experienced in adjacent Participating Areas (PAs) and the sustained traffic growth in the MID Region, the ATM/SAR/AIS Sub-Group reviews, as appropriate, the allocation of SSR codes in the region in order to ensure that the requirements of all FIRs/ACCs continue to be met.	Ongoing	Replaced and superseded by MIDANPIRG/10 Decision 10/44

CONCLUSIONS AND DECISIONS	FOLLOW-UP	REMARKS
CONCLUSION 9/22: AIRWORTHINESS AND OPERATIONAL APPROVAL FOR B-RNAV, RNP 10 AND RVSM OPERATIONS IN THE MID REGION That, with a view to facilitate and harmonize the airworthiness and operational approvals procedures for BRNAV, RNP 10 and RVSM operations in the MID Region: a) the European Joint Airworthiness Authority (JAA) Temporary guidance Leaflet No.2, guidance material on airworthiness approval and operational criteria for the use of navigation systems in the European airspace designated for Basic RNAV operations be endorsed as the official guidance material for airworthiness and operational approvals for B-RNAV operations in the MID Region; b) the guidance material developed by the United States, Federal Aviation Administration (FAA) Order No.8400.12 be used by States for the development of RNP 10 operational approval process; and c) the guidance material contained in both FAA Interim Guidance 91-RVSM and JAA Temporary Guidance Leaflet TGL No. 6 as amended for issuing Airworthiness and Operational Approval for aircraft and operators intending to operate within a designed RVSM airspace be adopted.	Actioned	
CONCLUSION 9/23: DATA FOR SUSTAINED SAFETY ASSURANCE OF RNP AND RVSM WITHIN THE MID REGION That, considering the on-going requirement for safety assurance related to RVSM and RNP operations within the Middle East Region, a) all States report data and incidents necessary for performing collision risk calculations required for sustained safe RVSM operations to the MID RMA*. The data will include, but not necessarily be limited to: i) assigned altitude deviations of 300 ft or more (monthly); ii) total number of IFR movements (monthly);	Ongoing	Replaced and superseded by MIDANPIRG/10 Conclusions 10/35 and 10/40

CONCLUSIONS AND DECISIONS	FOLLOW-UP	REMARKS
iii) ~~average time per movement spent in the level band FL290 - FL410;~~ iv) ~~ATC/ATC coordination failures (monthly); and~~ v) ~~traffic data (as requested by the MID RMA)*;~~ b) ~~monitoring States report navigational errors and traffic data in accordance with the Letter of Agreement concerning monitoring associated with RNP;~~ c) ~~air operators maintain procedures for reporting of turbulence;~~ d) ~~States report data on approval of operators and aircraft for RVSM operations (monthly); and~~ e) ~~the MID RMA* ensures that further processing and evaluation of this data within its Terms of Reference and identifies or develops methodologies for assessing risk associated with operational procedures prevailing within the MID Region.~~ ~~* MID RMA to be established~~ ~~Note: Until the MID RMA is established, States forward to the ICAO MID Regional Office any relevant information likely to have a negative impact on the safe operations of RNP and RVSM in the region.~~		
~~**DECISION 9/24:**~~ ~~**STATUS OF IMPLEMENTATION OF ICAO REQUIREMENTS IN THE SEARCH AND RESCUE FIELDS**~~ ~~That,~~ a) ~~the Secretariat, in consultation with concerned States, regularly updates the status of implementation of Search and Rescue provisions as indicated in the MID Basic Air Navigation Plan; and~~ b) ~~the updated list indicating the status of implementation of SAR provisions be indicated in the MID FASID Document.~~	Actioned	

CONCLUSIONS AND DECISIONS	FOLLOW-UP	REMARKS
CONCLUSION 9/25: **ASSIGNMENT OF THE RESPONSIBILITY FOR THE PRODUCTION OF THE WAC SHEETS: 2548, 2563 AND 2670** That, a) the responsibility for the production of the World Aeronautical Chart ─ ICAO 1:1000 000: i) WAC sheet 2548 is assigned to Iran; ii) WAC sheets 2563 and 2670 are assigned to Oman; and b) MID FASID Table AIS-7 be updated consequently.	Actioned Ongoing	To be reflected in the MID FASID after its official publication
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: 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.	Ongoing	To be actioned by States

CONCLUSIONS AND DECISIONS	FOLLOW-UP	REMARKS
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 NOTAN and pre-flight information system to be implemented is modular, expandable and based on data exchange concept to support further developments and applications.	Ongoing	To be actioned by States
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.	Ongoing	To be actioned by States
~~**CONCLUSION 9/29:** **IMPLEMENTATION OF QUALITY SYSTEM WITHIN MID STATES' AISS**~~ ~~That, with a view to obtain information from MID States regarding the status of implementation of quality system within their Aeronautical Information Service and/or the difficulties they face to implement the required system:~~ ~~a) ICAO MID Regional Office carries out a survey on the implementation of quality system; and~~ ~~b) the results of this survey should serve as a basis for the development of a Quality Management Plan for the MID Region to guide and assist States in the implementation of a Quality Management System in conformity with the ISO 9000 series of standards.~~	Actioned	

CONCLUSIONS AND DECISIONS	FOLLOW-UP	REMARKS
~~CONCLUSION 9/30: AIS/MAP TIMELINES FOR THE MID REGION~~ ~~That, as a support to the global ATM operational concept, the AIS/MAP timelines at Appendix 5J to the report on Agenda Item 5, be used in the MID Region as an internal planning tool for the implementation of specific AIS/MAP related subjects.~~	Actioned	Replaced and superseded by MIDANPIRG/10 Conclusion 10/61
~~DECISION 9/31: AIS/MAP TRAINING ACTION PLAN FOR THE MID REGION~~ ~~That, with a view to assist and support the activities of the CNS/ATM Human Resources Planning and Training Task Force, the AIS/MAP Task Force should:~~ ~~a) identify the AIS/MAP training resources already available in the MID Region; and~~ ~~b) propose an AIS/MAP training action plan for the MID Region~~	Ongoing	Covered by the TOR of the AIS/MAP TF.
~~DECISION 9/32: REVISED TERMS OF REFERENCE AND WORK PROGRAMME OF THE AIS/MAP TASK FORCE~~ ~~That, revised Terms of Reference and Work Programme of the AIS/MAP Task Force be adopted as shown at Appendix 5K to the report on Agenda Item 5.~~	Actioned	Replaced and superseded by MIDANPIRG/10 Conclusion 10/62

CONCLUSIONS AND DECISIONS	FOLLOW-UP	REMARKS
~~CONCLUSION 9/33:~~ ~~FURTHER TEST ACTIVITIES AND STUDIES OF EGNOS IN THE MID REGION~~ ~~That,~~ a) ~~EGNOS test bed based on the ENAV experience during the MIDAN activities be continued until adequate data representative of the region be available;~~ b) ~~the feasibility of using additional Ranging Integrity Monitoring Systems (RIMS) for achieving APV1 and APV2 requirements and a proposal for time scale be evaluated by Galileo Joint Undertaking;~~ c) ~~European Space Agency (ESA), defines the EGNOS architecture scenarios on the number/location of RIMS required for achieving APV 1 and APV 2 requirements throughout the MID Region in order to support the regional cost-benefit analysis (CBA).~~	Ongoing	Replaced and superseded by MIDANPIRG/10 Conclusion 10/8
~~CONCLUSION 9/34:~~ ~~WAAS DEMONSTRATION TEST BEDS~~ ~~That, the States of the MID Region willing to participate in the study of the WAAS demonstration test beds provide facilities for the reference stations when required.~~	Ongoing	Replaced and superseded by MIDANPIRG/10 Conclusion 10/10
CONCLUSION 9/35: COST-BENEFIT CONSIDERATION FOR AUGMENTATION SYSTEMS That, a) no commitment is to be made on the augmentation systems until all other options and implementation trends with associated cost benefit analyses are fully considered; and b) implementation strategy to be considered with user requirements, implementation trends/options endorsed in adjacent regions in accordance with the operational concept and planning principles of the global air navigation plan for CNS/ATM systems.	Ongoing	

CONCLUSIONS AND DECISIONS	FOLLOW-UP	REMARKS
~~CONCLUSION 9/36: REVISED STRATEGY OF THE GNSS IMPLEMENTATION IN THE MID REGION~~ ~~That, the revised strategy for the implementation of GNSS in the Middle East Region be adopted as indicated in Appendix 5N to the report on Agenda Item 5.~~	Ongoing	Replaced and superseded by MIDANPIRG/10 Conclusion 10/9
~~DECISION 9/37: IMPROVEMENT OF THE WORK OF THE ATN PLANNING GROUP~~ ~~That, the ATN Planning Group be invited to establish a working methodology and to appoint a Reportuer in order to have the work on the development of the MID Regional ATN Planning Document fully coordinated and followed up.~~	~~Actioned~~	
CONCLUSION 9/38: USE OF DIGITAL HIGH-SPEED CIRCUITS BETWEEN MAIN CENTRES That, the main Centres of the MID AFTN be requested to use digital high-speed links in their circuits with other main Centres in order to eliminate deficiencies related to the low speed circuits and to facilitate the migration to the ATN in the MID Region.	Ongoing	
CONCLUSION 9/39: HARMONIZATION BETWEEN VSAT NETWORKS That, the interconnectivity of the MID VSAT be done on the basis of hub-less network using a sole satellite in order to constitute an integrated and seamless network, taking into account the harmonization in the Region and between MID Region and other Regions.	Ongoing	

CONCLUSIONS AND DECISIONS	FOLLOW-UP	REMARKS
~~**CONCLUSION 9/40: ORGANIZATION OF THE ATN SEMINAR IN THE MID REGION**~~ ~~That,~~ ~~a) ICAO MID Regional Office makes the required arrangements to organize an ATN Seminar/ Workshop in year 2006 to assist States for the initial implementation of AMHS in the Region;~~ ~~b) MID States cooperate in assisting ICAO MID Regional Office in hosting this important event; and~~ ~~c) MID States take this opportunity to send sufficient participants to this seminar/workshop in order to constitute the nucleus of the core team charged of the ATN implementation in the Region.~~	Ongoing	Replaced and superseded by MIDANPIRG 10 Conclusion 10/63
~~**DECISION 9/41: MID REGIONAL CONTINGENCY PLAN FOR ATM/CNS**~~ ~~That,~~ ~~a) the relevant subsidiary bodies of MIDANPIRG revise their Terms of Reference (TOR) to include the development of regional guidance material leading to a MID Regional Contingency Plan for ATM including supporting CNS elements;~~ ~~b) the MID Regional Contingency Plan be updated by the relevant MIDANPIRG subsidiary bodies on a regular basis.~~	Ongoing	Replaced and superseded by MIDANPIRG/10 Conclusion 10/45
CONCLUSION 9/42: IMPLEMENTATION OF D-ATIS AND PDC IN THE MID REGION That, MID States not having done so, and where needs justify, are urged to implement in their international airports the dissemination of the ATIS and Pre-Departure Clearance via data link (D-ATIS and PDC).	Ongoing	To be actioned by States

CONCLUSIONS AND DECISIONS	FOLLOW-UP	REMARKS
~~CONCLUSION 9/43: ICAO STRATEGY WITH REGARD TO FUTURE ITU WORLD RADIO COMMUNICATION CONFERENCES~~ ~~That,~~ ~~a) the CNS/MET SG be tasked to follow up the developments of ICAO position regarding future WRC conferences and their preparatory meetings, and highlighting that position to the MID States;~~ ~~b) MID States Civil Aviation Authorities use the ICAO coordinated aeronautical position regarding the future WRC conferences in their national discussions with the radio regulatory authorities when developing proposals for submission by their respective Administrations to ITU conferences;~~ ~~c) MID States Civil Aviation Authorities, request their appropriate Ministries to assign aviation experts to participate in their national delegations to the future ITU conferences in order to brief the delegations at those conferences with ICAO position and to support that position; and~~ ~~d) MID States Civil Aviation Authorities be urged, as a matter of a priority to explain the ICAO concerns to their respective Ministerial Authorities including the League of Arab States and the Arab Civil Aviation Commission, in order to support the ICAO and IATA concerns with regard to protection of aeronautical frequencies at WRC-2007.~~	Ongoing	Replaced and superseded by MIDANPIRG 10 Conclusions 10/66 and 10/67

CONCLUSIONS AND DECISIONS	FOLLOW-UP	REMARKS
CONCLUSION 9/44: ~~CONVENING OF THE CNS/ATM HR P&T TASK FORCE~~ ~~That,~~ a) ~~MID States are urged to attend the CNS/ATM Human Resources Planning and Training Task Force meetings;~~ b) ~~the CNS/ATM HR P&T TF takes into consideration the outcome of the SIP carried in the MID Region during the period November/December 2004; and~~ c) ~~Terms of Reference and Work Programme of the Task Force are revised as at Appendix 5Q to the report on Agenda Item 5.~~	Actioned	
CONCLUSION 9/45: ~~UPGRADE OF THE KUWAIT-KARACHI CIRCUIT~~ ~~That, based on the upgrade of the Kuwait-Karachi circuit to 2.4K, MID COM centres are requested to route via Kuwait centre all traffic to Karachi (OP), Kabul (OA) and other destinations in ASIA PAC Region as appropriate.~~	Actioned	
CONCLUSION 9/46: ~~ADDITION OF THE BAGHDAD-KUWAIT CIRCUIT TO THE MID RATIONALIZED AFTN PLAN~~ ~~That, the MID Rationalized AFTN Plan be amended to include the new circuit between Baghdad and Kuwait as a tributary circuit.~~	Actioned	
CONCLUSION 9/47: ~~ADDITION OF THE CAIRO-TRIPOLI CIRCUIT TO THE MID RATIONALIZED AFTN PLAN~~ ~~That, the MID Rationalized AFTN Plan be amended to include the existing circuit between Cairo and Tripoli as a tributary circuit.~~	Actioned	

CONCLUSIONS AND DECISIONS	FOLLOW-UP	REMARKS
CONCLUSION 9/48: **PARTICIPATION OF THE MID COM CENTRES IN THE CIDIN MANAGEMENT CENTRE (CMC) OF THE EUR REGION** That, all MID COM Centres participate as external COM canters in the operation of CIDIN Management Centre (CMC) in the EUR Region and designate a Cooperating CIDIN Centre (CCC) operator for coordination process with EUROCONTROL.	Ongoing	
DECISION 9/49: **ESTABLISHMENT OF AN AD-HOC ACTION GROUP FOR THE SUPPORT OF AERONAUTICAL FREQUENCY BANDS** That, an Ad-Hoc Group be established and aimed at raising the awareness of the National Telecommunication Regulatory Authorities, Airlines and Civil Aviation Authorities on the aviation spectrum use and requirements to ensure Air navigation Safety in the MID Region.	Ongoing	Reply from MID States awaited
~~**DECISION 9/50:**~~ ~~**REVISED TERMS OF REFERENCE AND WORK PROGRAMME FOR THE AFS/ATN TASK FORCE**~~ ~~That, the MIDANPIRG meeting approves the revised Terms of Reference and Work programme of the AFS/ATN Task Force as presented at Appendix 5R to the Report on Agenda Item 5.~~	Actioned	Replaced and superseded by MIDANPIRG/10 Conclusion 10/70
DECISION 9/51: **MID REGIONAL AFTN CONTINGENCY PLAN** That, the MID Regional AFTN Contingency Plan be renamed MID Regional AFS Contingency Plan taking into account the need to address the continuity of the services of the ATS Direct Speech circuits to ensure the safety of Air Navigation.	Ongoing	

CONCLUSIONS AND DECISIONS	FOLLOW-UP	REMARKS

CONCLUSION 9/52:   PROJECT FOR MID VSAT IMPLEMENTATION
 	
That, in order to implement the MID VSAT Project in the MID Region, concerned States:
 	
   a)   be encouraged to seek assistance through ICAO Technical Cooperation Bureau (TCB); and
 	
   b)   carry out the implementation of the MID VSAT Equipment in an orderly and coordinated manner.
	Ongoing	

~~**CONCLUSION 9/53: SADIS INTERNET –BASED FTP SERVICE**~~ ~~That, in parallel with the satellite broadcast, the SADIS Provider State be invited, as of 1 July 2005, to make WAFS forecasts and OPMET data available, as a primary component of the SADIS service, in accordance with the SADIS User Guide, through the Internet-based FTP service.~~	Actioned	

DECISION 9/54:   IMPLEMENTATION OF SIGMET REQUIREMENTS IN THE MID REGION
 	
That, the ICAO MID Regional Office:
 	
   a)   publish the MID SIGMET guide;
 	
   b)   request the MID States to review and monitor their procedures to ensure that SIGMET messages are issued as required; and
 	
   c)   invite the Toulouse VAAC to perform tests in the MID Region concerning SIGMETs for volcanic ash.
	Ongoing	

~~**CONCLUSION 9/55: NON-IMPLEMENTATION OF ANNEX 3 PROVISIONS FOR METAR/SPECI AND TAF**~~ ~~That, the ICAO MID Regional Office, invite the MID States to review their procedures concerning the format for METAR/SPECI and TAF in view of ensuring that they are in accordance with Annex 3, MID ANP, and the new edition of the ROBEX Handbook.~~	Actioned	

CONCLUSIONS AND DECISIONS	FOLLOW-UP	REMARKS
DECISION 9/56: **REGIONAL PLANNING FOR MIGRATION TO BUFR CODED OPMET MESSAGES IN THE MID REGION** That, the CNS/MET SG develop a transition plan for migration to Binary Universal Form for the Representation of meteorological data (BUFR) in the MID Region taking due account of the planning in adjacent ICAO Regions.	Ongoing	
~~**CONCLUSION 9/57:** **INVITATION TO WMO FOR REGULAR PARTICIPATION IN MEETINGS OF THE MIDANPIRG CNS/MET SUB GROUP**~~ ~~That, ICAO invites WMO to regularly participate in meetings of the MIDANPIRG CNS/MET Subgroup.~~	Actioned	
~~**CONCLUSION 9/58:** **TRAFFIC FORECASTING REQUIREMENTS IN THE MID REGION**~~ ~~That,~~ ~~a) Membership of the Traffic Forecasting Sub-Group shall include all members of MIDANPIRG and that meetings of the Sub-group shall be open to all MID States;~~ ~~b) the Secretariat coordinates with other international and regional organizations; including IATA, with a view to establishing a MID database to support regional traffic forecasting activities;~~ ~~c) MID States continue their support to the TF SG by ensuring that their respective nominees to the membership of the Sub-group include, as much as possible, forecasting experts, air traffic management experts and, when required, financial analysts to carry out business case and cost/benefit analyses;~~ ~~d) MIDANPIRG and its subsidiary bodies clearly identify the data they require for the efficient development and implementation of regional air navigation plans;~~ ~~e) MID States continue to avail required FIR and other data to the Sub-group in the format agreed by the TFSG to facilitate the development of forecasts and other air navigation planning and implementation parameters; and~~	Actioned Ongoing Ongoing Ongoing Ongoing	Replaced and superseded by MIDANPIRG/10

CONCLUSIONS AND DECISIONS	FOLLOW-UP	REMARKS
f) ~~the Secretariat continue organizing workshops, seminars and other training programmes with a view to upgrading regional traffic forecasting capabilities.~~	Ongoing	
~~**CONCLUSION 9/59:** **MID BASIC ANP AND FASID (DOC 9708)**~~ ~~That, ICAO gives priority to the publication of the MID BASIC ANP and FASID in English and Arabic versions.~~	Ongoing	Document in final phase of publication Replaced and superseded by MIDANPIRG/10 Conclusion 10/7
~~**CONCLUSION 9/60:** **AMENDMENT PROPOSAL TO THE MID BASIC ANP AND FASID**~~ ~~That, the ICAO MID Regional Office, on behalf of MIDANPIRG, initiates 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.~~	Ongoing	
CONCLUSION 9/61: **AMENDMENT TO THE FORM USED FOR THE IDENTIFICATION, ASSESSMENT AND REPORTING OF AIR NAVIGATION DEFICIENCIES** That, with a view to analysing the rationale for non-elimination of air navigation deficiencies, ICAO considers the amendment of the uniform methodology for the identification, assessment and reporting of air navigation deficiencies to incorporate the revised form as in Appendix 6A to the report on Agenda Item 6.	Ongoing	Continue using amended Form.

CONCLUSIONS AND DECISIONS	FOLLOW-UP	REMARKS
~~CONCLUSION 9/62:~~ ~~REVIEW OF THE REQUIREMENTS PERTAINING TO ATS ROUTES~~ ~~That, taking into consideration the unlikelihood to implement certain ATS routes in the MID Region:~~ ~~a) IATA reconsiders its requirements for implementation of some ATS routes in the MID Region; and~~ ~~b) the ATM/SAR/AIS Sub-Group takes into account the concerns of States regarding some ATS route requirements which can not be implemented.~~	Actioned	
~~CONCLUSION 9/63:~~ ~~DEVELOPMENT OF A MID REGION'S AIR NAVIGATION~~ ~~DEFICIENCIES DATABASE~~ ~~That, ICAO MID Regional Office:~~ ~~a) develops an air navigation deficiencies database for the MID Region;~~ ~~b) develops a secure process for managing this database on the Internet;~~ ~~c) gives the possibility of controlled on-line introduction of updated information by States for their respective deficiencies; and~~ ~~d) allows other authorized users on-line access to view the information contained in the database.~~	Actioned Ongoing Actioned Actioned	Replaced and superseded by MIDANPIRG/10 Conclusion 10/77

CONCLUSIONS AND DECISIONS	FOLLOW-UP	REMARKS
~~CONCLUSION 9/64: ELIMINATION OF AIR NAVIGATION DEFICIENCIES IN THE MID REGION~~ ~~That,~~ ~~a) States review their respective lists of identified deficiencies and formulate and forward an action plan for rectification of outstanding deficiencies to the ICAO MID Regional Office for review;~~ ~~b) States increase their efforts to overcome the delay in mitigating air navigation deficiencies identified by MIDANPIRG and explore ways and means to eliminate deficiencies by reliable ways of funding;~~ ~~c) States are encouraged to set up an internal group of experts to examine the list of deficiencies and take appropriate actions with a view to recommend to their higher Civil Aviation Authorities solutions for elimination of deficiencies;~~ ~~d) 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);~~ ~~e) States be encouraged to foster the creation of regional and sub-regional cooperation and, wherever feasible, partnership initiatives with other States, users, air navigation service providers, industry and financial institutions to improve the safety of international civil aviation;~~ ~~f) 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;~~ ~~g) ICAO continues to provide assistance to States for the purpose of rectifying deficiencies; and~~ ~~h) when required, States request ICAO assistance through Technical Co-operation Programme and/or Special Implementation Projects (SIP).~~	Ongoing	Replaced and superseded by MIDANPIRG/10 Conc. 10/77

AGENDA ITEM 3: GLOBAL, INTER AND INTRA-REGIONAL ACTIVITIES

REPORT ON AGENDA ITEM 3: GLOBAL, INTER AND INTRA-REGIONAL ACTIVITIES

3.1   **Outcome of and follow-up on the DGCA Conference (DGCA/06**)

3.1.1   The Group noted the progress Report on implementation of the Directors General of Civil Aviation Conference on a Global Strategy for Aviation Safety. The Meeting recalled that the Declaration called for specific actions by States and instructed the MIDANPIRG subsidiary bodies to continue follow-up action on the recommendations of the DGCA Conference.

3.2   **Outcome of and follow-up on ALLPIRG/5**

3.2.1   The Meeting noted the outcome and action taken by the Council of ICAO on the fifth meeting of the ALLPIRG/Advisory Group and that the meeting agreed to a number of conclusions that call for further follow-up actions by MIDANPIRG. It was noted that the Secretariat has already taken the necessary action to amend the work programmes of the Sub-Groups in line with the ALLPIRG Conclusions.

3.3   **ICAO Business Plan**

3.3.1   During a presentation by the Chief of the Planning and Global Coordination Office (PCO), the Group was informed that the goal of implementing the ICAO Business Plan is to attain a result-oriented, performance-based organization and to introduce new working methods by ensuring the efficient and prudent use of limited resources. It was noted that on advice from the Council, all Bureaus and Regional Offices have initiated the development of their own Operational Plans in which critical tasks are broken down into smaller, contributing tasks. Consequent changes to the work and reporting format of MIDANPIRG have been also identified. The ICAO Business Plan, in conjunction with Operational Plans, is aimed at performance-based accountability for all Bureaus and Regional Offices.

AGENDA ITEM 4:   PROCEDURAL/MANAGERIAL ISSUES

REPORT ON AGENDA ITEM 4: **PROCEDURAL/MANAGERIAL ISSUES**

4.1 **Developments in the MID Regional Office**

4.1.1   The meeting was provided with verbal information on the status of latest developments in the ICAO MID Regional Office with regard to the changes of international staff (retirements, new Officers, fulfillment of positions, etc) and performance of the Office for the period of two years from MIDANPIRG/9 in April 2005 to MIDANPIRG/10 in April 2007.

4.2 **TOR of PIRGs**

4.2.1   The meeting noted the ongoing work by the Air Navigation Commission to review the TOR of PIRGs and to align the Work Programme with the Strategic Objectives of ICAO and the Global Air Navigation Plan. It was also noted that the method of reporting to the deliberative bodies of the Organization will be reviewed to ensure efficiency.

4.2.2   In connection with the above, it was recalled that the MMS/3 meeting noted that, in accordance with the new ICAO business planning process, all future work of the PIRGs would have to be justified and based on clearly established performance objectives in support of the ICAO Strategic Objectives. Furthermore, all TOR of PIRGs are being revised in order to ensure that resources were more appropriately directed and that all work, including that of the Secretariat, is in support of the business plan. Accordingly, the MMS/3 agreed that MIDANPIRG subsidiary bodies review their TOR taking into consideration the ICAO Business plan and the requirements for performance monitoring.

4.3 **Increasing the efficiency of MIDANPIRG**

4.3.1   The meeting recalled that ICAO initiated the development of a Business Plan along with performance measures for the Organization. The Business Plan is designed to translate the Strategic Objectives of the Organization into action plans and ensure a link between planned activities, organizational cost and performance assessment.

4.3.2   Taking into consideration, the new regional planning methodologies precipitated by the Global Plan and ICAO Business Planning requirements and with a view to increase the efficiency of MIDANPIRG, the meeting agreed to the following measures recommended by the MMS/3 meeting:

        a)   adjusting MIDANPIRG work with the Global Plan and the ICAO Strategic Objectives;

        b)   replacing MIDANPIRG Member States (MMS) by MIDANPIRG Steering Group (MSG) with TOR as at **Appendix 4A** to the Report on Agenda Item 4;

        c)   splitting the CNS/MET Sub-Group into two separate Sub-Groups, i.e. the CNS Sub-Group and the MET Sub-Group;

        d)   dissolving the AFS/ATN Task Force and include its activities in the terms of reference of the CNS Sub-Group;

e)   merging the RVSM Task Force with the RNP/RNAV Task Force (after the successful and safe implementation of RVSM in the MID Region; the work programme of the RVSM TF has been almost completed);

f)   dissolving the CNS/ATM Human Resources Planning and Training Task Force and include its activities in the TOR of each MIDANPIRG subsidiary body to be part of their agenda;

g)   inclusion of environmental issues in the TOR of the CNS/ATM/IC Sub-Group;

h)   addressing Aviation Security issues at the MIDANPIRG level on ad-hoc basis;

i)   presentation of the Sub-Group meetings reports to MIDANPIRG by the Chairpersons of the Sub-Groups, as appropriate;

j)   limit to a maximum of two cycles the number of terms for which a chairperson of MIDANPIRG and its subsidiary bodies may chair unless otherwise re-elected in which case the new term would be limited to one additional cycle only;

k)   amendment of the MIDANPIRG Procedural Handbook to reflect the changes above;

l)   conducting all MIDANPIRG meetings (including meetings of Sub-Groups, Working Groups, Tasks Forces etc.) in paperless format whereby all meeting documentation, including working papers and reports are made available on the MID Regional Office website for viewing and downloading with the objective to help reduce the cost of printed hard copies;

m)   posting Amendment Proposals to the Air Navigation Plan on the website for access by members and other interested stakeholders; and

n)   the possibility for MIDANPIRG to recommend to MID States to make available, at their expense, seconded personnel to the Regional Office for the purpose of helping in the following up of MIDANPIRG Decisions. Administrative and duty assignment arrangements to be defined in a memorandum of understanding (MOU) between ICAO and the State concerned.

4.3.3   Based on the above, the meeting agreed to the following Decisions and Conclusions:

DECISION 10/1:   *MIDANPIRG Steering Group (MSG)*

That,

a)   *the MIDANPIRG Steering Group (MSG) is established with Terms of Reference as at **Appendix 4A** to the Report on Agenda Item 4 ; and*

b)   *the MSG supersede and replace MIDANPIRG Member States (MMS).*

DECISION 10/2:   *REVISED MIDANPIRG ORGANIZATIONAL STRUCTURE*

*That, with a view to increase MIDANPIRG efficiency, MIDANPIRG Organizational Structure is updated as at **Appendix 4B** to the Report on Agenda Item 4.*

CONCLUSION 10/3:   PRESENTATION OF WORKING PAPERS (WPS) TO MIDANPIRG

> *That, to the extent possible:*
>
> *a) only those subjects which are mature enough (discussed within the appropriate MIDANPIRG subsidiary body) be presented to MIDANPIRG; and*
>
> *b) States and International Organizations refrain from presenting WPs of technical nature directly to MIDANPIRG.*

DECISION 10/4:   PAPERLESS MEETINGS

> *That, with the objective to reduce printing and distribution costs of the MID Regional Office, to the extent possible:*
>
> *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*
>
> *b) meeting reports and Amendment Proposals to the Air Navigation Plan of the MID Region be posted on the MID Regional Office website.*

CONCLUSION 10/5:   SECONDMENT OF NATIONAL EXPERTS TO THE MID REGIONAL OFFICE

> *That, States are encouraged to make available seconded personnel to the MID Regional Office for the purpose of helping in the performance of MIDANPIRG activities/Work Programme.*

4.4   Review and update of MIDANPIRG Procedural Handbook

4.4.1   The meeting was provided with a short description related to the MIDANPIRG Procedural Handbook. It is to be noted that the Second Edition - September 2003, which was approved by MIDANPIRG/8 meeting, is available on the ICAO MID Regional Office website and distributed to Members and Observers of MIDANPIRG, the ICAO Secretariat, and other States and International Organizations participating in meetings, contributing to, or having interest in the work of MIDANPIRG and/or its subsidiary bodies.

4.4.2   Since the establishment of MIDANPIRG, the Group has gained sufficient experience and has recognized specificities of the MID region with the objective of raising the performance of the Group and its subsidiary bodies. Demands on the Group has grown as it has adopted a wider range of responsibilities and expanded its role and activities. More recently, ICAO Council in light of experience gained with the regional air navigation planning groups (PIRGs), has determined that PIRGs should focus more on implementation issues rather than planning aspects.

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4.4.3   In considering the new regional planning methodologies precipitated by the Global Plan and ICAO Business Planning requirements and with a view to increase the efficiency of MIDANPIRG, it has become deemed necessary to revise the Procedural Handbook.

4.4.4   The meeting noted that the changes introduced in the *Third Edition – April 2007* of the MIDANPIRG Procedural Handbook are minimal; however, they restructure the procedural and managerial issues, which include inter-alia:

- the establishment of the MIDANPIRG Steering Group (MSG) and its Terms of Reference;

- updates to MIDANPIRG Subsidiary Bodies Terms of Reference;

- MIDANPIRG and its Subsidiary Body Chairpersons' election;

- documentation;

- MIDANPIRG Organizational Structure; and

- other changes as deemed necessary.

4.4.5   The meeting was informed that the MMS/3 meeting was also in favor of the changes introduced to the MIDANPIRG Procedural handbook. Accordingly, the meeting approved the revised version of the Handbook and agreed that, once the editorial/formatting work is finished, the Third Edition of the MIDANPIRG Procedural Handbook be posted on the ICAOMID Website: www.icao.int/mid.

4.4.6   Based on the above the meeting, agreed to the following Decision:

DECISION 10/6:   ***ADOPTION OF MIDANPIRG PROCEDURAL HANDBOOK, THIRD EDITION – APRIL 2007***

That, the MIDANPIRG Procedural Handbook, Third Edition dated April 2007 is adopted.

MIDANPIRG STEERING GROUP (MSG)

TERMS OF REFERENCE

A)   MANDATE:

	STRATEGIC OBJECTIVES	TASKS
1.	A to E	Execute its pivotal function as a coordinating and steering organ with highest possible efficiency in accordance with the goals set by MIDANPIRG.
2.	A/B/D/E	Address regional planning and implementation issues, including the establishment of regional performance objectives and associated projects based work packages as proposed by the different MIDANPIRG subsidiary bodies before submission to MIDANPIRG for endorsement.
3.	A/D/E	Ensure that the work programme of the different MIDANPIRG subsidiary bodies and the tasks assigned to them cover all air navigation planning and implementation aspects of the MID Region and are based on clearly established performance objectives in support of the ICAO Strategic Objectives and in connection with the Global Plan Initiatives (GPIs).
4.	A to E	Follow-up the on-going work undertaken within the MIDANPIRG framework.
5.	A to E	Address special issues of strategic and/or financial nature for which no agreement has been reached by the appropriate MIDANPIRG subsidiary body, with a view to facilitate their presentation to MIDANPIRG.

B)   COMPOSITION

The MIDANPIRG Steering Group (MSG) is composed of:

a)   the Chairperson and in his absence the First Vice-Chairperson of MIDANPIRG;

b)   MIDANPIRG Members/Alternates from MIDANPIRG Member States (Bahrain, Egypt, Iran, Jordan, Lebanon, Oman, Saudi Arabia and UAE); and

c)   additional representatives from MIDANPIRG Provider States and international/regional organizations may be invited on ad-hoc basis when required.

C)   WORKING ARRANGEMENTS

The Group shall meet when required and at least once between two MIDANPIRG meetings. The Group shall at all times work within a minimum of formality and paperwork. In interval between meetings of the Group, the representatives shall maintain continuity in the work of the Group. Best advantage should be taken of modern communications facilities, particularly e-mails, to keep the Members and the Secretary in permanent touch with each others.

MIDANPIRG Organizational Structure
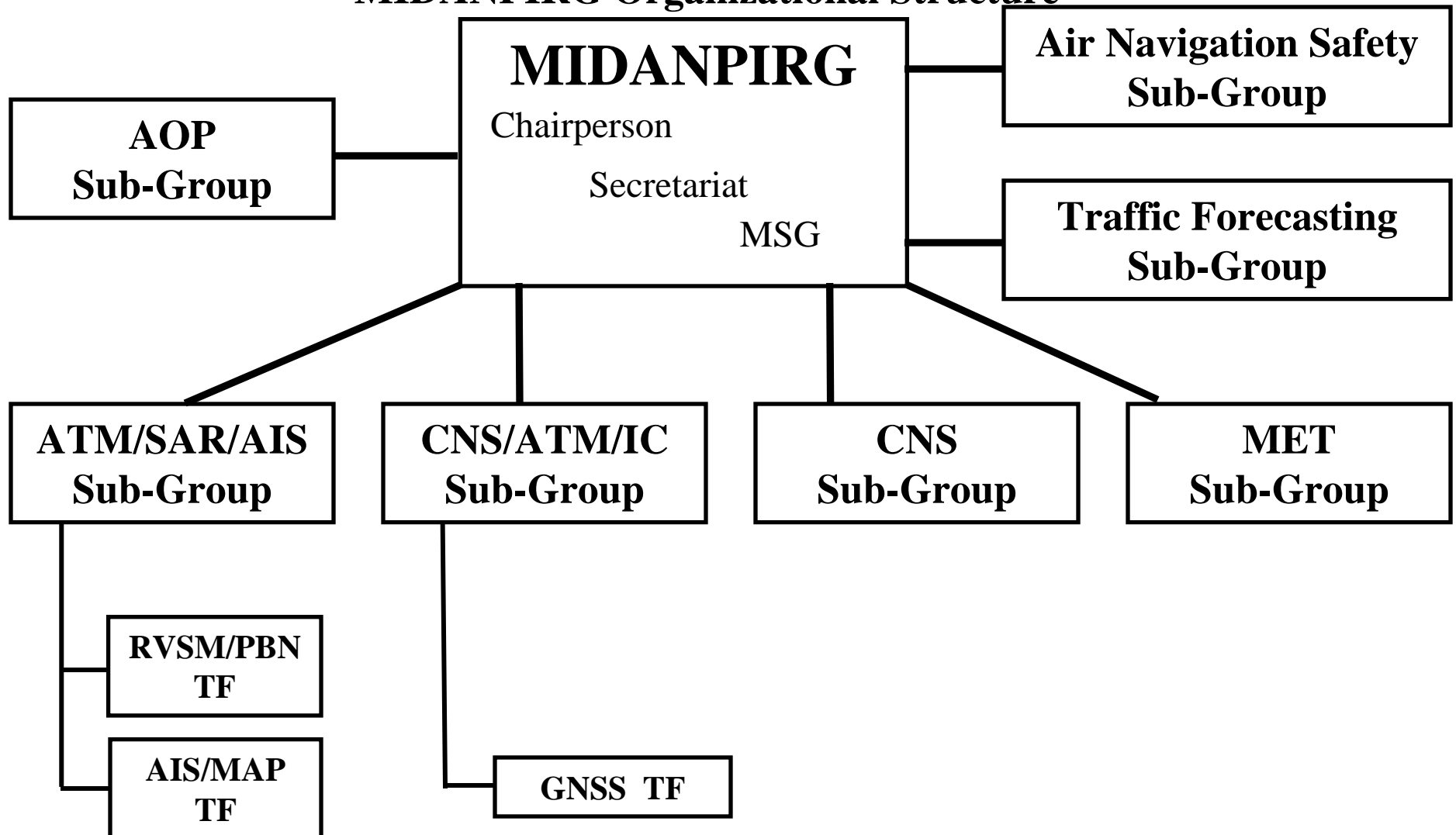
MIDANPIRG Organizational Structure

➢**MIDANPIRG Subsidiary Bodies:**

➢**Air Navigation Safety Sub-Group**

      Sub-Group

➢**ATM/SAR/AIS Sub-Group**

    * RVSM/PBN Task Force

    * AIS/MAP Task Force

➢**CNS/ATM/IC Sub-Group**

    * GNSS Task Force

➢**CNS Sub-Group**

➢**MET Sub-Group**

➢**Traffic Forecasting Sub-Group**

AGENDA ITEM 5:   REGIONAL AIR NAVIGATION PLANNING AND IMPLEMENTATION ISSUES:

5.1   GLOBAL PLAN AND CNS/ATM

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REPORT ON AGENDA ITEM 5: **REGIONAL AIR NAVIGATION PLANNING AND
IMPLEMENTATION ISSUES**

5.1 **GLOBAL PLAN AND CNS/ATM**

MID Basic ANP and FASID (Doc 9708)

5.1.1 The meeting recalled that MIDANPIRG/9, assuming that the French and Spanish languages
are not regularly used/required in the MID Region and with a view to expedite the process of publication
of the final version of the MID BASIC ANP and FASID (Doc 9708), under Conclusion 9/59, requested
ICAO to give priority to the publication of Doc 9708 in English and Arabic versions.

5.1.2 The meeting recalled also 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. However, the meeting noted that all the Amendments were pending waiting for the
publication of the final version of the MID Basic ANP and FASID.

5.1.3 The meeting noted that, in coordination with ICAO Headquarters (HQ), it was agreed that all
pending MID Basic ANP and FASID Amendments proposals, as approved by MIDANPIRG/9 and
MIDANPIRG/10, would be processed and incorporated into the final version of Doc 9708, which is
expected to be published by the end of 2007, after the approval by the ANC/Council. Nevertheless, a
Draft up-to-date version of the MID Basic ANP and FASID, which is not fully edited/formatted, was
made available to the meeting on a CD-ROM prepared by the AIS/MAP Section in ICAO HQ,
incorporating not only the text part of Doc 9708, but also all Charts in PDF format.

5.1.4 Based on the above, the meeting agreed to the following Conclusion, to replace and
supersede MIDANPIRG/9 Conclusions 9/59 and 9/60:

CONCLUSION 10/7: *MID BASIC ANP AND FASID (DOC 9708)*

> *That, with a view to have the final version of the MID BASIC ANP and FASID (Doc 9708)
> published prior to 31 December 2007:*
>
> *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*
>
> *b) ICAO allocate sufficient resources and higher priority for the publication of Doc 9708 in
> English and Arabic versions, incorporating all approved Amendments.*

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Global Air Navigation Plan (Doc 9750)

5.1.5   The meeting noted that the revised Global Air Navigation Plan (Global Plan) encompasses a systematic and integrated approach to planning. This revised planning process would be facilitated through planning tools, an electronic air navigation planning database, project and programme management techniques and new reporting methodologies. It was highlighted that the objective of this plan is to harmonize work programmes, improve reporting processes and help to ensure interoperability and seamlessness between regions. It would also introduce methods to ensure that performance objectives were developed and measured in terms of successful implementation.

5.1.6   The meeting noted the work in progress to amend the format of ANP's taking into account the Global Air Navigation Plan. In the mean time, the regional work programme will be aligned on the basis of the Global Air Navigation Plan.

Business Case Model for the implementation of CNS/ATM Systems

5.1.7   The meeting was presented with a brief description of a business case model for the implementation of the CNS/ATM systems developed by ICAO. It was noted that the Database and Financial Analysis Computer System (DFACS) is intended for use by States, air navigation service providers and airspace users in the evaluation of alternative CNS/ATM implementation scenarios to determine cost-effective implementation options. Based on the above, States and airspace users were invited to develop business cases using the above-mentioned tool.

GNSS developments and activities in the MID Region

5.1.8   The meeting recalled MIDANPIRG/9, Conclusion 9/33, that asked States to continue EGNOS test beds, Galileo Joint Undertaking (GJU) to evaluate the feasibility of using additional Ranging Integrity Monitoring Stations (RIMS) along with a proposal for time scale and the European Space Agency (ESA) to define the scenarios on the number/location of RIMS in order to support the regional cost benefit analysis.

5.1.9   In this regard the meeting noted that (GJU) provided the GNSS TF/5 meeting with the European contribution to the strategy for the GNSS implementation in the MID Region, based on the GNSS service implementation plan that has been prepared to extend EGNOS to some neighbouring Regions to Europe. This plan consists of three activities allowing achieving Approach with Vertical Guidance (APV) service in the Region:

    a) infrastructure scenarios definition and implementation plan;
    b) definition and establishment of an institutional framework; and
    c) application development, demonstration, training and awareness

5.1.10   The meeting noted that GJU activities were taken over by European GNSS Supervisory Authority (GSA), and was further advised that GSA and European Space Agency (ESA) started providing contributions for the GNSS implementation, and that ESA will be financing the EGNOS extension to some of the MID Region States which fall under the MEDA area, based on the above the meeting agreed to the following Conclusion which will replace MIDANPIRG/9, Conclusion 9/33

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CONCLUSION 10/8:   *EGNOS STUDIES IN THE MID REGION*

That, European Space Agency (ESA) and GNSS Supervisory Authority (GSA) define the EGNOS architecture and feasibility of using additional Ranging Integrity Monitoring Stations (RIMS) for achieving APV and to support the regional cost benefits analysis in the MID Region.

5.1.11   The meeting noted that the second amendment of the Global Plan with specific regard to navigation systems, a Global Plan Initiative (GPI-21) *"Navigation Systems"* has been defined. The focus of the initiative is to enable the introduction and evolution of performance-based navigation supported by a robust navigation infrastructure providing an accurate, reliable and seamless global positioning.

5.1.12   The meeting was informed of the GNSS activities that are taking place in the MID Region. Saudi Arabia had started a consultation study that was carried out by an external consultant which resulted a recommendation to form a dedicated team with members from Air Navigation Services (ANS), Aviation Safety and Standards for the GNSS implementation. The consultation study also defined the implementation strategy approach in Saudi Arabia.

5.1.13   The meeting further noted that Arab Civil Aviation Commission (ACAC) Regional GNSS Steering-Group (ARG SG) was established.

5.1.14   Based on the above, the meeting agreed on the updated Strategy and Synopsis for the Implementation of GNSS in the MID Region, developed by the CNS/ATM/IC SG/3 which are at **Appendix 5.1A,** to the Report on Agenda Items 5, and agreed to the following Conclusion to replace MIDANPIRG/9 Conclusion 9/36:

CONCLUSION 10/9:   *REVISED STRATEGY FOR THE IMPLEMENTATION OF GNSS IN THE MID REGION*

*That, the Revised Strategy for the Implementation of GNSS in the MID Region is to be amended as shown at **Appendix 5.1A** to the Report on Agenda Item 5.1.*

5.1.15   The meeting noted that many GNSS activities are currently in progress and was of the view that all these GNSS activities in the Region, need to be coordinated in order to avoid duplication of efforts, share experiences and get the maximum benefits from these activities, hence, the meeting agreed to the following Conclusion to replace MIDANPIRG/9 Conclusion 9/34:

CONCLUSION 10/10:   *COORDINATION OF GNSS ACTIVITIES*

That,

a)   all GNSS activities are to be coordinated in order to be inline with the MID Region GNSS Strategy;

b)   MID States;

i)   share experience gained during demos, test bed trials and implementation;

ii)   provide input to the GNSS Task Force;

iii)   are encouraged to participate in the GNSS Research and Development in a coordinated manner; and

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iv) *designate GNSS focal points and send their contact details to the ICAO MID Regional Office prior to 31 May 2007.*

5.1.16 The meeting approved the updated Terms of Reference (TOR) and Work Program of the GNSS Task Force to take into consideration the latest development as at **Appendix 5.1B** to the Report on Agenda Item 5.1 and agreed to the following Decision:

DECISION 10/11: *REVISED TERMS OF REFERENCE AND WORK PROGRAMME FOR THE GNSS TASK FORCE*

That, the revised Terms of Reference and Work Programme of the GNSS Task Force is adopted as at **Appendix 5.1B** *to the Report on Agenda Item 5.1*

5.1.17 Egypt presented the meeting with a NAVISAT presentation, where it noted that the NAVISAT Implementation Plan detailed study would be completed by June 2008 and launching of its services is expected in July 2010.

5.1.18 The meeting was concerned by the low level of attendance to the GNSS TF meetings, and urged States to participate more actively to support the work of GNSS TF. The meeting further agreed that the GNSS TF composition should include different Stakeholders and Organizations, that can support the Task Force.

5.1.19 Base on the above the meeting agreed to the following Conclusion:

CONCLUSION 10/12: *PARTICIPATION IN THE GNSS TF MEETINGS*

That,

a) *MID States are urged to participate more actively in the work of the GNSS TF meeting; and*

b) *ICAO MID Regional Office is to send invitation to organizations that can support GNSS TF Work Programme*

MID Region strategy for the implementation of GPIs

5.1.20 The meeting noted that the ICAO Council had adopted the Global Plan with the framework that includes 23 Global Plan Initiatives (GPIs), which were developed on the basis of an industry roadmap that was aimed at bringing near and medium term benefits to aircraft operators, taking advantage of currently available aircraft capabilities and ATC infrastructure and technology.

5.1.21 The meeting noted that the integration of the industry roadmap into the Global Plan had taken into account the need to achieve the objective of global harmonization, interoperability and seamlessness of the global air navigation system. The GPIs are options for air navigation system improvements that when implemented, result in direct performance enhancements. States and regions will choose initiatives that meet their performance objectives, identified through an analytical process, specific to the particular needs of a State, region, homogeneous ATM area or major traffic flow. A set of interactive planning tools (e.g. software applications, planning documentation, web-based reporting forms, project management tools) that support the Global Plan, will assist with the analytical process.

5.1.22   The meeting recalled that ALLPIRG/5 (March 2006) developed *Conclusion 5/2: Implementation of Global Plan Initiatives (GPIs)* to be implemented by the regional planning groups.

5.1.23   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. Each MIDANPIRG meeting is to review, as part of its regular agenda, the progress achieved and challenges identified in the implementation of the GPIs.

5.1.24   Based on the above, and in order to facilitate the process of implementation of the Global Plan based on Regional priorities, the meeting adopted the *MID Region Strategy for the implementation of the Global Plan Initiatives (GPIs)* as at **Appendix 5.1C** to the Report on Agenda Item 5.1, and agreed to the following Conclusion:

CONCLUSION 10/13:   *MID REGION STRATEGY FOR THE IMPLEMENTATION OF THE GLOBAL PLAN INITIATIVES (GPIS)*

        *That, the MID Region Strategy for the implementation of the Global Plan Initiatives (GPIs) is adopted as at **Appendix 5.1C** to the Report on Agenda Item 5.1.*

5.1.25   The meeting 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.

5.1.26   In support of the evolution from a systems-based approach to a performance-based approach to planning and implementation of air navigation, the meeting reviewed the proposed projects related to the AGA, AIS, ATM, and CNS fields and accordingly agreed to the following Conclusion:

CONCLUSION 10/14:   *IMPLEMENTATION OF WORK PROGRAMME IN SUPPORT OF STRATEGIC PERFORMANCE OBJECTIVES*

        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:

a) *improvement of the MID ATS route structure (FUA, dynamic and flexible ATS route management, improved Civil/Military coordination, etc);*

b) *enhancement of MID States' TMA management;*

c) *MID RMA operations continuity;*

d) *support of the introduction and implementation of SMS in the MID States;*

e) *development of MID States' contingency plans;*

f) *improvement of the quality and efficiency of aeronautical information services provided by MID States;*

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.*

ADS-B activities in the MID Region

5.1.27   The meeting noted that ADS-B serves as an important enabler of several ATM operational concept components including traffic synchronization and conflict management, and that work on the ADS-B concept of use should be continued, as ADS-B brings substantial safety and capacity also being a cost-effective to install and maintain.

5.1.28   The meeting was appraised that implementation of ADS-B has to be harmonized, compatible and interoperable with respect to operational procedures, supporting data link and ATM applications. Furthermore, the strategy for the near term introduction of ADS-B is to be based on a common element the SSR Mode S extended squitter, as the initial data link in order to facilitate the global interoperability for the initial introduction of ADS-B.

5.1.29   The meeting noted that the Global Plan Initiative GPI-9 *"Situational Awareness"* recognized that the implementation of enhanced surveillance techniques (ADS) will allow reductions in separation minima and an enhancement of safety, increase in capacity, improve flight efficiency, all on a cost-effective basis. These benefits may be achieved by bringing surveillance to areas where there is no primary or secondary radar, when cost-benefit models warrant it. In airspaces where radar is used, enhanced surveillance can bring further reductions in aircraft separation minima and improve, in high traffic density areas, the quality of surveillance information both on the ground and in the air, thereby increasing safety levels.

5.1.30   Based on the above, the meeting encouraged States in collaboration with the airspace users to develop and implement an ADS-B trials programme using the available technology and services, aimed at improving the ADS-B knowledge and evaluating the benefits for the Air Traffic Management in the MID Region. Accordingly, the meeting agreed to the following Conclusion:

CONCLUSION 10/15:   *MID REGION STRATEGY FOR THE IMPLEMENTATION OF ADS-B*

> *That,*
>
> a) *MID States, in collaboration with the airspace users, are encouraged to develop and implement ADS-B trials programme, when cost-benefit models warrant it; and*
>
> b) *the Strategy at **Appendix 5.1D** to the Report on Agenda Item 5.1 is endorsed as the MID Region Strategy for the implementation of ADS-B.*

5.1.31   The meeting noted that the CNS/ATM/IC Sub-Group TOR are updated to include the activities related to the ADS-B where the Sub-Group will monitor studies, demonstrations, trials and test beds carried out by MID States, related to ADS-B ensuring that the initial introduction of ADS-B is carried out in a harmonized manner, taking into consideration global interoperability issues.

5.1.32   The meeting further noted with appreciation that Saudi Arabia has developed a plan for an ADS-B Test Bed. The project is planned for trial purpose and it's expected to take place in the first quarter of 2009. An ADS-B Ground Station will be installed in Jeddah, King Abdulaziz International Airport (KAIA) and will be interfaced with the new ATM system in Jeddah ACC, It was highlighted that only aircrafts which are equipped with proper amenities will participate in the trial.

5.1.33   The meeting was further informed that Iran had installed five modern PSR and SSR Radar equipped with EUROCAT "C" Software in five of their International Airports.

FANS 1/A activities in the MID Region

5.1.34   The meeting was informed of the outcome of the CNS/ATM/IC SG/3 meeting related to FANS 1/A activities in the MID Region and noted that FANS 1/A (ADS & CPDLC) trials have been carried out by Saudi Arabia during the period from 4 January to 3 April 2006. The meeting noted that the lessons learnt from the Saudi Arabian FANS 1/A trials were as follows:

> − FANS-1/A has potential benefits for Saudi Arabia, and possibly other parts of the region, if implemented;
>
> − the system works very well once air traffic controllers are well trained;
>
> − flight Data is key to making the system work correctly;
>
> − there were no safety concerns identified during the trials;
>
> − the system supports preferred routing but there are airspace issues that need to be addressed as well; and
>
> − FANS 1/A implementation has implications beyond Saudi Arabia and this should be studied on a regional basis.

5.1.35   The meeting was also informed that a proposal for a larger regional FANS-1/A trial was endorsed by ACAC and that an ACAC FANS Implementation Group (AFIG) has been established to, inter-alia, coordinate the trials.

5.1.36   The meeting further noted that IATA supported the implementation of FANS 1/A in the Region and Bahrain confirmed that they will join Saudi Arabia in the FANS 1/A trials.

5.1.37   The meeting made reference also to the Global Plan, and especially GPI-17 "*DATA LINK APPLICATIONS*" and recognized that the use of CPDLC and implementation of other data link applications can bring significant advantages in terms of workload and safety over voice communication for both pilots and controllers. In particular, they can provide efficient linkages between ground and airborne systems, improved handling and transfer of data, reduced channel congestion, reduced communication errors, interoperable communication media and reduced workload.

5.1.38   The meeting recognized that FANS-1/A and ATN applications support similar functionality, but with different avionics requirements and that many internationally operated aircraft are initially equipped with FANS-1/A avionics to take advantage of data link services offered in certain oceanic and remote regions. Accordingly, the meeting agreed that any implementation of the FANS 1/A should be supported by a safety case.

5.1.39   Based on the above and taking into consideration the areas in the MID Region which are still not covered by radar (approximates 40%) and the concern raised about the coordination between States in the MID Region, mainly for the exchange of radar data and improvement of the VHF communication, the meeting agreed to the following Conclusion:

CONCLUSION 10/16:   *FANS 1/A ACTIVITIES IN THE MID REGION*

> *That, MID States, in coordination with users, are encouraged to implement FANS 1/A (ADS-C/CPDLC) as an interim solution, until a fully ATN compliant ADS/CPDLC system is made available*.

5.1.40   The meeting was informed that FANS Operational Manual (FOM) has been developed and is already used in some ICAO regions (APAC, NAT, etc). Accordingly, for global harmonization purpose, the meeting was of view that States which will be involved in FANS 1/A trials/implementation in the MID region should take advantage of the available FOM.

Improper handling of FPLs and associate ATS messages and establishment of an IFPS in the MID Region

5.1.41   The meeting noted that, MIDANPIRG/9, had concerns regarding the problems associated with the improper handling of flight plans, and had agreed on methodology that, ICAO in coordination with IATA and concerned States should carry out a survey on the inconsistencies related to dissemination of ATS messages in the MID Region and agreed with the concept of establishment and feasibility study for the implementation of an Integrated Flight Plan Processing System (IFPS) in the MID Region to be finalized by Bahrain with the cooperation of all concerned parties.

5.1.42   The meeting noted that the RVSM TF/12 meeting in May 2006, discussed the continuing problem of non-receipt of flight plans in some FIRs, which was linked in part, to the use of Repetitive Flight Plans (RPLs), and non-acceptance by some flight data processing systems of more than 7 characters in item 10 of the flight plan, or other incompatibilities with incoming data also the ATM/SAR/AIS SG/8 meeting in November 2006, considered a number of communication related ATC operational problems, including those associated with the delay in the processing/transmission of flight plans (FPLs). Accordingly the meeting agreed to a revised Methodology for the Identification of Causes of Improper Handling of FPLs and Associated ATS Messages as at **Appendix 5.1E** to the Report on Agenda Item 5.1 and agreed to the following Conclusion:

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CONCLUSION 10/17:   *SURVEY RELATIVE TO THE IMPROPER HANDLING OF FPLS AND ASSOCIATED ATS MESSAGES*

> *That,*
>
> a) *the methodology for the identification of causes of improper handling of FPLs and associated ATS messages at **Appendix 5.1E** to the Report on Agenda Item 5.1 is endorsed; and*
>
> b) *MID States are to carry out a survey relative to the improper handling of FPLs and associated ATS messages based on this methodology for a period of at least one month.*

5.1.43   The meeting noted with appreciation that Bahrain had completed the first stage of the MID IFPS Feasibility Study, however the study was based largely on Bahrain's input, and that in order to finalize the study, more inputs are required from all the MID States. In this context, it would be necessary for each State to nominate an IFPS focal point for the purpose of coordination regarding States' input.

5.1.44   The meeting further noted that in Europe IFPS was successfully established under the EUROCONTROL regulatory framework, and that there is no similar (single) regulatory body in the MID Region. Consequently, it would be necessary to develop an enabling regulatory framework prior to the IFPS attaining its potential. To this extent, Bahrain has proposed to introduce the pilot IFPS system, initially based on the existing FDPS in Bahrain to proof the concept. Consequently the meeting agreed to the following Conclusion to replace MIDANPIRG Conclusion 9/18:

CONCLUSION 10/18:   *ESTABLISHMENT OF AN INTEGRATED INITIAL FPL PROCESSING SYSTEM (IFPS) IN THE MID REGION*

> *That,*
>
> a) *MID States designate their IFPS focal points and send their contact details to the ICAO MID Regional Office prior to 31 May 2007;*
>
> b) *the IFPS focal points participate in the finalization of the feasibility study for the implementation of an IFPS in the MID Region, to be finalized by Bahrain; and*
>
> c) *coordination be carried out with EUROCONTROL with a view to benefit from their experience and expertise in the implementation of an IFPS, including the development of a regulatory framework.*

5.1.45   Based on the above the meeting also instructed CNS/ATM/IC Sub-Group to study the issue of regulatory framework for IFPS and make recommendations regarding the approach to be taken, for the resolution of this task.

5.1.46   The meeting was further informed that the feasibility study carried out is for the core IFPS System and did not tackle the communication infrastructure issues that will be needed for its full operations. In this context the meeting instructs the CNS Sub-Group to follow-up the IFPS system architecture and any other issues related.

**REVISED STRATEGY FOR THE IMPLEMENTATION OF GNSS
IN THE MID REGION**

Considering:

a)   That safety is the highest priority.

b)   That elements of Global Air Navigation Plan for CNS/ATM System on GNSS and requirements
for the GNSS implementation will be incorporated into the CNS part of FASID.

c)   That GNSS Standards and Recommended Practices (SARPs), PANS and guidance material for
GNSS implementation are available.

d)   That regional augmentation systems include both satellite-based and ground-based systems.

e)   That human, environmental and economic factors will affect the implementation.

f)   The availability of avionics including limitations of some receiver designs; the ability of aircraft
to achieve RNP requirements and the level of user equipage.

g)   The development of GNSS systems including satellite constellations and improvement in system
performance.

h)   The airworthiness and operational approvals allowing the current GNSS applied for en-route and
non-precision approach phases of flight without the need for augmentation services external to
the aircraft.

i)   The development status of aircraft-based augmentation systems.

The general strategy for the implementation of GNSS in the MID Region is detailed below.

1)   There should be an examination of the extent to which the GNSS system accessible in the Region
can meet the navigational requirements of ATM service providers and aircraft operators in the
Region.

2)   Evolutionary introduction of GNSS Navigation Capability should be consistent with the Global
Air Navigation Plan.

3)   Implementation should be in full compliance with ICAO Standards and Recommended Practices
and PANS.

4)   Introduce the use of GNSS for navigation in remote/oceanic areas.

5)   Introduce the use of GNSS with appropriate augmentation systems, as required, for en-route
navigation, non-precision approach, APV BaroVNAV, APV I and APV II.
States and airspace users take note of the available and upcoming SBAS navigation services
providing for APV operations and take necessary steps towards installation and certification of
SBAS capable avionics.

6)   Any external augmentation system deemed necessary for the implementation of GNSS for a particular flight phase in an area under consideration (SBAS/GBAS including ground-based regional augmentation system) should be implemented in full compliance with ICAO SARPs.

       States, in their planning and introduction of GNSS services, take full advantage of future benefits accrued from using independent core satellite constellations, other GNSS elements and their combinations, and avoid limitations on the use of specific system elements.

7)   To the extent possible, States should work co-operatively on multinational basis to implement GNSS augmentation system in order to facilitate seamless and inter-operable systems.

8)   States consider segregating traffic according to navigation capability and granting preferred routes to aircraft with better navigation performance with the exception to State aircraft.

9)   States undertake a coordinated R & D program on GNSS implementation and operation.

10)   ICAO and States should undertake education and training programs to provide necessary knowledge in GNSS theory and operational application.

11)   States establish multidisciplinary GNSS implementation teams, using section 5.2.2 and Appendix C of ICAO Document 9849, GNSS Manual.

12)   States, in their planning for implementation of GNSS services, provide effective spectrum management and protection of GNSS frequencies to reduce the possibility of unintentional interference.

13)   A synopsis of the MID Strategy is in **Attachment 1**.

Synopsis of the MID GNSS Strategy

☛**Phase One (up to 2010)**

    a- GNSS with appropriate augmentation system for en-route navigation,
terminal and NPA

    b- GNSS for approaches with vertical guidance(APV BaroVNAV + ABAS)

    c- Decommissioning of NDBs

☛**Phase Two (2011 to 2015)**

    a - GNSS with appropriate augmentation system for en-route navigation
terminal and NPA

    b - Complete decommissioning of NDBs

    c - GNSS for approaches with vertical guidance(APV BaroVNAV + ABAS,APV I and APV II)

    d - Decommissioning of VORs

    e - ILS maintained at airports

☛**Phase Three (2016 onwards)**

    a - GNSS with appropriate augmentation system for en-route navigation
terminal, NPA , APV, and CAT I precision approach

    b - Complete decommissioning of VORs

    c - Rationalization of DMEs

    d - Decommissioning of ILS CAT I

    e - CAT II/III requirements implemented by GBAS where operationally
required and economically beneficial

GLOBAL NAVIGATION SATELLITE SYSTEMS TASK FORCE
(GNSS TF)

TERMS OF REFERENCE AND WORK PROGRAMME

1. **TERMS OF REFERENCE**

In accordance with the operational concept and general planning principles of the global air navigation plan for CNS/ATM, the GNSS Task Force shall:

1) Monitor necessary studies, demonstrations, trials, test beds and cost benefit analyses related to the use of GNSS for all phases of flight in the MID region.

2) Monitor the progress of updated studies, projects, trials and demonstrations by the MID Region States, and information available from other Regions.

3) Develop a coordinated strategy/plan for the implementation of GNSS in the MID region in an evolutionary manner, taking into consideration the new CNS technologies and the requirements and expectations of the airspace users and ATM partners.

4) Provide a forum for active exchange of information between States related to the implementation of GNSS.

5) Identify deficiencies and constraints that would impede implementation of GNSS, and propose solutions that would facilitate the rectification of such problems.

6) Identify and address as appropriate, possible sources of funding to facilitate GNSS implementation in the MID Region.

7) Identify and address, to the extent possible, institutional financial and legal matters related to the GNSS implementation in the MID Region.

8) Develop a system of post-implementation reviews to ensure the effective and safe introduction of GNSS operation.

9) Develop guidance material and processes covering the operational approval of GNSS.

2.   WORK PROGRAMME

Ref	Tasks	Priority	Target Completion Date
1	Monitor the progress achieved by the MIDAN Demo related to the feasibility study pertaining to the possible use of EGNOS as GNSS augmentation system in the MID Region.	A	2007
2	Monitor the study related to the possible use of WAAS as GNSS augmentation system in the MID Region.	B	2007
3	Monitor the progress of the NAVISAT study.	A	2007
4	Follow up the progress achieved in GNSS activities in adjacent regions.	B	2008
5	Review and identify intra and inter regional co-ordination issues related to the implementation of GNSS and where appropriate recommend actions to address those issues.	B	2008
6	Examine to what extent the GNSS system accessible in the Region can meet the navigational requirements of ATM service providers and aircraft operators in the Region.	B	Ongoing
7	Identify and co-ordinate GNSS implementation priorities in the MID Region.	B	2007
8	Provide assistance to States in planning and implementation of GNSS in the MID Region including the development of GNSS procedures.	B	2008
9	Suggest ways and means for rectifying the problems as they arise related to the implementation of GNSS.	B	2008
10	Provide necessary knowledge in GNSS theory and operational application.	B	2008
11	Assist States to establish proper training and education programmes related to the implementation of GNSS.	B	2008

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

The GNSS Task Force is composed of the 15 MID Region Provider States, IATA. IFALPA, EUROCONTROL, and additional representative from International / regional organizations may be invited when required.

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

G P I		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

IMPROVEMENT OF THE MID ATS ROUTE STRUCTURE

GPI-1:	FLEXIBLE USE OF AIRSPACE
GPI-4:	ALIGNMENT OF UPPER AIRSPACE CLASSIFICATIONS
GPI-5:	RNAV AND RNP (PERFORMANCE-BASED NAVIGATION)
GPI-7:	DYNAMIC AND FLEXIBLE ATS ROUTE MANAGEMENT
GPI-8:	COLLABORATIVE AIRSPACE DESIGN AND MANAGEMENT

Strategic Objectives	Actions	Description/Tasks	Target Date	Initiated by	Benefits	Status
A, C, D	Improvement of MID ATS routes structure	– Analyse the en-route ATS route structure and implement identifiable improvements; – Increased accommodation of user-preferred flight profiles; – Monitor planning and implementation process.	2009	ICAO, States, users	– Shorter routes/reduced travel times – Increased airspace capacity and efficiency – Reduced fuel consumption – Reduced environmental impact	
A, C, D	Implement Flexible Use of Airspace (FUA) Concept	– Conduct Regional review of special use of airspace; – Remove large tracts of permanent restricted airspace; – Establish civil/military coordination bodies at national level; – Implement collaborative civil/military airspace planning at national level; – Increase role of civil/military coordination forums; – Implement dynamic and flexible ATS routes structure concept. – Monitor implementation	2010	ICAO, States, users	– Improved safety – Shorter routes/reduced travel times – Increased airspace capacity and efficiency – Reduced fuel consumption – Reduced environmental impact	

Strategic Objectives	Actions	Description/Tasks	Target Date	Initiated by	Benefits	Status
A, E	Implement Regional ATM contingency planning	– Define route schemes for contingency situations; – Promulgation of contingency plans.	2008	States, ICAO, users	Ensure continuity and safety of air transport	
A, C, D	Collaborative airspace design and management	– Collaboration with users and adjacent airspaces on airspace design and management; – Extend the implementation of RNAV 5 areas to cover the whole airspace in the MID Region above FL 195; – Reorganize the MID airspace to ensure application of a common airspace classification in the upper airspace, above an agreed common level.	2009	ICAO, States, users	– Improvement in safety; – Improved airspace capacity; – Improved interoperability and seamlessness; – Reduced fuel consumption; – Reduced environmental impact.	

RVSM OPERATIONS IN THE MID REGION

GPI-2:   REDUCED VERTICAL SEPARATION MINIMA

Strategic Objectives	Actions	Description/Tasks	Target Date	Initiated by	Benefits	Status
C, D	Ensure safe RVSM operations in the MID Region	– Monitor/follow-up RVSM operations in the MID Region; – Ensure MID RMA operations continuity; – Plan for the implementation of RVSM in Baghdad and Kabul FIRs; – Follow-up/coordinate RVSM implementation/operations in adjacent regions.	2009	ICAO, States, MID-RMA	– Increased airspace capacity and efficiency; – Reduced fuel consumption; – Reduced environmental impact.	

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	Benefits	Status
A, D	Implement an IFPS in the MID Region	– 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	– 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	– 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	– Improvement in safety; – Reduced workload for both pilots and controllers; – Improved efficiency.	

A	Implement operations decision support and alerting systems	– 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	– 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); – Analyse eTOD requirements develop a common understanding of the requirements (needs in terms of data format, temporality, cross-border harmonisation, etc); – Develop a MID Region eTOD implementation strategy and action plan; – Harmonize, coordinate and support the eTOD implementation activities on a regional basis; – Provide eTOD.	2009	ICAO, States	– Improved safety; – Reduction in risk of CFIT;	
A, D	Provision of MET information	– 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	– Improved safety; – Improved efficiency.	

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	Benefits	Status
A, C, D	Improve TMA capacity and efficiency	– Collaboration with users on TMA design and management; – 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; – Finalize implementation of WGS-84; – Develop MID Region PBN Strategy; – Develop and implement optimized RNP and RNAV SIDs, STARs and approach procedures in accordance with the PBN concept, taking into consideration aircraft capabilities; – Develop and implement GNSS procedures for Non-Precision Approaches and approaches with vertical guidance (APV).	2010	ICAO, States, Users	– Improvement in safety – Increased airspace capacity and efficiency; – Efficient flight trajectories; – Reduction in CFIT; – Reduced fuel consumption; – Reduced environmental impact.	

Strategic Objectives	Actions	Description/Tasks	Target Date	Initiated by	Benefits	Status
C, D	Plan for the implementation of Continuous descent procedures and unrestricted climb departure procedures	– 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	– Efficient flight trajectories; – Increased airspace efficiency; – Reduced fuel consumption; – Reduced environmental impact.	

ENHANCEMENT OF AERODROME INFRASTRUCTURE AND MANAGEMENT

GPI-13:	AERODROME DESIGN AND MANAGEMENT
GPI-15:	MATCH IMC AND VMC OPERATING CAPACITY

Strategic Objectives	Actions	Description/Tasks	Target Date	Initiated by	Benefits	Status
A, D	Implement collaborative aerodrome SARPs and safety management (13)	– Establish collaborative bodies with ATM, aircraft operators and aerodrome operators for developing plans to increase aerodrome capacity to meet the actual air traffic or forecast demand – Implement aerodrome ground infrastructure commensurate with operational expectations including operations of new larger aircrafts at existing aerodromes, – Implement, where warranted, precise surface guidance to and from a runway to improve capacity and efficiency, – Implement collaborative aerodrome operational procedures with ATM, ground services providers and associated operations support services – Develop, Implement and make available to ATM at aerodromes a positioning system for all vehicles and aircrafts operating on the movement area on a cost-benefit basis. – Implement advance surface movement guidance and control, associated procedures and implement electronic conflict alert systems, as required. – Implement safety management system at aerodromes	2010	ICAO, States, Users	– Improvement in safety – more efficient use of aerodrome resources and ground handling – Increased aerodrome capacity and efficiency – allow minimal and precise ATFM measures to be applied – reduction in delays and higher predictability of flight schedules – increased ability to safely manoeuvre in all weather conditions	

IMPROVEMENT OF STATE'S AERODROME OPERATIONS

GPI-14:	RUNWAY OPERATIONS
GPI-15:	MATCH IMC AND VMC OPERATING CAPACITY

Strategic Objectives	Actions	Description/Tasks	Target Date	Initiated by	Benefits	Status
A	Implement procedures and technologies to enhance the performance of runway operations and optimize runway capacity	− Undertake analysis to determine most favourable ATM factors and measures (procedures, management, etc) for runway capacity optimization − Establish collaborative bodies with ATM, aircraft operators and aerodrome operators for implementing plans and measures aimed at prevention of runway incursion − Develop and implement a runway physical characteristics maintenance programme − Implement, where warranted, precise surface guidance to and from a runway to improve capacity and efficiency	2010	ICAO, States	− Improvement in safety − Reduction in runway incursion − reduce runway occupancy time and maximize runway capacity − Enhance the performance of runway operations − Increased aerodrome capacity and efficiency	

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	Benefits	Status
A, D	Provide timely and quality assured aeronautical information to users	– Improve the compliance with the AIRAC system; – Advance posting of the AIRAC information on the web; – Use of email to enhance the communication between the AIS community in the MID Region; – Implement AIS automation in order to ensure availability, sharing and management of electronic aeronautical information; – Complete the implementation of Quality Management Systems (QMS); – Monitor implementation progress.	2009	States, ICAO	– Improved safety; – Improved planning and management of flights; – Efficient use of airspace.	

IMPLEMENTATION OF GNSS IN THE MID REGION

> **GPI-21:   NAVIGATION SYSTEMS**
> **GPI-23:   AERONAUTICAL RADIO SPECTRUM**

Strategic Objectives	Actions	Description/Tasks	Target Date	Action by	Benefits	Status
C, D	Implement GNSS	– Implement GNSS for En-route; – Implement GNSS for NPAs; – Carry out GNSS trials, demonstrations and test beds; – Determine the most appropriate augmentation system for the MID Region based on cost-benefit analysis; – Introduce, in an evolutionary manner, the use of GNSS with appropriate augmentation system in the MID Region; – Monitor implementation progress.	2010	ICAO, States	– Optimal use of advanced technologies; – Operational Efficiency; – Reduction in environmental impact.	
A, D	Implement Radio Spectrum Management and processes to protect the aeronautical spectrum	– Ensure Regional coordination for the protection of the aviation spectrum at WRC2007, and beyond – Disseminate ICAO policy statements of requirements for aeronautical radio frequency spectrum; – Implement frequency spectrum management.	2009	ICAO, States	– Assurance of aviation spectrum – Administer the use of the allocated aviation spectrum	

IMPROVEMENT OF COMMUNICATION INFRASTRUCTURE

GPI-17:	DATA LINK APPLICATIONS
GPI-22:	COMMUNICATION INFRASTRUCTURE

Strategic Objectives	Actions	Description/Tasks	Target Date	Action by	Benefits	Status
A, D	Implement communication infrastructure to support voice and data communication	– Follow up on the implementation of the Aeronautical Fixed Services (AFS) – Follow up the implementation on voice communications – Migrate from AFTN/CIDIN to AMHS – Implement high speed digital circuits between main centres – Monitor the implementations – Follow up the developments in the Panels – Implement hormonally the appropriate developments.	2010	ICAO, States	– Improved safety – Improvement in operational efficiency – Better coordination	
D	Implementation of ATN in the MID region	– Develop Regional ATN Planning document – Review of ATN implementation problems and develop coordinated solutions – Develop ATN Operation procedures – Develop conformance procedures and check list for AMHS and ATN routers	2010	ICAO, States	– Optimal usage of advanced technologies – Increase the use of the data – Better cost effective integrations – Easier in maintenance and operation	

		− Develop Information Security policy − Develop information Security Guidance − Coordinate and monitor implementation to be harmonized and interoperable globally; − Follow-up activities of panels and other regions.				
	Implement advanced technologies to support data link services	− Identify & implement selected, harmonized data links to ensure interoperability between States and Regions; − Implement available technologies in support of and to facilitate ground and airborne applications (CPDLC, ADS, D-ATIS)	2010	ICAO, States	− Reduce work load for pilot and controllers − Seamless interoperable operation − Efficient linkage between ground and airborne systems	
A,D	Implement MID VSAT network	− Identify States requirement; − Signature of MOU by concerned States; − Explore technical cooperation for establishing a mechanism for progress; − Harmonize the implementation of VSAT Network; − Monitor the implementation.	2010	ICAO, States	− Eliminate many communication deficiencies thus Increase safety − Robust network − Easier development and management − Support new CNS/ATM technologies	

NOTE:

– **GPI-3**: Harmonization of Level Systems: Not Applicable to the MID Region

– **GPI-6**: Air Traffic Flow Management: Not reflected

MID REGION STRATEGY FOR THE IMPLEMENTATION OF AUTOMATIC DEPENDENT SURVEILLANCE-BROADCAST (ADS-B)

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;
e)   the outcome of the 11th Air Navigation Conference; and

Recognizing that:

i)   the implementation of data-link surveillance technologies is an evolutionary process, but which has significant potential for safety and cost-effectiveness; and
ii)   implementation of ADS-B is in support of various Global Plan Initiatives;

The MID Region strategy for the implementation of ADS-B is detailed below:

A)   the MID Region ADS-B implementation plan should:

1)   be evolutionary and consistent with the Global Air Navigation Plan taking into consideration associated MID Region priorities;

2)   when cost/benefit models warrant it, prioritize implementation in areas where there is no radar coverage surveillance, followed by areas where implementation would otherwise bring capacity and operational efficiencies;

3)   ensure that implementation of ADS-B is harmonized, compatible and interoperable with respect to operational procedures, supporting data link and ATM applications;

4)   identify sub-regional areas where the implementation of ADS-B would result in a positive cost/benefit in the near term, while taking into account overall Regional developments and implementation of ADS-B in adjacent homogeneous ATM areas;

5)   be implemented following successful trial programmes with regards to safety and operational feasibility, taking into account studies and implementation experiences from other ICAO Regions; and

6)   be implemented in close collaboration with users.

B)   Implementation should be monitored to ensure collaborative development and alignment with the MID Region projects and relevant elements of the GPIs.

**METHODOLOGY FOR THE IDENTIFICATION OF CAUSES OF IMPROPER
HANDLING OF FPLS AND ASSOCIATED ATS MESSAGES**

For a period of at least one month, MID States should carry out a survey to identify (by origin):

a) The total number of flights.

b) The number of incidents where a FPL has not been received (FPL not transmitted, incorrect address, AFTN switch failure at origin, AFTN switch failure en-route, handling error).

c) The number of incidents where a FPL has been received but the letter "W" was missing.

d) The number of incidents where a FPL has been received but with incorrect details (FPL/estimate mismatch).

e) The number of incidents where a FPL has been received late.

f) The number of incidents where a CNL message was received for the FPL.

g) Incident related to the handling of FPL due to any other cause.

To carry out the survey, States have to handle the here-above mentioned incidents as follows:

a) each incident has to be recorded in a specific log file;

b) the incident is investigated and the log is annotated with reasons, if available;

c) a fax is sent to the Civil Aviation Authority at the point of departure of the flight, requesting for investigation of the problem;

d) the log file is updated based on the received reply; and

e) each originating State is informed of the findings with copy to the ICAO MID Regional Office in order to facilitate follow-up action.

Having completed the above, the data gathered from the survey should be analysed to determine the major causes related to the improper handling of FPLs and associated ATS messages.

AGENDA ITEM 5: REGIONAL AIR NAVIGATION PLANNING AND IMPLEMENTATION ISSUES:

5.2 AOP

REPORT ON AGENDA ITEM 5:   REGIONAL AIR NAVIGATION PLANNING AND
                                 IMPLEMENTATION ISSUES

5.2   AOP

Certification of Aerodromes

5.2.1   The meeting recalled that the revised statement of BORPC for Regional Air Navigation Planning considered certification of aerodromes and safety management system as one of the operational requirement and planning criteria for aerodromes.

5.2.2   The meeting recalled ICAO requirements on certification of aerodromes as reflected at Amendment 8 to Annex 14 - Volume I (applicable as of 23 November 2006) and as a follow-up; reviewed the information provided by MID States on the status of implementation of these requirements as contained in **Appendix 5.2A** to the Report on Agenda Item 5.2.

5.2.3   The meeting was of the view that there is a need to provide more detailed information on the status of implementation of certification of aerodromes and safety management system at each State's international aerodrome listed in the MID Basic Air Navigation Plan (Doc 9708), a regular follow up of the status of implementation is to be carried out.

5.2.4   The meeting noted the information on the outcome of MID Office visits that were carried out in the framework of a special implementation project (SIP) approved by ICAO Council for the year 2006 on Implementation of Aerodrome regulations and safety management systems in the MID Region. Six selected States (Cyprus, Jordan, Libya, Qatar, Sudan, and Syria) that require assistance in this field or were scheduled for auditing by ICAO in the year 2006 under the Universal Safety Oversight Audit Programme were visited. In an effort to increase efficiency of the SIP, the meeting noted that a one-day training session on the ICAO provisions related to certification of aerodromes and safety management at aerodromes was conducted at each State. States expressed appreciation and strong support to the SIP initiative undertaken by ICAO.

5.2.5   The meeting also noted that a survey on the status of implementation of Annex 14— *Aerodromes,* Volume I — *Aerodrome Design and Operations*, specifications on Aerodrome Certification and Safety Management System in the MID Region had been conducted by ICAO in the second half of 2006 with a view to compile a database on the global implementation of aerodrome certification and safety management system at aerodromes requirements. This survey was intended to provide a general overview of the status of implementation of these requirements. The information provided will assist ICAO in planning for the future work programme in the follow-up to the implementation of these requirements. Fourteen States had responded to the survey until 15 January 2007. It was noticed that the level of implementation certification of aerodromes and SMS at aerodromes in the MID Region is having low rate of progress and is not in accordance with Annex 14 Volume I related requirements.

5.2.6   The meeting reviewed and updated the status of implementation of requirements that have been provided by MID States as at **Appendices 5.2A** and **5.2B** to the Report on Agenda Item 5.2 and the following was noted:

a)   No information was available on the status of implementation of certification of aerodromes in 2 MID States (Afghanistan and Yemen).

b)   Most of MID States have in place legislation for aerodromes to be certified, however, most of those legislations do not contain criteria to certify aerodromes.

c)   A separate regulatory entity has been formed by most of MID States responsible for certification of aerodromes

d)   Aerodrome Manuals have been prepared for the majority of MID aerodromes; however most of these Manuals are under review and are not yet approved by the State regulatory bodies.

e)   Assessment by States of their International Aerodromes facilities, services and operational procedures as contained in the Aerodrome Manuals are still on going in most of MID States.

f)   Few MID States have issued an interim certification of max. one year for some of their international aerodromes

g)   13 out of 58 aerodromes open for international air transport were certified in the MID Region.

5.2.7   Based on the above and with a view to support harmonized implementation in the MID Region; the meeting agreed and endorsed the following Conclusions to replace and supersede MIDANPIRG/9 Conclusion 9/2:

CONCLUSION 10/19:   IMPLEMENTATION OF CERTIFICATION OF AERODROMES

That, MID States that have not yet certified their international aerodromes, are urged to do so and:

a)   *establish an appropriate regulatory framework and a criteria for the certification of aerodromes;*

b)   *develop an Aerodrome Manual for each international aerodrome insuring that it includes a safety management system prior to granting the aerodrome certificate; and*

c)   *certify all its International Aerodromes insuring that they continue meeting certification obligations.*

CONCLUSION 10/20:   STATUS OF IMPLEMENTATION OF CERTIFICATION OF AERODROMES

That, MID States not fully implementing certification of each of their international aerodromes are required to:

a)   *provide the rationale for non implementation;*

b)   *advise if ICAO assistance is needed, and*

c)   *provide information on the expected date for fully certifying each of their international aerodrome.*

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Report on Agenda Item 5.2

5.2.8   The meeting recalled MIDANPIRG/9 concerns with regards to Annex 15 not specifying any Section/Table of the AIP where the information related to certification of aerodromes should be provided. Noting the importance of providing information on the full implementation of certification of aerodromes by a State and considering Paragraph 4.6 of Doc 9774 - Manual on certification of aerodromes *"Promulgation in the AIP of the certified status and details of the aerodrome",* accordingly, the meeting agreed to the following Conclusion:

CONCLUSION 10/21:   PROMULGATION OF INFORMATION ON CERTIFICATION OF AERODROMES IN THE STATE AIP

> *That, ICAO considers amendment of Annex 15 with a view to specify a section/table within the Aerodrome Part of the AIP for the promulgation of the information related to certification of aerodromes.*

Operations of New Larger Aircrafts (NLAs) at existing aerodromes

5.2.9   The meeting noted the outcome of AOP SG/5 meeting related to results of a survey that was agreed by MIDANPIRG/9 meeting on the readiness of MID States that intend to accommodate NLAs in one or more of their Principle or an Alternate aerodromes, in order to assist States in planning safety requirements and future developments at their aerodromes.

5.2.10   Responses to the survey/questionnaire were received from 6 MID States i.e Bahrain, Egypt, Jordan, Kuwait, Qatar and Saudi Arabia and that IATA has provided information on those aerodromes in the MID region which are ready or are planning to accommodate A380. When analysing the responses; the meeting noted that:

   i)   Airside facilities needs more efforts for readiness to accommodate NLAs; in particular potential safety risks at the following areas:

   - Holding bays,
   - apron arrangement and surface movement control,
   - terminal passenger bridges,
   - visual aids,
   - arrangement for disabled aircraft removal,
   - obstacle free zones, and
   - aerodrome Rescue and Fire Fighting.

   ii) Aerodrome Emergency plans needs to be updated before accommodating NLAs

   iii) Alternate aerodromes should be decided and prepared.

   iv) Accommodating the NLAs is a challenge especially at large airports, 4 MID States international aerodromes might be ready to accommodate NLAs by 2008 i.e. Bahrain, Doha (Qatar), King Abdulaziz (Jeddah-Saudi Arabia), and Dubai (UAE).

5.2.11   The meeting was of the view that new ICAO Circular No. 305 – June 2004, which provides guidance material on conducting aeronautical studies, including the development of alternative measures, operational procedures and operating restrictions that could, while preserving safety, allow aerodromes that do not meet the relevant Annex 14, Volume I, code F criteria to accommodate a specific NLA on an interim basis. It was stressed that States remain responsible for deciding what is acceptable as a measure, procedure or restriction.

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5.2.12   Information received from States and those provided by IATA as well as MID Office analyses are contained in **Appendix 5.2C** to the Report on Agenda Item 5, and posted on ICAO MID Forum.

5.2.13   The meeting was of the view that Global Planning Initiative – (*GPI-13)* "*Aerodrome Design and Management"* should be considered when developing plans to increase aerodrome capacity to meet the actual air traffic or forecast demand including accommodation of NLAs.

Runway Safety and Efficiency

5.2.14   The meeting recognized that in the AOP field, significant part of deficiencies were in the area of runway pavement conditions, as follows:

- Runway Surface irregularities
- Runway surface contamination
- Foreign objects on runway surface

5.2.15   It was noted that evidence from aeroplane overrun and run-off incidents and accidents indicate that in many cases inadequate runway friction characteristics/aeroplane braking performance was the primary cause or at least a contributing factor and that the regularity and efficiency of aeroplane operations can become significantly impaired as a result of poor friction characteristics, especially when the runway is wet. Accordingly, in an effort to enhance runway safety and efficiency in the MID Region; the meeting was apprised of the outcome of the AOP SG/5 meeting related to improvement of airfield pavement surface conditions.

5.2.16   The meeting recalled that Doc 9774 – *Manual on Certification of Aerodromes* requires a system for documenting all safety-related aerodrome facilities as well as aerodrome operational and maintenance records including information on aerodrome pavement condition as one of the essential features of Safety Management Systems at aerodromes.

5.2.17   The meeting noted with concern that degradation of runway surface characteristics creates various levels of unsafe operating conditions for aircraft and to a lesser degree, airfield personnel. One of the types of pavement distress, that present an immediate safety concern in the MID Region, is the continued build up of rubber on runways. Under wet conditions all runways types with rubber build-up loose their skid resistance qualities and experience has shown that timely removal of rubber build-up is a cost-effective solution for rectifying the frictional deterioration of runway surfaces and maintaining safe aircraft operations. Timely removal is important because the longer the build-up continues, the more laborious and extensive the removal process becomes and that in turn leads to other unnecessary costs.

5.2.18   The meeting was of the view that establishing, implementing and maintaining an effective **"Pavement Management System"** by each State to evaluate the technical and operational pavement conditions is a strategic objective to ensure that a "Pavement Surface Maintenance Programme" and a "Correction Programme for the Removal of Rubber Build-Up on Runways**"** should be established and updated. The meeting recognized that an effective Pavement Surface Maintenance Programme should detail the procedures to be followed to ensure that pavement maintenance, both preventive and corrective, is performed by the State/Aerodrome Operators, and agreed on the main particulars to be included, as a minimum, in a State "Pavement Maintenance Programme" as contained at **Appendix 5.2D** to the Report on Agenda Item 5.2.

5.2.19   Based on the above, the meeting agreed to the following Conclusion:

*CONCLUSION 10/22:   ESTABLISHMENT OF "PAVEMENT SURFACE MAINTENANCE PROGRAMME" AND
                              "CORRECTION PROGRAMME FOR THE REMOVAL OF RUBBER BUILD-UP ON
                              RUNWAYS" IN THE MID REGION*

That, MID States establish and implement an effective "Pavement Surface Maintenance Programme" and a "Correction Programme for the Removal Of Rubber Build-Up on Runways" on a continuous basis.

5.2.20   The meeting encouraged MID States having experience on Pavement Management Systems to organize workshops, seminars or training sessions with the support of ICAO, and to share information and on-the-job experience in this area.

5.2.21   In order to assist States in preventing runway incursions at their aerodromes; the meeting was provided with information on ICAO guidance material contained at the *"Manual for Preventing Runway Incursion" - Doc 9870* (First Edition – May 2006) which can be downloaded from ICAO website: http://www.icao.int/fsix/res_ans.cfm. The meeting also noted that an "ICAO Runway Safety Tool Kit" for Runway Incursion Prevention is now available on the same website.

5.2.22   The meeting was apprised on the information provided by IATA on "Runway Incursion Programme" which is one of several initiatives aimed at reducing or eliminating accidents or incidents attributed to runway incursions, the meeting also noted the importance of adhering to safe operating procedures at all times.

5.2.23   The meeting was of the view that Global Plan Initiative – (*GPI-14)" Aerodrome Operations"* should be considered when developing plans to enhance safety and efficiency of runway operations.

5.2.24   The meeting recognized that a significant number of AOP deficiencies in the MID region were initially in the area of aerodrome operational services and requested ICAO to consider organizing a workshop/seminar on one of the following areas: Aerodrome Rescue and Fire Fighting, Aerodrome Emergency Plan, Removal of Disabled Aircraft, Apron Management and Surface Movement Guidance and Control System with a view to assist States in eliminating AOP deficiencies related to non-implementation of aerodrome operational services. Accordingly the meeting agreed on the following Conclusion:

*CONCLUSION 10/23:   ASSISTANCE OF MID STATES IN ELIMINATINIG DEFICIENCIES IN
                              AERODROME OPERATIONAL SERVICES*

That, ICAO considers organizing a workshop/seminar on one of the following subjects: Aerodrome Rescue and Fire Fighting, Aerodrome Emergency Plan, Removal of Disabled Aircraft, Apron Management and Surface Movement Guidance and Control System (SMGCS).

MIDDLE EAST REGION

**CERTIFICATION OF AERODROMES STATUS OF
MPLEMENATION FOLLOW-UP**

(April 2007)

TIMELINES:

Global

Regional

National

**MIDDLE EAST REGION - CERTIFICATION OF AERODROMES
STATUS OF IMPLEMENTATION FOLLOW-UP**

(April 2007)

		2001	2002	2003	2004	2005	2006	2007	2008
Global	**Legislation**								
MID Region									
States	Afghanistan								
	Bahrain								
	Cyprus								
	Egypt								
	Iran, Islamic Rep. of								
	Iraq								
	Israel								
	Jordan								
	Kuwait								
	Lebanon								
	Libya								
	Oman								
	Qatar								
	Pakistan								
	Saudi Arabia								
	Sudan								
	Syrian								
	United Arab Emirates								
	Yemen								
Global	**Formation of Separate Regulatory Entity**								
MID Region									
States	Afghanistan								
	Bahrain								
	Cyprus								
	Egypt								
	Iran, Islamic Rep. of								
	Iraq								
	Israel								
	Jordan								
	Kuwait								
	Lebanon								
	Libya								
	Oman								
	Qatar								
	Pakistan								
	Saudi Arabia								
	Sudan								
	Syrian								
	United Arab Emirates								
	Yemen								
Global	**Preparation of the Aerodrome Manual**								
MID Region									
States	Afghanistan								
	Bahrain								
	Cyprus								
	Egypt								

		2001	2002	2003	2004	2005	2006	2007	2008
	Iran, Islamic Rep. of	▨	▨	▨	▨	▨	▨	▨	▨
	Iraq						Y	Y	Y
	Israel	▨	▨	▨	▨	▨	▨	▨	▨
	Jordan	▨	▨	▨	▨	▨	▨	▨	▨
	Kuwait			▨	▨	▨	▨	▨	▨
	Lebanon						Y	Y	Y
	Libya								
	Oman	▨	▨	▨	▨	▨	▨	▨	▨
	Qatar	▨	▨	▨	▨	▨	▨	▨	▨
	Pakistan								
	Saudi Arabia	▨	▨	▨	▨	▨	▨	▨	▨
	Sudan								
	Syrian			▨	▨	▨	▨	▨	▨
	United Arab Emirates	▨	▨	▨	▨	▨	▨	▨	▨
	Yemen								
Global	**Aerodrome Operational Performance Assessment**	█	█	█	█	█	█	█	█
MID Region		▓	▓	▓	▓	▓	▓	▓	▓
States	Afghanistan								
	Bahrain				▨	▨	▨	▨	▨
	Cyprus								
	Egypt				▨	▨	▨	▨	▨
	Iran, Islamic Rep. of								
	Iraq								
	Israel				▨	▨	▨	▨	▨
	Jordan								
	Kuwait				▨	▨	▨	▨	▨
	Lebanon								
	Libya								
	Oman						Y	Y	Y
	Qatar				▨	▨	▨	▨	▨
	Pakistan								
	Saudi Arabia	▨	▨	▨	▨	▨	▨	▨	▨
	Sudan								
	Syrian				▨	▨	▨	▨	▨
	United Arab Emirates	▨	▨	▨	▨	▨	▨	▨	▨
	Yemen								
Global	**Issue of an Aerodrome Certificate for Int'l Airports**				█	█	█	█	█
MID Region					▓	▓	▓	▓	▓
States	Afghanistan								
	Bahrain				▨	▨	▨	▨	▨
	Cyprus								
	Egypt								
	Iran, Islamic Rep. of								
	Iraq								
	Israel						▨	▨	▨
	Jordan					▨	▨	▨	▨
	Kuwait								
	Lebanon						Y	Y	Y
	Libya								
	Oman								
	Qatar						Y	Y	Y
	Pakistan								
	Saudi Arabia				▨	▨	▨	▨	▨
	Sudan								
	Syrian								

		2001	2002	2003	2004	2005	2006	2007	2008
	United Arab Emirates				▨	▨	▨	▨	▨
	Yemen								
SAFETY MANAGEMENT SYSTEM									
Global	**Safety Management System**						▓	▓	▓
MID Region							▨	▨	▨
States	Afghanistan								
	Bahrain								
	Cyprus								
	Egypt								
	Iran, Islamic Rep. of								
	Iraq								
	Israel								
	Jordan								
	Kuwait								
	Lebanon								
	Libya								
	Oman								
	Qatar								
	Pakistan								
	Saudi Arabia								
	Sudan								
	Syrian								
	United Arab Emirates					▨	▨	▨	▨
	Yemen								
UNIVERSAL SAFETY OVERSIGHT AUDIT PROGRAMME									
Global	**Universal Safety Oversight Audit Programme**					▓	▓	▓	▓
MID Region						▨	▨	▨	▨
States	Afghanistan								
	Bahrain								
	Cyprus								
	Egypt					🟨	🟨	🟨	🟨
	Iran, Islamic Rep. of								
	Iraq								
	Israel							🟨	🟨
	Jordan						🟨	🟨	🟨
	Kuwait					🟨	🟨	🟨	🟨
	Lebanon								
	Libya								
	Oman								
	Qatar								
	Pakistan								
	Saudi Arabia								
	Sudan								
	Syrian								
	United Arab Emirates								
	Yemen								

STATUS OF IMPLEMENTATION OF CERTIFICATION OF AERODROMES IN THE STATES OF THE MID REGION

AERODROMES INCLUDED IN THE MID BASIC AIR NAVIGATION PLAN & FASD (DOC 9708)

(April 2007)

STATE	NO. OF AERODROMES OPEN FOR INT'L AIR TRANSPORT		RESPONSIBLE BODY	NUMBER OF CERTIFIED AERODROMES/ON-GOING/PLANNED		
	As indicated in the MID ANP	Info. Provided by States on		Certified	On-Going	Planned
AFGHANISTAN	2					
BAHRAIN	1	1	Bahrain Civil Aviation Affairs		1	
EGYPT	15	8	ECAA	3	5	
IRAN	8					
IRAQ	2	4	Iraqi CAA		4	
ISRAEL	5	4	Israeli CAA		3	
JORDAN	3	3	Jordan CAA		3	
KUWAIT	1	1	DGCA	1		
LEBANON	1	1	Lebanese CAA		1	
OMAN	2	2	DGCA & M		1	1
QATAR	1	1	Qatar CAA		1	
SAUDI ARABIA	4	3	Saudi GACA	3		
SYRIA	3	3	Syrian Aerodromes Rehabilitation & Cert. and Env. Protection Authority		3	
U.A.E.	6	6	U.A.E GCAA	6		
YEMEN	4					
TOTAL	**58**			**13**		

MIDANPIRG/10
Appendix 5.2C to the Report on Agenda Item 5.2

**RESPONSE TO QUESTIONNAIRE ON
MIDDLE EAST AERODROMES READINESS TO ACCOMMODATE
THE NEW LARGER AIRCRAFTS**

	Afghanistan	Bahrain	Egypt	Iran	Iraq	Israel	Jordan	Kuwait	Lebanon	Oman	Qatar	Saudi Arabia			Syria		United Arab Emirates	Yemen
1. General information:																		
1.2 Name of aerodrome:		Bahrain Int'l	Cairo Int'l				Queen Alia Int'l	Kuwait Int'l			Doha Int'l	King Abdel Aziz, Int'l, Jeddah	King Fahd Int'l, Damam					
2. Compliance with the applicable Standards & Recommended Practices of Annex 14 Volume I, 4th Edition July 2004																		
2.1 AERODROME FACILITIES																		
2.1.1 Runways and Shoulders		✔	✔				✔	P			P	✔	✔					
§ 3.1.9 The runway width should be not less than 60m.								X				✔						

	Afghanistan	Bahrain	Egypt	Iran	Iraq	Israel	Jordan	Kuwait	Lebanon	Oman	Qatar	Saudi Arabia		Syria		United Arab Emirates	Yemen
§ 3.2.3 Runway shoulders should extend symmetrically on each side of the runway so that the overall width of the runway and shoulders is not less than 75m.								✓				✓					
2.1.2 Runway Strips and runway end safety areas		✓	✓				✓	✓			P	P	✓				
§ 3.4.2 The runway strip shall extend before the threshold and beyond the end of RWY for a distance of at least 60 m.								✓				✓					
§ 3.4.3 The runway strip width should extend laterally to a distance of at least 150 m on each side of the centre line of the runway and its extended centre line through the length of the strip.								✓				✓					
§ 3.4.3 The runway safety end area should extend from the end of the runway strip to a distance of at least 240 m.								✓				x					
§ 3.5.4 The width of a runway safety end area shall be at least 120 m.								✓				✓					
2.1.3 Taxiways and shoulders		P	✓				✓	✓			X	P	✓				
§ 3.9.3 The clearance between an outer main wheel of an aeroplane and the taxiway edge should be not less								✓				✓					

	Afghanistan	Bahrain	Egypt	Iran	Iraq	Israel	Jordan	Kuwait	Lebanon	Oman	Qatar	Saudi Arabia	Syria	United Arab Emirates	Yemen
than 4.5m (the same as for Code E); however, a greater clearance than 4.5 m may provided to permit higher taxiing speeds.															
§ 3.9.4 The minimum width of a taxiway should be not less than 25m.								✔			✔				
§ 3.10.1 Taxiway shoulders and grading of the taxiway strip should be provided to give a minimum overall width of 60m								✔			✔				
§ 3.11.1 The Taxiway strip should extend symmetrically on each side of the centre line of the taxiway throughout the length of the taxiway to at least 57.5 m								✔							
2.1.4 Taxiways curves and intersections		✔	✔				✔	✔			✔	✔	✔		
§ 3.9.5 The design of curves should be such that, when the cockpit of the aeroplane remains over the taxiway centre line marking, the clearance distance between the outer main wheels of the aeroplane and the edge of the taxiway should be not less than 4.5m.								✔							
§ 3.9.5 The design of fillets at junctions and intersections of taxiways with runways, aprons and other								✔							

	Afghanistan	Bahrain	Egypt	Iran	Iraq	Israel	Jordan	Kuwait	Lebanon	Oman	Qatar	Saudi Arabia		Syria		United Arab Emirates	Yemen
taxiways should ensure that the minimum wheel clearances of 4.5 m are maintained when aeroplane are manoeuvring through the junctions and intersections.																	
2.1.5. Bridges, tunnels, and culverts under taxiways		NA	NA				NA	NA			NA	NA	✓				
§ 3.9.19 The width of that port ion of a taxiway bridge capable of supporting aeroplanes, as measured perpendicularly t o t he taxiway centreline, shall not be less than the width of the graded area of the strip provided for that taxiway.																	
§3.9.20 Access should be provided for RFF vehicles to intervene in both directions within the specified response time.																	
2.1.6 Taxiway minimum separation distance		✓	✓				✓				NA	P	✓				
§ 3.9.7 The following minimum separation distances should apply:																	
Table 3-1 Taxiway centreline to instrument code 4 runway centreline 190m								✓				✓					
Taxiway centreline to non-instrument code 4 runway centreline 115m								NA				✓					

	Afghanistan	Bahrain	Egypt	Iran	Iraq	Israel	Jordan	Kuwait	Lebanon	Oman	Qatar	Saudi Arabia	Syria	United Arab Emirates	Yemen
Taxiway centreline to taxiway centreline 97.5m								✓				N			
Taxiway centreline to object (including taxiway strip) 57.5m								✓				N			
Aircraft stand taxilane centre line – object 50.5m								✓				N			
§ 3.11.3 The taxiway strip should provide an area clear of objects which may endanger taxiing aeroplane								✓				✓			
2.1.7 Holding bays		**P**	**P**				**X**	**X**			✓	✓	**P**		
§ 3.12.6 The distance between a holding bay, runway-holding position at a taxiway/runway intersection or road-holding position and the centre line of a runway shall be 107.5 m where the code letter is F. The distance may need to be increased to avoid interference with radio navigation aids in case of precision approach runway.								X				✓			
§ 3.12.8 If a holding bay, runway-holding position at a taxiway/runway intersection or road-holding position for a precision approach runway code number 4 is at greater elevation compared to the threshold, the distance of 107.5 m should be further								X				✓			

	Afghanistan	Bahrain	Egypt	Iran	Iraq	Israel	Jordan	Kuwait	Lebanon	Oman	Qatar	Saudi Arabia		Syria		United Arab Emirates	Yemen
increased 5 m for every metre the bay or position is higher than the threshold.																	
2.1.8 Aprons		**P**	**P**				**P**				**P**		**P**				
§ 3.13.2 The total apron area should be adequate to permit expeditious handling of aerodrome traffic at its maximum anticipated density.																	
Adequate stands and size												N					
There should be room enough on the apron to provide for the number and types of aircraft expected to use it with adequate safety margins from obstructions including parked aircraft. The design of the apron should aim at facilitating the movement of aircraft and avoiding difficult manoeuvres, which might require undesirable use of excessive amounts of engine, thrust, or imposes abnormal stress on tyres.												N					
Please indicate the number of stands available for Code F aircraft and other relevant information.		P	P				X				x	N					
§ 3.13.6 The dimensions of the apron should be such that the minimum clearance between a manoeuvring aircraft and any obstruction should not be less than 7.5m and may be reduced when special circumstances so												N					

	Afghanistan	Bahrain	Egypt	Iran	Iraq	Israel	Jordan	Kuwait	Lebanon	Oman	Qatar	Saudi Arabia	Syria		United Arab Emirates	Yemen
warrant:																
a) between the terminal, including any fixed passenger bridge and the nose of an aircraft; and							✔	✔				N				
b) over any portion of the stand provided with azimuth guidance by a visual docking guidance system.							✔	✔				N				
2.1.9 Strength of pavement		66/F/P/X/U	05/23 & Apron:				79/F/C/W/U	Under study			PCN 50	NA	103/F/A/R/T			
Please indicate pavement strength data for the movement area intended for the operations of NLAs in the aerodrome																
2.2 AERODROME OPERATIONAL SAFETY SERVICES																
2.2.1 Aerodrome emergency planning	**P**	**P**					**X**	✔			**NA**		**P**			
§ 9.1.1 An aerodrome emergency plan shall be established at an aerodrome, commensurate with the aircraft operations and other activities conducted at the aerodrome.								✔				N				

	Afghanistan	Bahrain	Egypt	Iran	Iraq	Israel	Jordan	Kuwait	Lebanon	Oman	Qatar	Saudi Arabia		Syria		United Arab Emirates	Yemen
§ 9.1.2 The aerodrome emergency plan shall provide for the coordination of the actions to be taken in an emergency occurring at an aerodrome or in its vicinity.												N					
§ 9.1.3 The plan shall coordinate the response or participation of all agencies which, could be of assistance in responding to an emergency.								✓				N					
Prior to the introduction of NLA the aerodrome emergency plan will need to be reviewed, An aerodrome operator will need to conduct a task resources analysis and generic assessment that should consider the provision of specific resources, trained personnel and rescue equipment commensurate with the level of operation of NLAs (Critical elements to be considered include among others; increased number of passengers, full length upper decks, size of airframe, exceeded fuel quantities, fuel tank locations and additional specialized rescue capability that will be needed in areas of difficult terrain or water).								N				N					
Please indicate whether the aerodrome emergency plan considering NLAs operations has been established/reviewed, coordinated,												N					

	Afghanistan	Bahrain	Egypt	Iran	Iraq	Israel	Jordan	Kuwait	Lebanon	Oman	Qatar	Saudi Arabia		Syria		United Arab Emirates	Yemen
assessed and tested.																	
2.2.2 Rescue and Fire Fighting		✓	P				✓		✓		NA	P	✓				
§ 9.2.3 The level of protection provided at an aerodrome for rescue and fire fighting shall be appropriate to the aerodrome category with a remission factor of one where the number of movements of the aeroplanes in the highest category normally using the aerodrome is less than 700 in the busiest consecutive three months.												P					
§ 9.2.4 As of 1 January 2005, The RFF category should be equal to the largest aeroplane operating at that aerodrome regardless of the number of movements.												P					
§ 9.2.5 The aerodrome category shall be determined from Annex 14, Volume I, table 9-1 and shall be based on the longest aeroplanes normally using the aerodrome and their fuselage width.												P					
2.2.3 Disabled aircraft removal		✓	✓				X		✓		NA	P	✓				
§ 9.3.2 The disabled aircraft removal plan should be based on the characteristics of the aircraft that may																	

	Afghanistan	Bahrain	Egypt	Iran	Iraq	Israel	Jordan	Kuwait	Lebanon	Oman	Qatar	Saudi Arabia	Syria		United Arab Emirates	Yemen
normally be expected to operate at the aerodrome, and include among others things: a) a list of equipment and personnel on, or in the vicinity of, the aerodrome which would be available for such purpose; and b) arrangements for the rapid receipt of aircraft recovery equipment kits available from other aerodromes.											P P					
Please indicate aerodrome plan for the removal of disabled aircraft on, or in the vicinity of the aerodrome considering NLAs operations:											P					
2.2.4 Ground Servicing of Aeroplanes		✔	✔				✔	✔			✔		✔			
§ 9.6.1 Fire extinguishing equipment suitable for at least initial intervention in the event of fuel fire and personnel trained in its use shall be readily available during the ground servicing of the NLA, and shall be a mean of quickly summoning the rescue and fire fighting service in the event of a fire or major fuel spill.																
2.2.5 Aerodrome maintenance services		✔	P				✔	✔			X	X	✔			

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	Afghanistan	Bahrain	Egypt	Iran	Iraq	Israel	Jordan	Kuwait	Lebanon	Oman	Qatar	Saudi Arabia	Syria	United Arab Emirates	Yemen
1. With the introduction o f NLAs such as the A380, aerodrome maintenance or reconstruction programmes will need to ensure that the specific aircraft requirements in terms of increased aircraft mass, wheelbase and wingspan; the wider location of the outboard engines; and possible jet blast to temporary structures are taken into account. The wing tip track-in whilst negotiating turns will also need to be considered. Where the specific requirements exceed those of current code E aircraft, special arrangements may be necessary.												X			
2. Specific instructions will be required to be given to contractors or maintenance staff in terms of control of safety and work in progress. Please indicate that the aerodrome maintenance or reconstruction programmes is considering NLAs operations requirements:		Yes	Yes				Yes				NA	X NA	Yes		
2.3 OBSTACLE LIMITATION SURFACES															
2.3.1 Obstacle free zone		**NA**	✔				**X**	**X**			**NA**	**NA**	✔		
Annex 14, Volume I, defines OFZ as: "The air space above the inner approach surface, inner transitional															

	Afghanistan	Bahrain	Egypt	Iran	Iraq	Israel	Jordan	Kuwait	Lebanon	Oman	Qatar	Saudi Arabia	Syria	United Arab Emirates	Yemen
surfaces, and balked landing surface and that portion of t he strip bounded by these surfaces, which is not penetrated by any fixed obstacle other than a low-mass and frangible mounted one required for air navigation purposes."															
§ 4.2.14 & 15 The Obstacle Free Zone (OFZ) shall extend to at least 77.5m either side of the runway centreline for a code 4 precision approach runway Category I, II, or III with regard to code F: a) the width of the inner horizontal surface has been increased from the code E dimension of 120 m to 155 m. The inner approach surface begins 60 m from the threshold and extends to 900 m. It has a slope of 2 per cent;															
b) the inner transitional surface has a slope of 33.3 percent; and c) the length o f the inner edge of the balked landing surface has been in creased from the code E dimension of 120 m to 155 m. The distance from the threshold or runway end (whichever is less) is 1 800 m. The divergence (each side) is 10 per cent and the slope is 3.33 per cent.															
2.4 VISUAL AIDS															

	Afghanistan	Bahrain	Egypt	Iran	Iraq	Israel	Jordan	Kuwait	Lebanon	Oman	Qatar	Saudi Arabia		Syria		United Arab Emirates	Yemen
2.4.1 Markings and signs		P	P				X	X			NA	NA	P				
§ 5.4.1.3 Signs shall be frangible. Annex 14, Volume I, Table 5-4 specifies location distances for taxiing guidance signs including runway exit signs and their height to near side of sign.																	
These distances may need to be increased to ensure that clearance for propellers and the engine pads is obtained for NLAs operations. With an increased distance from the taxiway edge, the angle of signs relative to the taxiway may have to be considered. Signs along some taxiways may have to be strengthened or relocated because they may be subject to excessive jet blast.																	
Additional signs may be needed: a) where ATC procedures require NLA movement along specific taxiway routes, b) along service roads that run adjacent to or across an NLA designated taxiing route to alert vehicle drivers to the potential exposure to excessive jet blast																	

	Afghanistan	Bahrain	Egypt	Iran	Iraq	Israel	Jordan	Kuwait	Lebanon	Oman	Qatar	Saudi Arabia	Syria	United Arab Emirates	Yemen
c) where separation between taxiways are insufficient to allow NLA-NLA or NLA-other aircraft that may require air traffic procedures to control aircraft movement.															
Additional information and mandatory instruction markings may be required to identify NLA-permitted taxi routes, speed restriction areas, prohibited movement area and specific NLA holding positions.															
2.4.2 Lights		✔	✔				X	X			✔	NA	✔		
§ 5.3.9.8 The runway edge lights shall show at all angles in azimuth necessary to provide guidance to a pilot landing or taking off in either direction.															
Lights may be liable to the effect of jet blast, elevated runway and taxiway lights may have to be replaced with inset units that should meet the requirement of Annex 14 Volume I, § 5.3.9.8															
The strength of all lights and fittings over which the NLA may pass may have to be checked for adequacy.															
Additional stop bar lights and runway guard lights may be required if runway –holding positions are relocated or															

	Afghanistan	Bahrain	Egypt	Iran	Iraq	Israel	Jordan	Kuwait	Lebanon	Oman	Qatar	Saudi Arabia	Syria	United Arab Emirates	Yemen
new positions provided.															
3. Information guidelines in ICAO Circular 305 Operation of New Larger Aeroplanes at Existing Aerodromes		No Need	P				X				NA	NA	P		
The purpose of the Circular is to assist States in addressing various aspects of operating NLAs at existing aerodromes. The Circular provides information on issues concerning aerodrome facilities and services, air traffic management and flight operations that should be considered in accommodating NLAs at existing aerodromes. It also provides guidance on conducting aeronautical studies, including the development of alternative measures, operational procedures and operating restrictions that could, while preserving safety, allow aerodromes that do not meet the relevant Annex 14 Volume I - Code F criteria to accommodate the NLA **on an interim basis**. *States remain responsible for deciding what is acceptable as a measure, procedure, restriction* **or any other alternative that should be temporary only, so that safety is not compromised**.															

	Afghanistan	Bahrain	Egypt	Iran	Iraq	Israel	Jordan	Kuwait	Lebanon	Oman	Qatar	Saudi Arabia	Syria	United Arab Emirates	Yemen
Please describe the actions taken and/or will be taken by operators to accommodate the NLA at existing aerodromes if no or limited physical modifications are contemplated. (Please use additional pages, if necessary)							New terminal Building will be constructed								
4. Target Completion Dates		2008	NA				Not yet	2013 - 2015			NA	NA			
Please indicate the timelines, that the above provisions in Items 2 and 3; are expected to be completed.															
5. Alternate Aerodromes		NA	NA				NA	N			NA				
Annex 6 Vol 1 §4.3.4 requires alternate aerodromes to be selected and specified. The ICAO Doc 9708 Air Navigation Plan requires States to promulgate in Table AOP 1 of both the Basic Air Navigation Plan (Basic ANP) and the Facilities and Services Implementation Document (FASID, inter allia, the names of alternate aerodromes, aerodrome reference code and RFF category. Please indicate the names of alternate (take-off/en-route/destination) aerodromes that have been or will be nominated. Please also indicate if your State															

	Afghanistan	Bahrain	Egypt	Iran	Iraq	Israel	Jordan	Kuwait	Lebanon	Oman	Qatar	Saudi Arabia			Syria	United Arab Emirates	Yemen
aviation authority will be initiating a proposal to amend ICAO Doc 9708.																	
6. IATA is requested to provide information on Airlines plans to operate NLAs at MID Aerodromes (principle, alternate and en-route aerodromes)		Bahrain:	Cairo: P	Imam Khomeini, Tehran: P		Tel Aviv: P	Amman: P	Kuwait	Beirut: P	Muscat: P	Doha: ✓	King Abdel Aziz, Int'l, Jeddah: ✓	King Fahd Int'l, Damam: P			Dubai: ✓	
7. Any other information and/or comments:																	

Legend:

| Ready | ✓ | In Progress | P | Not ready | X | Not planned to accommodate NLAs | N |

No Comment or No Answer for a particular question   NA.

States that have responded to MID Questionnaire on NLAs   [   ]

States that did not respond to MID Questionnaire on NLAs   xxx

Analysis of the Survey based on response received from 6 States and IATA:

Analysing the responses received from the 6 states (Bahrain, Egypt, Jordan, Kuwait, Qatar and Saudi Arabia) and IATA; it was noted that:

   a)   Airside facilities needs more efforts for readiness to accommodate NLAs; in particular potential safety risks at the following areas::

   - Holding bays,
   - Apron arrangement and surface movement control,
   - Terminal passenger bridges,

- Visual aids,
- Arrangement for disabled aircraft removal,
- Obstacle free zones, and
- Aerodrome Rescue and Fire Fighting.

b) Aerodrome Emergency plans needs to be updated before accommodating NLAs

c) Alternate aerodromes should be decided and prepared.

d) Accommodating the NLAs is a challenging especially at large airports, 4 MID States might be ready to accommodate NLAs in one of their international aerodromes by 2008 (Bahrain, Bahrain – Doha, Qatar - King Abdel Aziz Jeddah, Saudi Arabia - Dubai, UAE).

**PAVEMENT SURFACE MAINTENANCE PROGRAMME IN THE MID REGION AND
CORRECTION PROGRAMME FOR THE REMOVAL OF RUBBER BUILD-UP ON RUNWAYS**

MINIMUM REQUIREMENTS TO BE INCLUDED

1.　　　　Pavement Inventory: The following needs to be depicted in an appropriate form and level of details:

- Location of all Runways, taxiways and aprons
- Dimensions
- Type of Pavement
- Year of construction or most recent major rehabilitation

2.　　　　Inspection Type and Schedule: A detailed inspection schedule that should be performed at least once a year, details is contained in table A2-1 to the Airport Service Manual Doc. 9137 - Part 2, Appendix A.

3.　　　　Drive-by Inspections: A drive-by inspection should be performed at a minimum of once per month to detect unexpected changes in the pavement surface condition.

4.　　　　Record Keeping: For detailed and drive-by inspections; the Aerodrome Operators should record and keep on file complete information on the findings and on the maintenance performed. Minimum information for record keeping documentation is listed below:

- Inspection date
- Location
- Distress types
- Remedial Actions (scheduled or performed)

5.　　　　Record Keeping Retrieval: Member States should use any form of record keeping it deems appropriate, so long as the pavement inventories and records obtained from pavement surveys and inspections can be retrieved to provide an adequate report when requested by an authority.

6.　　　　Reference Documents: Are available to Member States that provide specific guidelines for conducting inspections, determining types of surface distresses, their probable causes and recommended methods of repairs.

Correction programme for the removal of rubber build-up on runways

Particulars to be included:

a)　　　Scheduling Runway friction Surveys: Aerodrome operators whose runways receive significant jet traffic should schedule periodic friction surveys of both ends of the runway. Table 2A -1 the Airport Service Manual Doc. 9137 - Part 2, Appendix A.

b)   Evaluation Techniques for Rubber Build-Up:

- Visual inspection
- Mechanical inspection
- Continuous friction measuring equipment qualifications, limitations, operating and training requirements
- Continuous friction measuring equipment, readings and corrective scheduling in accordance with guidance on runway friction level classification as contained in table 3-1 to Annex 14, Volume 1- Attachment A, Section 7.9 on runway surface condition level

c)   Methods available to the aerodrome operator that could be chemical removal or mechanical removal or combination as listed below, the selected method should not only remove rubber build-up, but do so in a way that will increase friction to an acceptable level without destroying or damaging the integrity of the surface:

i)   High-pressure water blasting (up to 35,000 psi)
ii)   Chemical solvents
iii) Chemical solvents and high-pressure water blasting
iv)   Hot compressed air

d)   A computer software Programme for evaluation of friction data may be studied.

e)   Guidance for removing rubber build-up is given in the Airport Service Manual Doc 9137 - Part 2, Chapter 8.

AGENDA ITEM 5: **REGIONAL AIR NAVIGATION PLANNING AND IMPLEMENTATION ISSUES:**

5.3   ATM/SAR

REPORT ON AGENDA ITEM 5:   **REGIONAL AIR NAVIGATION PLANNING AND**
                                 IMPLEMENTATION ISSUES

5.3   ATM/SAR

Review of the ATS Route Network

5.3.1   The meeting recalled that MIDANPIRG/9 noted that the majority of the deficiencies in the ATM field are related to the non-implementation of ATS routes listed in the MID Basic ANP. Accordingly, under Conclusion 9/62, MIDANPIRG/9 recognized the need to review some of the requirements of the MID Basic ANP pertaining to ATS routes, which could not be and are not likely to be implemented in the near future.

5.3.2   The meeting noted that the ATM/SAR/AIS SG/8 meeting (Oman 2006), carried out a thorough review of the ATS route network in the MID Region and had identified a number of ATS routes to be created, deleted or to be re-aligned. It was further noted that this has been also reviewed by the CNS/ATM/IC SG/3 meeting (Cairo 2007), which supported the decision of the ATM/SAR/AIS SG/8 meeting to delete, from the list of air navigation deficiencies, the ATS routes, which have not been implemented since long time and to transfer them from the MID Basic ANP to a separate file called "Future ATS Route requirements", which will be used for planning purpose within the ATM/SAR/AIS Sub Group framework.

5.3.3   IATA highlighted that, with the introduction of RVSM in the MID region, a number of unidirectional routes have been implemented and expressed the desire for economical alternatives to the newly created opposite direction routes. In this regard, it was underlined that in some cases, the difference between the eastbound and westbound routes is approximately 150 NM (equivalent to approximately 20 minutes). The following examples have been brought to the attention of the meeting:

- A791/A145 (Cairo and Jeddah FIRs);
- A411/A727 (Cairo and Jeddah FIRs);
- A415/R659-R219 (Emirates FIR).

5.3.4   The meeting noted also that IATA highlighted the urgent need for airspace users to implement some ATS routes in the Indian Ocean area. It was recalled in this regard that coordination should be carried out with the ICAO APAC Office with a view to extend ATS Route N/UN764 from SOCATRA to DADAR as follows:

NOBSU 171554N 0431318E
RIYAN (RIN)
SOCATRA
SUHIL
VUTAS   }   *Mumbai FIR*
P2
DADAR

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5.3.5   IATA requested that concerned States, that have not yet done so, expedite the implementation of the five (5) major ATS routes in that area as reflected in the MID basic ANP (UL322, UM574, UN764, UN555 and UP323), as the ATS routes through the Indian Ocean expect increase in traffic, especially during the Hajj season.

5.3.6   The meeting noted also that the MID ATS route network is very complex and that in many cases new direct routes/route segments have been implemented with new designators, maintaining the old routes with their designators, while these routes are no longer used by users. The meeting was of view that a radical review of the MID ATS route network has to be carried out based on the definition of city-pairs routes, maintaining to the extent possible, the same route designator. The meeting agreed also that this work has to be carried out using automated tools. In this regard, the meeting was informed that the ICAO Five-Letter Name Codes and Route Designator system (ICARD) was being used for the allocation of 5LNCs and that EUROCONTROL, in close coordination with ICAO, is working on the improvement and broadening the scope of this software, with a view to be used also for the management of an ATS route database. In this respect, the meeting noted with appreciation that the use of ICARD for the allocation of five letter name codes in the MID Region has been very efficient during the past two years. It was also highlighted that ICARD was an excellent tool for the elimination of duplicate codes.

5.3.7   In connection with the above, the meeting noted that during the ATM/SAR/AIS SG/8 meeting, UAE raised concern about the mechanism used for the amendment of the Basic Air Navigation Plan to reflect the changes of the ATS route network and suggested that the list of ATS routes be transferred from the Basic ANP to the FASID. In this regard, it was recalled that the Second Inter-Regional Coordination Meeting on interface issues between APAC, EUR and MID Regions (IRCM/2) held in Paris, 11-14 September 2006, addressed this issue and agreed that the current ATS route network planning process is a very cumbersome and lengthy exercise, requiring each time a formal process of amendment to the Basic ANP. This process usually takes a significant amount of time and does not meet the needs of States and airspace users. Taking into consideration the new and rapidly changing environment, the meeting recognized that a significant revision of the current regional ANPs philosophy is required in order to reconcile it with the ATM operational concept and the new Global ANP provisions. In this regard, the meeting noted with appreciation that the ANC has instructed the ICAO Secretariat to amend the structure of the ANPs in order to align them with the Global Plan.

5.3.8   Based on the above, the meeting reviewed and endorsed the revised version of the MID Basic ANP Table ATS 1 as at **Appendix 5.3A** to the Report on Agenda Item 5.3 and supported the initiative of creating the "Future ATS Route requirements" list as at **Appendix 5.3B** to the Report on Agenda Item 5.3. The meeting agreed also that the ATM/SAR/AIS Sub-Group should carry out a thorough/radical review of the ATS route network in the MID Region, taking into consideration the concern raised by IATA and the proposal to define city-pairs routes.

5.3.9   The meeting, accordingly, agreed to the following Decision:

DECISION 10/24:   MID ATS ROUTE NETWORK

> *That,*
>
> a)   *the Secretariat initiates action, in accordance with established procedures, for the amendment of the MID Basic ANP Table ATS 1 to reflect the changes at **Appendix 5.3A** to the Report on Agenda Item 5.3; and*

b) *the list of Future ATS Route requirements at **Appendix 5.3B** to the Report on Agenda Item 5.3, be used within the framework of the ATM/SAR/AIS Sub-Group for future improvements of the MID ATS route network.*

5.3.10   The meeting recalled that the IRCM/2 was of view that there is an urgent need for Afghanistan and Pakistan to adjust the Minimum Enroute Altitude (MEA) on ATS route P628/G792 from FL320 to FL300 for the sake of harmonization with Indian FIRs and to accommodate additional flight levels. In this regard, Pakistan informed the meeting that this issue has been addressed also within the framework of APANPIRG and that taking into consideration the current situation in Afghanistan, including the non-implementation of RVSM within Kabul FIR, and the lack of coordination between Kabul and Lahore ACCs (estimates are not sent by Kabul ACC, etc), the MEA on ATS route P628/G792 could not be lowered from FL320 to FL300 in the short term. Accordingly, the meeting was of view that this issue, along with all other issues related to Afghanistan, need to be addressed separately and necessitate further inter-regional coordination.

Civil/Military Coordination

5.3.11   The meeting was informed of the outcome of the Special Civil/Military Coordination Meeting (SCMCM) held in Sana'a, Yemen, from 18 to 19 June 2006 as reviewed by the ATM/SAR/AIS SG/8 meeting and noted that the SCMCM discussed mainly the following three (3) issues:

- Coordination between Military Authorities and ATS Authorities;
- Military activities over the high seas; and
- Uncoordinated flights over the Red Sea Area.

5.3.12   Based on the outcome of the SCMCM and the ATM/SAR/AIS SG/8, the meeting agreed to the following Conclusions:

CONCLUSION 10/ 25:   CIVIL/MILITARY COORDINATION

That, with a view to ensure effective/optimum civil/military co-ordination and joint use of airspace with a maximum degree of safety, regularity and efficiency of international civil air traffic, States that have not yet done so, are urged to:

a) *implement Assembly Resolution A35-14 Appendix P and the provision of Annexes 2, 11 and 15 as well as LIM MID (COM/MET/RAC) RAN Meeting 1996, Recommendations 2/9, 2/10 and 2/13;*

b) *give due consideration to the urgent establishment of civil/military coordination bodies for airspace management and air traffic control;*

c) *arrange for Letters of Agreement (LOAs) to be signed between ATS authorities and Military authorities in order to establish coordination procedures for the exchange of information; and*

d) *ensure that the Military authorities are:*

i. *fully involved in the airspace planning and management process;*

ii. *aware of the new developments in civil aviation; and*

iii. *involved in national, regional and international aviation meetings, workshops, seminars and training sessions, as appropriate.*

CONCLUSION 10/ 26:   *COORDINATION OF FLIGHTS OPERATING OVER HIGH SEAS*

That, taking into consideration that the Convention on International Civil Aviation shall be applicable only to civil aircraft:

a) *all parties involved are urged to ensure that proper coordination between the ATS authorities and foreign military units operating over the high seas be carried out to the extent practicable;*

b) *State aircraft operating in airspace over high seas, should:*

i) *adhere, to the extent practicable, to ICAO provisions; or*

ii) *operate with "Due Regard" for the safety of navigation of civil aircraft where there are operational situations that do not lend themselves to ICAO flight procedures.*

c) *States report any incident relating to uncoordinated flights operating over high seas, in a timely manner (within 15 days) and in accordance with the suggested mechanism illustrated in the flow chart at **Appendix 5.3C** to the Report on Agenda Item 5.3.*

CONCLUSION 10/27:   *UNCOORDINATED FLIGHTS OVER THE RED SEA AREA*

That,

a) *the procedures at **Appendix 5.3D** to the Report on Agenda Item 5.3 be followed by all civil uncoordinated flights and, to the extent practicable, by military aircraft operating over the Red Sea area;*

b) *States, that have not yet done so, publish an AIP Supplement, as soon as possible, for the promulgation of these procedures;*

c) *IATA continue its effort in ensuring that concerned operators are fully conversant with these procedures;*

d) *all parties involved, through their proper channels, take appropriate action to ensure that the airspace users be informed of and comply with the agreed procedures; and*

e) *States:*

i) *report without delay all incidents relating to civil uncoordinated flights over the Red Sea Area; and*

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> ii) report any incident relating to State aircraft operating over the Red Sea Area, in a timely manner (within 15 days) and in accordance with the suggested mechanism illustrated in the flow chart at **Appendix 5.3C** to the Report on Agenda Item 5.3.

RVSM operations and monitoring activities in the MID Region

5.3.13   The meeting was informed of the outcome of the ATM/SAR/AIS SG/8 and MID RMA Board/4 meetings related to RVSM operations and monitoring activities in the MID Region. The meeting noted that the outcome of the ATM/SAR/AIS SG/8 related to the subject was based on the reports of the MID RMA/1 meeting (Cairo, 14 –15 June 2005), MID RMA Board/1 meeting (Cairo 05–06 September 2005), MID RMA Board/2 meeting (Bahrain, 27–28 February 2006) and the RVSM TF/12 meeting (Cairo, 29 - 31 May 2006).

5.3.14   The meeting recalled that MIDANPIRG/9, under Conclusion 9/13, agreed that the MID Regional Monitoring Agency (MID RMA) be established for carrying out RVSM and eventually, RNP and RNAV related duties and responsibilities in the MID Region as soon as possible and developed an Action Plan for the set up of the MID RMA. The revised duties and responsibilities of the MID RMA as well as the agreed principles for its establishment are at **Appendices 5.3E** and **5.3F** to the Report on Agenda Item 5.3, respectively.

5.3.15   The meeting noted that the MID RMA/1 meeting and the MID RMA Board/1 meeting further updated the initial action plan developed by MIDANPIRG/9 relative to the establishment of the MID RMA and that all issues pertaining to the modalities, organizational structure and funding mechanism of the MID RMA have been discussed, which lead to the establishment of the MID RMA in Bahrain, effective 24 November 2005, with the help of EUROCONTROL and based on the offer made by Bahrain to establish and host the MID RMA, providing the required resources and ensuring the administrative management (provision and management of Staff). The meeting noted also with appreciation that Bahrain offered to pay for the set up of the MID RMA without waiting for MID States' contributions, provided that Bahrain recover the cost through the agreed funding mechanism.

5.3.16   With a view to resolve the legal issues related to the membership, funding, duties and responsibilities of the MID RMA, a Memorandum of Agreement (MOA) has been signed by ten (10) participating States as at **Appendix 5.3G** to the Report on Agenda Item 5.3. Accordingly, the MID RMA Board agreed that the funding mechanism for the first year of operation of the MID RMA be based on contributions from the ten (10) participating States on equal share basis.

5.3.17   The meeting noted that the MID RMA Board/2 meeting further reviewed the progress of the MID RMA Project and agreed to the main points of negotiation for a Custodian Agreement, which describes exactly the support functions of ICAO in the MID RMA. The Custodian Agreement signed by the three concerned parties (the ICAO Secretary General, The Under Secretary Civil Aviation Affairs of Bahrain and the MID RMA Board Chairman) is at **Appendix 5.3H** to the Report on Agenda Item 5.3.

5.3.18   The meeting recalled that the MID RMA Board/3 meeting (Muscat, Oman, 24-25 November 2006) noted that the approach adopted in the MID Region for the implementation of an RMA cost recovery arrangement has the essential elements of the model recommended by ALLPIRG/5 and the sixth meeting of the Air Navigation Services Economic Panel (ANSEP/6), Montreal, 27-31 March 2006, which adopted the step-by-step approach procedure for implementation of an RMA cost recovery arrangement as at **Appendix 5.3I** to the Report on Agenda Item 5.3.

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5.3.19   Based on the above, the meeting noted that the directives on global approach to cost recovery of RMAs did not mention a specific funding mechanism, nevertheless the issue of RMA cost sharing arrangements was left to the PIRGs decision.

5.3.20   Taking into consideration the MMS/3 recommendation on the subject of the MID RMA funding mechanism and the characteristics of the MID Region and its areas of major flow, the meeting noted with appreciation that during the MID RMA Board/3 meeting Jeddah, 2006. new MID RMA funding mechanism has been agreed upon and accordingly the MID RMA participating States were divided into two categories, as follows:

- **Category 1**: Bahrain, Egypt, Iran, Oman and Saudi Arabia will be paying 15% each of the yearly total cost of operation of the MID RMA, and

- **Category 2**: Jordan, Kuwait, Lebanon, Syria and Yemen will be paying 5% each of the yearly total cost of operation of the MID RMA.

5.3.21   The meeting noted with concern that although the contributions of MID RMA Member States for the first year of operation of the MID RMA should have been paid before 30 June 2006, on the basis of the invoices issued by ICAO on 30 May 2006, Iran, Lebanon and Syria have not yet paid their contributions. It was also noted that the payment from Iran for the second year of operation of the MID RMA is also still pending. Accordingly, the meeting urged Iran, Lebanon and Syria to pay their contributions, as soon as possible, and in any case before 31 May 2007.

5.3.22   Based on the outcome of all MID RMA Board meetings related to the set up, administrative management, membership and funding mechanism of the MID RMA, the meeting agreed to the following Conclusions and Decisions:

CONCLUSION 10/28:   *INITIAL SET UP AND ADMINISTRATIVE MANAGEMENT OF THE MID RMA*

That,

a) *Bahrain pays for the initial set up of the MID RMA without waiting for MID States contributions and the cost is recovered through the agreed funding mechanism, in coordination with the ICAO Technical Cooperation Bureau; and*

b) *Bahrain is responsible for the administrative management of the MID RMA.*

DECISION 10/29:   *ESTABLISHMENT OF THE MID RMA BOARD*

That,

a) *a MID RMA Board is established with Terms of Reference (TOR) as at **Appendix 5.3J** to the Report on Agenda Item 5.3; and*

b) *the MID RMA Board is to be composed of a focal point nominated by each Member State.*

CONCLUSION 10/ 30:   *MEMBERSHIP OF THE MID RMA*

> *That,*
>
> a) *Bahrain, Egypt, Iran, Jordan, Kuwait, Lebanon, Oman, Saudi Arabia, Syria and Yemen committed themselves to participate in the MID RMA project; and*
>
> b) *taking into consideration the tremendous efforts deployed by UAE in the preparation for the successful and safe implementation of RVSM in the MID Region, UAE is:*
>
> > i. *invited to join the MID RMA Project; and*
> >
> > ii. *is to be exempted from the payment of contributions for the first ten (10) years of operation of the MID RMA*
> > .

CONCLUSION 10/31:   *EUROCONTROL SUPPORT TO THE MID RMA*

> *That,*
>
> a) *the EUROCONTROL support for the set up and operation of the MID RMA is appreciated; and*
>
> b) *the good cooperation between the MID RMA and EUROCONTROL is to be continued.*

CONCLUSION 10/32:   *MID RMA PROJECT*

> *That,*
>
> a) *the Memorandum of Agreement (MOA) at **Appendix 5.3G** to the Report on Agenda Item 5.3 constitute the legal document related to the establishment, funding and management of the MID RMA; and;*
>
> b) *the Custodian Agreement between ICAO, the MID RMA Board and Bahrain at **Appendix 5.3H** to the Report on Agenda Item 5.3, signed by the ICAO Secretary General, the Under Secretary for Civil Aviation Affairs of Bahrain and the MID RMA Board Chairman on behalf of the MID RMA participating States, represents the legal document which describes the support functions provided by ICAO in the MID RMA project*
> .

CONCLUSION 10/33:   *FUNDING MECHANISM OF THE MID RMA*

> *That,*
>
> a) *the activities of the MID RMA be ensured through contributions from all MID RMA Member States, which could be recovered in accordance with ICAO Policies on charges for Airports and Air Navigation Services (Doc 9082), in coordination with IATA;*
>
> b) *Bahrain, Egypt, Iran, Oman and Saudi Arabia pay 15% each of the yearly operating budget of the MID RMA;*

c) Jordan, Kuwait, Lebanon, Syria and Yemen pay 5% each of the yearly operating budget of the MID RMA;

d) the budget estimate for the MID RMA operation for each year be prepared/approved by the MID RMA Board before 30 April;

e) the MID RMA participating States pay their contributions on a yearly basis not later than 1 November of each year based on the invoices issued by ICAO;

f) the MID RMA Board Chairman, in compliance with the Custodian Agreement and based on the agreed funding mechanism and the estimation of the yearly operating budget of th MID RMA, be delegated the authority to certify on behalf of the MID RMA Participating States the requests for advance payment to the MID RMA on 1 December of each year;

g) the bills related to the MID RMA expenses be certified by the MID RMA Board chairman and reviewed by the MID RMA Board at each of its meetings;

h) in case the contributions for one year exceed the yearly cost for the operation and management of the MID RMA, the difference be deducted from the contributions of the next year(s); and

i) the MID RMA funding mechanism be revised by the MID RMA Board when necessary.

CONCLUSION 10/34:   *MID RMA PROJECT ACTION PLAN/TIMELINES*

That,

a) the MID RMA Project Action Plan/Timelines is updated by the MID RMA Board as at **Appendix 5.3K** to the Report on Agenda Item 5.3; and

b) concerned parties take necessary measures to expedite the implementation of the required actions on a timely manner.

5.3.23   The meeting noted that the RVSM TF/12 meeting reviewed some ATC operation aspects pertaining to RVSM operations including the requirements for ATS routes, the communications problems between ACCs and within some FIRs (mainly Baghdad FIR) and the problems associated with the delay in the processing/transmission of flight plans (FPLs). The meeting recalled that this has been reviewed by the ATM/SAR/AIS SG/8 meeting that addressed also the issue of implementation of RVSM within Baghdad and Kabul FIRs and noted with concern the difficulties Afghanistan and Iraq are facing to set up an appropriate independent (national) ATC system. The main problems are related to the communication infrastructure, the availability and training of air traffic controllers and the uncoordinated military activities. The meeting noted that implementation of RVSM within Baghdad FIR is not a priority at present since the pre-requisites for this are not met/available and that a period of two years would be sufficient for Afghanistan to meet the ICAO requirements to go ahead with the RVSM implementation.

5.3.24   Based on the above, the meeting agreed to the following Conclusions emanating from the ATM/SAR/AIS SG/8 meeting:

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CONCLUSION 10/35:   REQUIREMENTS FOR PROVISION OF DATA TO THE MID RMA

That, considering the on-going requirement for RVSM safety assessment in the MID Region:

a) *States not providing the required data to the MID RMA, in accordance with the requirements of safety monitoring agencies, be included in the MIDANPIRG List of air navigation deficiencies;*

b) *the MID RMA ensure that the requests for provision of data are extended to MID States' RVSM Programme Managers and their Alternates in order to carry out the necessary internal coordination and speed up the process of collection of data; and*

c) *States ensure that good communication and cooperation between the RVSM Programme Managers and the MID RMA Board Members is established and observed.*

CONCLUSION 10/36:   SPECIAL BAGHDAD FIR COORDINATION MEETING

That, with a view to address coordination issues between Iraq and its adjacent States, a Special Baghdad FIR Coordination Meeting be organized under the aegis of ICAO with the attendance of Bahrain, Iraq, Iran, Jordan, Kuwait, Saudi Arabia, Syria, Turkey, IATA, IFALPA, FAA, the Combined Forces Air Component Commander (CFACC) and the MID RMA.

CONCLUSION 10/37:   FLEXIBLE HANDLING OF TRAFFIC INTENDING TO USE THE RVSM AIRSPACE

That, in accordance with the provisions of the ATC MANUAL FOR A REDUCED VERTICAL SEPARATION MINIMUM (RVSM) IN THE MID REGION, and with a view to enhance the safety and efficiency of air navigation in the MID Region:

a) *States are urged to refrain from taking actions unilaterally to systematically penalize the flights intending to use the RVSM airspace when:*

i)   *there's a doubt about the aircraft's RVSM approval status (missing of letter "W" from the FPL); or*
ii) *the FPL was not received; and*

b) *States are invited to show more flexibility in dealing with this issue.*

5.3.25   The meeting noted that the MID RMA Board/3 meeting, under Draft Conclusion 3/4, requested that the RVSM post implementation safety analysis report be ready before 15 March 2007. It was noted with appreciation that States have put all effort to provide the requested data in a timely manner and that the MID RMA Team worked very hard, in coordination with EUROCONTROL, to meet the deadline for the development of the RVSM Safety Monitoring Report (SMR) for 2006, which was presented to the MID RMA Board/4 meeting (Cairo, 21-22 March 2007). In this regard, the meeting reiterated its thanks and appreciation to EUROCONTROL for all the support provided to the MID RMA and to the Region.

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5.3.26   The meeting reviewed and approved the SMR for 2006 and noted that the assessment was based on four safety objectives:

- **Safety Objective 1**: that the vertical-collision risk in MID RVSM airspace due solely to technical height-keeping performance meets the ICAO target level of safety (TLS) of 2.5×10^{-9} fatal accidents per flight hour.

- **Safety Objective 2**: that the overall vertical-collision risk – i.e. the overall risk of mid-air collision in the vertical dimension in MID RVSM airspace meets the ICAO overall TLS of 5×10^{-9} fatal accidents per flight hour.

- **Safety Objective 3:** address any safety-related issues raised in the SMR by recommending improved procedures and practices.

- **Safety Objective 4:** propose safety level improvements to ensure that any identified serious or risk-bearing situations do not increase and, where possible, that they decrease. This should set the basis for a continuous assurance that the operation of RVSM will not adversely affect the risk of en-route mid-air collision over the years.

5.3.27   The meeting noted that, subject to the limitations of data available and the collision risk model used, the SMR demonstrated that the Middle East RVSM operations met three safety objectives (1, 3 and 4) out of the four principal safety objectives. For Safety Objective #2 (i.e. that the overall risk of mid-air collision in the vertical dimension in MID RVSM airspace meets the ICAO overall TLS of 5×10^{-9} fatal accidents per flight hour), it was not possible to assess its compliance as no suitable information was available to provide an estimate for the overall vertical-collision risk:

− The computed vertical-collision risk due to technical height-keeping performance is 2.17×10^{-14}, which meets the ICAO technical TLS of 2.5×10^{-9} fatal accidents per flight hour.

− The SMR 2006 does not provide an estimate for the overall vertical-collision risk because of the absence of suitable information on atypical errors; therefore it was not possible to assess compliance with the ICAO overall TLS of 5×10^{-9} fatal accidents per flight hour. Nevertheless, the SMR provides recommendations to the MID RMA for collecting that information for future assessments.

− All safety related issues regarding the Middle East RVSM operations have been identified and improved procedures and practices have been recommended for future MID RMA practices.

− Current risk bearing situations have been identified in the Report and actions have been proposed to the MID RMA to ensure relevant information is collected in order to identify operational issues and potential mitigations.

5.3.28   With regard to the assessment of the overall vertical-collision risk (Safety Objective 2), the meeting recognized that without data, it would be impossible to assess compliance with the ICAO overall TLS of 5×10^{-9} fatal accidents per flight hour. In this respect, the meeting highlighted the importance of reporting the Altitude Deviations on a monthly basis and recalled that this was requested for the development of the RVSM pre-implementation safety analysis and requested by MIDANPIRG under Conclusion 8/24 which was replaced by MIDANPIRG/9 Conclusion 9/23.

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5.3.29   The meeting agreed that the MID RMA continue the monitoring of RVSM operations in the whole Middle East RVSM airspace over the months by the collection of altitude deviation reports from the participating States. It was highlighted that these reports should describe the nature, duration and length of the altitude deviation itself. The meeting recognized also the necessity for the provision of radar data especially for those areas where the density of traffic is very important. This data is used to calculate the passing frequency which represents one of the values used by the EUROCONTROL's Model. It was clarified that radar data will be requested only for those RVSM approved aircraft equipped with transponder and operating between FL290 and FL410. The meeting agreed that the MID RMA buy a new software for the recording and analysis of radar data and noted with appreciation that Bahrain, Oman, Saudi Arabia, Syria and Yemen agreed to provide the MID RMA with radar data, as and when required.

5.3.30   Based on the above, the meeting agreed that the next SMR report should be ready before 1 September 2008, with a view to be presented to MIDANPIRG/11. For this purpose, it was agreed that the SMR 2007-2008 be based on FPL/traffic data for the month of November 2007. Accordingly, the meeting agreed to the following Conclusions emanating from the MID RMA Board/4 meeting:

CONCLUSION 10/38:   MID RVSM OPERATIONS SAFETY ASSESSMENT

> *That, the safety assessment of RVSM operations in the MID Region be based on the following safety objectives:*
>
> a) **Safety Objective 1***: that the vertical-collision risk in MID RVSM airspace due solely to technical height-keeping performance meets the ICAO target level of safety (TLS) of 2.5 x 10^{-}9 fatal accidents per flight hour;*
>
> b) **Safety Objective 2***: that the overall vertical-collision risk – i.e. the overall risk of mid-air collision in the vertical dimension in MID RVSM airspace meets the ICAO overall TLS of 5 x 10^{9} fatal accidents per flight hour;*
>
> c) **Safety Objective 3***: address any safety-related issues raised in the SMR by recommending improved procedures and practices; and*
>
> d) **Safety Objective 4:** *propose safety level improvements to ensure that any identified serious or risk-bearing situations do not increase and, where possible, that they decrease. This should set the basis for a continuous assurance that the operation of RVSM will not adversely affect the risk of en-route mid-air collision over the years.*

CONCLUSION 10/39:   STATUS OF MID RVSM SAFETY OBJECTIVES

> *That, the RVSM operations within the airspace of the MID RMA Member States:*
>
> a) *met safety objectives #1, #3 and #4; and*
>
> b) *had not been possible to assess against safety objective #2.*

5.3-12

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CONCLUSION 10/40:   *SUSTAINED RVSM SAFETY ASSESSMENT ACTIVITY IN THE MID REGION*

    That, considering the on-going requirement for RVSM safety assessment in the MID Region:

    a) The MID RMA is responsible for the development of the RVSM Safety Monitoring Reports (SMR);

    b) the MID RMA determine the exact type and format of data necessary for performing collision risk calculations and inform States accordingly;

    c) States provide the required data in a timely manner. The data will include, but not necessarily be limited to:

        i)   approval of operators and aircraft for RVSM operations (monthly);

        ii)   altitude deviations of 300 ft or more (monthly);

        iii)   ATC/ATC coordination failures (monthly); and

        iv)   traffic data (as requested by the MID RMA);

    d) the MID RMA coordinate with Bahrain, Oman, Saudi Arabia, Syria and Yemen for the recording and analysis of radar data, as and when required.

CONCLUSION 10/41:   *MID RVSM SAFETY MONITORING REPORT FOR 2007-2008*

    That,

    a) the MID RVSM Safety Monitoring Report (SMR) for 2007-2008 be ready before 1 September 2008; and

    b) the FPL/traffic data for the month of November 2007 be used for the development of the SMR 2007-2008.

Performance Based Navigation

5.3.31   The meeting recalled that a number of different perspectives in relation to several aspects of required navigation performance (RNP) and area navigation (RNAV) exist within the international civil aviation community. In particular, the naming conventions associated with RNP have not provided clear understanding regarding concepts, terminology and definitions, and different navigation specifications for similar RNAV applications have been developed. Consequently, divergences in regional implementations had resulted in lack of harmonization between RNP and/or RNAV applications in different areas of the world. Accordingly, ICAO, with the assistance of the RNP Special Operational Requirements Study Group (RNP SORSG), commenced work to ensure a common global understanding of RNP/RNAV and the relationship between RNP and RNAV system functionality.

5.3.32   The meeting noted that the RNP SORSG, which met for the first time in April 2004, is reviewing RNP and RNAV to address current proliferation and to develop a basis for current and future requirements for Performance Based Navigation (PBN). It was also noted that the study group's work is reaching a mature stage and the outcome is expected to be presented to the Air Navigation Commission in the first half of 2007.

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5.3.33   The meeting further noted that the ATM/SAR/AIS SG/8 meeting addressed the issue of Performance Based navigation (PBN). It was recalled in this regard that in the Global Plan, Global Plan Initiatives (GPIs) have been developed to support performance objectives and that GPI-5 is related to Performance Based Navigation "*RNAV and RNP (PBN)*".

5.3.34   As aircraft systems evolved, it became apparent that the original ICAO provisions were not sufficient to meet all of industry's demands, and consequently they were unable to prevent the development of partially divergent industry specifications. Particularly, there was a need among the industry community to develop RNP in the terminal airspace, as the current ICAO RNP provisions are insufficient to meet terminal airspace and approach requirements. In light of this, RTCA developed the RNP RNAV concept (RTCA DO236). The main differences between ICAO "RNP" and industry "RNP RNAV" is functional integrity[1] vs. containment integrity[2] and continuity.

5.3.35   The meeting was informed that the RNP SORSG identified that the main issue was that RNP, as currently defined by ICAO, did not specify the requirement for on-board performance monitoring and alerting, which is the function on board the aircraft that detects and informs the crew when the RNAV system is unable to satisfy the performance prescribed in the navigation specification. Considering that the navigation containment is based on accuracy, functional integrity, continuity and systems availability, RNP SORSG agreed on the need to specify future applications of performance based navigation without a requirement for on-board performance monitoring and alerting, to be designated as RNAV, and applications with a requirement for on-board performance monitoring and alerting, to be designated as RNP, thereby addressing the current confusion and differences of opinion about what is RNP. The table below illustrates this:

Navigation Specification Designation	Current Scenario	New Scenario (PBN concept)
RNP x	*ICAO*: with or without performance monitoring and alerting requirement (vaguely addressed) *Industry (RTCA and Eurocae)*: Only with performance monitoring and alerting requirement	Performance monitoring and alerting requirement
RNAV x	*ICAO:* designations do not exist *States and Regions:* differing State and Regional designations do exist	No performance monitoring and alerting requirement

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1 Integrity: The ability of a system to provide timely warnings to users when the system should not be used for navigation. (ICAO *Manual of Required Navigation Performance*, Doc 9613)

2 Containment integrity: A measure of confidence in the estimated position, expressed as the probability that the system will detect and annunciate the condition where the TSE is greater than the cross track containment limit. (RTCA DO236)

5.3.36   The meeting noted that the work of the RNP SORSG is presently progressing very well, and in order to harmonize PBN between States, the RNAV and RNP applications were agreed as follows:

Area of Application	Navigation Accuracy (NM)	Designation of Navigation Standard (current)	Designation of Navigation Standard (new)	Requirement for performance monitoring and alerting
Oceanic/Remote	10	RNP 10	RNAV 10 (RNP 10 label)	no
	4	RNP 4	RNP 4	yes
Enroute – Continental	5	RNP 5 Basic RNAV	RNAV 5	no
Enroute – Continental and Terminal	2	US-RNAV type A	RNAV 2	no
Terminal	1	US-RNAV type B and P-RNAV	RNAV 1	no

5.3.37   In addition to the harmonization of navigation specifications, as indicated in the above table, new navigation specifications were developed. For terminal area applications, Basic-RNP 1 was developed, and for approach, RNP Approach and RNP AR Approach navigation specifications were developed. RNP 2 and Advanced-RNP 1 will be addressed in a future revision to the PBN Manual. The diagram below shows all the navigation specifications agreed on by the RNP SORSG, as well as where they fit in the overall PBN concept:
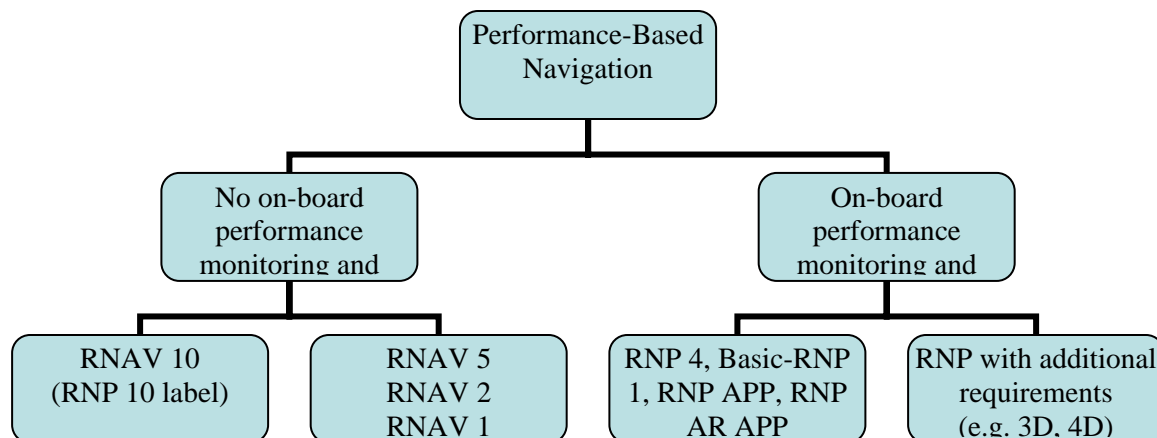
5.3.38   The meeting noted that, the Separation and Airspace Safety Panel (SASP) is in the process of drafting an amendment to Annex 11 – *Air Traffic Services*, Attachment B, *"Method of establishing ATS routes for use by RNAV-equipped aircraft"*, and its work includes updating relevant guidance material on safety and separation.

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5.3.39   The meeting was informed about the plan/timelines for the development of the revised *Performance Based Navigation Manual,* and other related ICAO provisions (amendments to various ICAO Annexes and guidelines).

5.3.40   The meeting noted that on 28 March 2007, at the occasion of the Worldwide Symposium on Performance of the Air Navigation System, an ad hoc meeting was held between ICAO, EUROCONTROL, FAA and IATA with the aim to agree on a strategic approach to ensure that there would not be a proliferation of implementations of PBN, that all States would use the guidance contained in the PBN Manual for their implementations, and to further investigate the means of assisting States with implementation and that a number of actions have been agreed upon.

5.3.41   It was also brought to the attention of the meeting that a Computer-based Training CD-ROM would be developed by EUROCONTROL and would be available soon and that a PBN Seminar, approved by the ICAO Council as a SIP for 2007, is scheduled to be held in the MID Region in November 2007.

5.3.42   The meeting recalled that, with a view to increase the efficiency of MIDANPIRG and its subsidiary bodies, the ATM/SAR/AIS SG/8 meeting agreed with the recommendation of the MMS/3 meeting to merge the RVSM and RNP/RNAV Task Forces into a new single Task Force, considering that the work programme of the RVSM Task Force has been almost completed after the successful and safe implementation of RVSM in the MID Region. Accordingly, the meeting reviewed the Terms of Reference of the newly established RVSM/PBN Task Force as at **Appendix 5.3L** to the Report on Agenda Item 5.3 and agreed to the following Decisions:

DECISION 10/42:   ESTABLISHMENT OF THE RVSM/PBN TASK FORCE

*That, the RVSM and RNP/RNAV Task Forces are merged to become the RVSM/PBN Task Force with the Terms of Reference as at **Appendix 5.3L** to the Report on Agenda Item 5.3.*

DECISION 10/43:   MID REGION PBN STRATEGY

That, the RVSM /PBN Task Force:

a) follow up the developments related to Performance Based Navigation (PBN); and

b) develop a MID Region strategy to implement the PBN concept.

SSR Code Allocation Plan (CAP) for the MID Region

5.3.43   The meeting recalled that ICAO MID Regional Office had been assigning codes to MID Region States upon request, from the list of SSR codes assigned to the MID Region based on SSR Code Allocation Plan (CAP), which was last reviewed by MIDANPIRG/2 meeting in 1995 and endorsed by the LIM MID RAN (COM/MET/RAC) Meeting in 1996.

5.3.44   MIDANPIRG/9 meeting in 2005, noting the sustained traffic growth in the MID Region, endorsed an updated list of SSR codes assignment system for domestic and transit purposes for the MID Region. Furthermore, taking into account acute shortage of SSR codes being experienced in the EUR/NAT Region and the need to avert a similar situation in the MID Region, MIDANPIRG/9 assigned the ATM/SAR/AIS Sub-Group to review the allocation of SSR codes in the MID Region.

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5.3.45 The meeting noted that the Second Inter-Regional Coordination Meeting between ICAO APAC, EUR/NAT and MID Regional Offices (IRCM/2) held in Paris, September 2006, was of the opinion that the MID Region, in order to solve the problems of SSR codes allocation, should as matter of urgency, exploit the basic principles of ORCAM including the establishment of Participating Areas (PAs) in the MID Region.

5.3.46 The meeting was apprised of the action taken by the ATM/SAR/AIS SG/8 meeting in November 2006 in view of MIDANPIRG Conclusion 9/21 including problems that were related to differences in the SSR code assignments and the formation of the SSR Study Group and its terms of reference.

5.3.47 The meeting accordingly, requested the ATM/SAR/AIS Sub-Group to continue the review of SSR code allocation, considering as necessary the possibility of implementing the basic ORCAM principles including the establishment of PAs in the MID Region, and to amend the MID FASID Document as appropriate.

5.3.48 Based on the above the meeting agreed to the following Decision:

DECISION 10/44: *ESTABLISHMENT OF A MID REGION SSR CODE STUDY GROUP*

That, the MID Region SSR Code Study Group is established with the Terms of Reference as at Appendix 5.3M to the Report on Agenda Item 5.3.

Contingency Plans

5.3.49 The meeting recalled that in accordance with the provisions of Annex 11, Air Traffic Services (ATS) authorities shall develop and promulgate contingency plans for implementation in the event of disruption or potential disruption of ATS and supporting services in the airspace for which they are responsible for such services. In this regard, the meeting also recalled MIDANPIRG/8 Conclusion 8/19 *The Development and Promulgation of Contingency Plans* which called for States to implement, with the assistance of ICAO, the provisions of Annexes 11 and 15, and Decision 9/41 *MID Regional Contingency Plan For ATM/CNS*, which, *inter alia*, required relevant MIDANPIRG subsidiary bodies to revise their terms of reference to support the process of developing a MID Regional contingency plan.

5.3.50 The meeting noted the development of contingency plans which was in progress in some States. However, the meeting noted with concern that the development and promulgation of contingency plans in the MID Region remained far below expectation.

5.3.51 The meeting recognize that, it could take some time before a need arises for the implementation of a specific contingency plan, within which period there may be changes in routes, events, ATS and related capabilities, etc., which necessitate review and updating of the plans. The meeting also recalled that deviations from the Air Navigation Plan (ANP) were to be approved by the President of the ICAO Council, on behalf of the Council.

5.3.52 The meeting was apprised of the use of the template at **Appendix 5.3N** to the Report on Agenda Item 5.3, which is commonly used in other ICAO Regions to, *inter alia*, reduce diversity in the development of the various States' contingency plans, and to facilitate final review as the need for implementation of a particular plan becomes imminent.

5.3.53   Based on the above, the meeting agreed to the following Conclusion, which is to supersede MIDANPIRG/8 Conclusion 8/19 and MIDANPIRG/9 Decision 9/41:

CONCLUSION 10/45:   DEVELOPMENT AND PROMULGATION OF CONTINGENCY PLANS

> *That,*
>
> a) *States are urged to develop and promulgate contingency plans in accordance with Annex 11 and Annex 15 provisions;*
>
> b) *ICAO MID Office carry out a survey on the status of development and promulgation of contingency plans in the Region;*
>
> c) *States use the template at **Appendix 5.3N** to the Report on Agenda Item 5.3 for the development and promulgation of contingency plans; and*
>
> d) *the relevant subsidiary bodies of MIDANPIRG revise their Terms of Reference (TOR) to include the development of regional guidance material leading to a MID Regional Contingency Plan for ATM including supporting CNS elements.*

5.3.54   The meeting noted with appreciation the development of a contingency plan by Saudi Arabia, and that the contingency plan largely met the national requirements. The meeting noted however, that more work on the plan was still necessary in order to fully comply with the provisions of Annex 11, and to meet the MID Region contingency plan requirements. Saudi Arabia was requested to refer the plan to the ATM/SAR/AIS Sub-Group. The meeting also noted that contingency plan was under development in Lebanon.

Language Proficiency

5.3.55   The meeting recalled that in accordance with Annex 1 to the Convention, as of 5 March 2008, aeroplane, airship, helicopter and powered-lift pilots, air traffic controllers and aeronautical station operators, shall demonstrate the ability to speak and understand the language used for radiotelephony communication to the level specified in the language proficiency requirements in Appendix 1 of the Annex.

5.3.56   The meeting noted that ICAO Doc 9835 – '*Manual on Implementation of ICAO Language Proficiency Requirements,*' provides guidance material and valuable information on a range of aspects related to language proficiency training and testing.

5.3.57   The meeting also noted that in some States in the MID Region, Air Traffic Services were provided through the use of two languages: national language and English. The meeting acknowledged however, that the use of more than one language in the same environment could lead to degradation of situational awareness for flight crews who do not understand both the languages used for radiotelephony in that environment.

5.3.58   The meeting agreed that the establishment of a single-language radiotelephony environment that would rely only on the English language, based on the new ICAO language proficiency requirements, would decisively improve communication effectiveness in air traffic services and would therefore significantly contribute to improvement of safety. The meeting also recalled the provisions Annex 10, Volume II regarding the use of standardized phraseology, which has been developed and published by ICAO.

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5.3.59   The meeting was informed that a Language Proficiency Seminar, approved by ICAO as a SIP for 2007, is scheduled to be held in the MID Region in September 2007.

5.3.60   Based on the above, the meeting urged States to take necessary measures to ensure that the ICAO language proficiency provisions are implemented, and accordingly, agreed to the following Conclusions:

CONCLUSION 10/46:   *ICAO LANGUAGE PROFICIENCY*

That, with a view to expedite the process of implementation of the ICAO Language Proficiency requirements, States are urged to:

a) *ensure that all stakeholders (pilots, controllers, language teachers, regulator,s etc.) are familiar with the ICAO language proficiency requirements;*

b) *adopt/incorporate the ICAO language proficiency requirements (Amendment 164 to Annex 1) into national legislation;*

c) *establish a plan to coordinate administrative and training matters (testing, number of personnel to be trained, training centres, duration of training, etc.);*

d) *develop/select test(s) to meet ICAO language proficiency requirements;*

e) *assess current language proficiency level of controllers and pilots, according to the ICAO rating scale;*

f) *develop language training packages designed to reduce the gap between current language proficiency level and ICAO Level 4;*

g) *develop language training package to maintain language proficiency and a schedule of language refresher training;*

h) *review recruitment and selection procedures and consider a minimum of at least ICAO level 3 in language proficiency before entry to professional training programmes; and*

i) *present reports to ICAO on progress achieved in preparing for implementation of ICAO language proficiency requirements, on regular basis.*

CONCLUSION 10/47:   *USE OF THE ENGLISH LANGUAGE AND STANDARD ICAO PHRASEOLOGY*

That,

a) *States are urged to ensure that their air traffic controllers and pilots use the standard ICAO phraseology in aeronautical communication; and*
b) *in order to improve situational awareness and prevent the occurrence of ATS incidents and accidents, States are invited to implement measures that require or encourage air traffic controllers and pilots to:*

   i.   *use as much as possible the English language in aeronautical communication; and*

> *ii.* *use only the English language in aeronautical communication, in all situations where at least one of the pilots in the environment (sector) does not speak the national language.*

A380 Wake Turbulence

5.3.61   The meeting noted that revised guidance material on the subject of the Airbus A380 aircraft wake vortex aspects had been provided to MID States by ICAO through a State Letter in October 2006. The material was strongly recommended to be used, pending amendment of *Procedures for Air Navigation Services — Air Traffic Management* (PANS-ATM, Doc 4444).

Status of implementation of Search and Rescue (SAR) in the MID Region

5.3.62   The meeting recalled that the basic principles, operational requirements and planning criteria regarding search and rescue services, had been developed for the MID Region and were indicated in the MID Basic Air Navigation Plan (ANP).

5.3.63   The meeting recognized the important role of SAR agreements, particularly for border areas where concerns for sovereignty and for saving lives must be balanced, high sea areas, and inhospitable areas where rapid response is essential to successful SAR operations. In this regard, the meeting noted with appreciation the ongoing development of SAR agreements between some of the MID States. The meeting noted that Volume 1 of ICAO Doc 9731, *International Aeronautical and Maritime Search and Rescue (IAMSAR)* Manual provided a sample agreement that could be used by the MID States in their agreements. Accordingly, the meeting agreed to the following Conclusion:

CONCLUSION 10/48:   SEARCH AND RESCUE (SAR) AGREEMENTS

> *That, with a view to strengthen search and rescue cooperation and coordination:*
>
> a) *States are urged to sign SAR agreements with their neighbouring States; and*
>
> b) *the model of SAR agreement available in the International Aeronautical and Maritime Search and Rescue Manual (IAMSAR Manual) as at **Appendix 5.3O** to the Report on Agenda Item 5.3, be used to guide States in the development of their own SAR agreements.*

5.3.64   The meeting was apprised that the International 406 Mhz Beacon Registration Database (IBRD), which is an important supporting element of the satellite alert and location system that detects and distributes emergency signals transmitted by 406 Mhz emergency locator transmitters (ELTs), became operational on 16 January 2006, and that IBRD was managed and maintained by the Cospas-Sarsat Secretariat.

5.3.65   The meeting was apprised of the much enhanced services that will be provided by the Cospas-Sarsat System to users of 406 Mhz emergency locator transmitters (ELTs), over those available to 121.5/243 Mhz ELT users. The meeting noted however, that for the IBRD system to operate effectively, it requires that both the owners register their ELTs, and that SAR providers have access to registration databases.

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5.3.66   The meeting noted that the IBRD was not intended to replace existing national ELT registration facilities, but rather to supplement the 406 Mhz registration process by providing 24-hour access and to assist SAR service providers in retrieving valuable data during SAR operations. SAR service providers will be able to query the IBRD directly over the Internet at: http://www.406registration.com,   which is freely available. The process for registering an ELT is elaborated at the Cospas-Sarsat website at: http://www.cospas-sarsat.org.

5.3.67   The meeting also noted in particular, that the Cospas-Sarsat System will cease processing of 121.5/243 Mhz ELTs on 1 February 2009. To this effect, to continue receiving the Cospas-Sarsat services, owners and users of 121.5/243 Mhz ELTs should upgrade to 406 Mhz on a timely manner. Accordingly, the meeting agreed to the following Conclusion:

CONCLUSION 10/49:   406 MHZ BEACON REGISTRATION DATABASE (IBRD)

That, MID States are:

a) *urged to require ELT owners and users of 121.5/243 Mhz ELTs to upgrade to 406 Mhz ELT as soon as possible and in any case before 1 February 2009;*

b) *urged to require ELT owners to register their 406 Mhz ELTs in the IBRD database; and*

c) *invited to designate an IBRD focal point and request Cospas-Sarsat to allocate the designated person a user identification and password in order to access the IBRD database and take advantage of the service available.*

TABLE ATS 1 – ATS ROUTES
TABLEAU ATS 1 – ROUTES ATS
TABLA ATS 1 – RUTAS ATS

EXPLANATION OF THE TABLE

Column

   1   **Designator of ATS route.**

   2   **Significant points defining the ATS routes. Only prominent locations have been listed. Additional points where facilities are provided to complete navigational guidance along a route, but not otherwise marking significant characteristics of the route (change of heading of centre line, intersection with other routes, etc.) have normally not been included. Locations shown in parentheses indicate significant points outside the Region.**

  Note 1.   *Not representing the operator's requirements.* **Operator's required route and/or navaids are shown in square brackets ([ ]).**

  Note 2.   *Subject to further study.* **Including the associated navigation aid coverage.**

  Note 3   *Subject to military agreement.*

  Note 4.   *Not acceptable at present.*

  Note 5.   *At present, implementation possible only during specific periods (e.g. weekends, nights, etc., as published).*

  Note 6.   *At present, implementation of the RNAV route only possible above FL 300, or as published.*

  Note 7.   *Unidirectional use.*

Whenever reference to name States is made in Table ATS 1 in connection with the above notes, the following abbreviations, based on those indicated in Location Indicators (Doc 7910), are used:

HE	**Egypt**
HL	**Libyan Arab Jamahiriya**
HS	**Sudan**
LC	**Cyprus**
LL	**Israel**
OA	**Afghanistan**
OB	**Bahrain**
OE	**Saudi Arabia**
OI	**Iran, Islamic Republic of**
OJ	**Jordan**
OK	**Kuwait**
OL	**Lebanon**
OM	**United Arab Emirates**
OO	**Oman**
OP	**Pakistan**
OR	**Iraq**
OS	**Syrian Arab Republic**
OT	**Qatar**
OY	**Yemen**

Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2
LOWER AIRSPACE	

Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2
UPPER AIRSPACE	

A145	**(LUXOR)** **WEJH** **GASSIM** **KING FAHD**
A219	**(NAWABSHAH)** **SERKA 2951.0N 06615.0E** **KANDAHAR** **(TERMEZ)**
A408	**(ADDIS ABABA)** **SALEH 140000N 0420000E** **HODEIDAH**
A411	**(CAIRO)** **SHARM EL SHEIKH** **PASAM 2730.8N 03455.7E** ***Note 7(OE)** **WEJH** **KING ABDULAZIZ** **JAZAN** **SANA'A**
~~**A412**~~	~~**JERUSALEM * Note 4(OJ)**~~ ~~**AMMAN**~~ ~~**ZELAF 3257.0N 03800.0E**~~ ~~**TANF**~~
A413	**TESSO 2828.9N 04927.4E** **VUXAL 2835.5N 04946.1E** **ALNIN 2840.9N 05001.6E** **BUSHEHR**
A414	**GITLA 3219.1N 03402.8E** **(SITIA)**
A415	**KING KHALID** **DOHA * Note 5(OE,OB)** **SHARJAH**
A416	**ARDABIL** **RASHT** **NOSHAHR** **DASHTE NAZ** **SABZEVAR**

UA145	**(LUXOR)** **WEJH** **GASSIM** **KING FAHD**
UA219	**(NAWABSHAH)** **SERKA 2951.0N 06615.0E** **KANDAHAR** **(TERMEZ)**
UA408	**(ADDIS ABABA)** **SALEH 140000N 0420000E** **HODEIDAH**
UA411	**(CAIRO)** **SHARM EL SHEIKH** **PASAM 2730.8N 03455.7E** ***Note 7(OE)** **WEJH** **KING ABDULAZIZ** **JAZAN** **SANA'A**
~~**UA412**~~	~~**JERUSALEM* Note 4(OJ)**~~ ~~**AMMAN**~~ ~~**ZELAF 3257.0N 03800.0E**~~ ~~**TANF**~~
UA413	**TESSO 2828.9N 04927.4E** **VUXAL 2835.5N 04946.1E** **ALNIN 2840.9N 05001.6E** **BUSHEHR**
UA414	**GITLA 3219.1N 03402.8E** **(SITIA)**
UA415	**KING KHALID** **DOHA * Note 5(OE,OB)** **SHARJAH**
UA416	**ARDABIL** **RASHT** **NOSHAHR** **DASHTE NAZ** **SABZEVAR**

Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2
LOWER AIRSPACE	

Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2
UPPER AIRSPACE	

A417	**PUTRA 165432N 0525631E** **LOTEL 180926N0514103E** **IMPOS 183136N 0511848E** **SILPA 184953N 0510158E** **ASTIN 200410N 0495320E** **NONGA 205048N 0492014E** **ALRIK 220631N 0482535E** **AMBAG 230529N 0474611E** **RESAL 240649N 0470427E** **KIA 245310N 0464534E**
A418	**KUMUN 254000N 0551515E** **PAPAR 2640N 05427E* Note 7** **Segment KUMUN-PAPAR(OI and OM)** **SHIRAZ**
A419	**(ASHGABAT)** **RIKOP 3740.0N 05814.8E** **SABZEVAR** **TABAS** **DARBAND** **KERMAN** **BANDAR ABBAS** **DARAX 260942N 0555300E** **SHARJAH** **MIADA 245112N 0545736E** **MEMBI 243705N 0542631E *See** **Note 4 for segment KITAP-MEMBI** **KITAP 224928N 0522923E** **PURDA 210805N 0510329E** **ASTIN 200410N 0495320E** **~~DIXEL~~ KUTMA 182927N 0481202E** **SHARURAH (SHA)** **SANA'A** **HODEIDA**
A422	**UROMIYEH** **TABRIZ** **PARSABAD** **(BAKU)**
A424	**BAGHDAD** **RAFHA * Note 3** **HAIL**

UA417	**PUTRA 165432N 0525631E** **LOTEL 180926N0514103E** **IMPOS 183136N 0511848E** **SILPA 184953N 0510158E** **ASTIN 200410N 0495320E** **NONGA 205048N 0492014E** **ALRIK 220631N 0482535E** **AMBAG 230529N 0474611E** **RESAL 240649N 0470427E** **KIA 245310N 0464534E**
UA419	**(ASHGABAT)** **RIKOP 3740.0N 05814.8E** **SABZEVAR** **TABAS** **DARBAND** **KERMAN** **BANDAR ABBAS** **DARAX 260942N 0555300E** **SHARJAH** **MIADA 245112N 0545736E** **MEMBI 243705N 0542631E*See** **Note 4 for segment KITAP-MEMBI** **KITAP 224928N 0522923E** **PURDA 210805N 0510329E** **ASTIN 200410N 0495320E** **~~DIXEL~~ KUTMA 182927N 0481202E** **SHARURAH (SHA)** **SANA'A** **HODEIDA**
UA422	**UROMIYEH** **TABRIZ** **PARSABAD** **(BAKU)**
UA424	**BAGHDAD** **RAFHA * Note 3** **HAIL**

Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2
LOWER AIRSPACE	

Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2
UPPER AIRSPACE	

MADINAH
KING ABDULAZIZ

A451	**LUXOR** **ALEBA** **PORT SUDAN** **[ASMARA] * Note 1** **ASSAB 1304.0 N 04238.8E** **PARIM 1231.7N 04327.2E** **ADEN** **ANGAL 1614.0N 06000.0E** **(MUMBAI)**
A453	**KABUL** **GHAZNI** **KANDAHAR** **ZAHEDAN** **BANDAR ABBAS** **GHESHM (KHM)** **BANDAR LENGEH** **KISH** **MIDSI 2641.7N05152.5E** **PIMAL 2626.5N05122.1E** **BAHRAIN * Note 7 (OB, OI)**
A466	**(TERMEZ)** **AMDAR 3712.5N 06720.6E** **KABUL3431.1N 06909.1E** **SANAM 3305.0N 07003.0E** **(DERA ISMAIL KHAN)** **(JHANG 3116.0N 07218.0E)** **(SAMAR 3120.8N 07434.0E)** **(ASARI 3048.3N 07509.6E)**
A777	**TONVO 250500N 0563200E** **BUBAS 245938N 05700 03E** **NADSO 244957N 0574926E** **MIXOL 240618N 0592739E** **VAXIM 231900N 0611100E**
A788	**SHIRAZ** **BUSHEHR** **KAPIP 290217N 0500054E**

MADINAH
KING ABDULAZIZ

UA451	**LUXOR** **ALEBA** **PORT SUDAN** **[ASMARA] * Note 1** **ASSAB 1304.0N 04238.8E** **PARIM 1231.7N 04327.2E** **ADEN** **ANGAL 1614.0N 06000.0E** **(MUMBAI)**
UA453	**KABUL** **GHAZNI** **KANDAHAR** **ZAHEDAN** **BANDAR ABBAS** **GHESHM (KHM)** **BANDAR LENGEH** **KISH** **MIDSI 2641.7N05152.5E** **PIMAL 2626.5N05122.1E** **BAHRAIN * Note 7 (OB, OI)**
UA466	**(TERMEZ)** **AMDAR 3712.5N 06720.6E** **KABUL 3431.1N 06909.1E** **SANAM 3305.0N 07003.0E** **(DERA ISMAIL KHAN)** **(JHANG 3116.0N 07218.0E)** **(SAMAR 3120.8N 07434.0E)** **(ASARI 3048.3N 07509.6E)**
UA775	**REXOD 211230N 0613830E** **TUMET 222307N 0595702E** **KUSRA 231726N 0585102E**
UA788	**SHIRAZ** **BUSHEHR** **KAPIP 290217N 0500054E**

Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2

LOWER AIRSPACE

Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2

UPPER AIRSPACE

	PATIR 285606N 0492923E **WAFRA 2837.3N 04757.5E** **HAFR AL BATIN** **HAIL** **HALAIFAH**
A791	**SISIK 2936.0N 03241.E** **NUWEIBAA** **KITOT 2902.1N 03450.8E** ***Note 7 (OE)** **SOBAS 2756.0N 03904.9E** **HAIL** **KING FAHD** **BAHRAIN *Note 7 Bahrain-Sharjah** **RATUN 2646.2N 05108.0E** **SHARJAH** **IMLOT 2517.1N 05708.1E** **(JIWANI)**
B121	**RUDESHUR(RUS)** **RASHT(RST)** **MEGRI(MGR)**
B400	**SEEB (MCT)** **ITURA 232351N 0580720E** **IZKI (IZK)** **HAIMA (HAI)** **DAXAM 171612N 0544715E** **MUTVA 165325N 0543201E** **IMKAD 155245N 0535147E** **NODMA 152603N 0533358E** **RIGAM 143932N 0530414E** **RAPDO 132317N 0521532E** **VEDET 120134N 0512410E** **(MOGADISHU)**
B401	**ARAR** **BASRAH * Note 3**
~~**B402**~~	~~**ELEXI 3441.5N 04109.0E**~~ ~~**DIER-ZZOR**~~ ~~**ALEPPO**~~ ~~**NISAP 364724N 0363830E**~~

	PATIR 285606N 0492923E **WAFRA 2837.3N 04757.5E** **HAFR AL BATIN** **HAIL** **HALAIFAH**
UA791	**SISIK 2936.0N 03241.1E** **NUWEIBAA** **KITOT 2902.1N 03450.8E** ***Note 7 (OE)** **SOBAS 2756.0N 03904.9E** **HAIL** **KING FAHD** **BAHRAIN*Note 7 Bahrain-Sharjah** **RATUN 2646.2N 05108.0E** **SHARJAH** **IMLOT 2517.1N 05708.1E** **(JIWANI)**
UB121	**RUDESHUR(RUS)** **RASHT(RST)** **MEGRI(MGR)**
UB400	**SEEB(MCT)** **ITURA 232351N 0580720E** **IZKI (IZK)** **HAIMA (HAI)** **DAXAM 171612N 0544715E)** **MUTVA 165325N 0543201E** **IMKAD 155245N 0535147E** **NODMA 152603N 0533358E** **RIGAM 143932N 0530414E** **RAPDO 132317N 0521532E** **VEDET 120134N 0512410E** **(MOGADISHU)**
UB401	**ARAR** **BASRAH * Note 3**
~~**UB402**~~ `UM861`	**ELEXI 3441.5N 04109.0E** **DIER-ZZOR** **ALEPPO** **NISAP 364724N 0363830E**

Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2
LOWER AIRSPACE	

Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2
UPPER AIRSPACE	

UB403	**MANDERA** **BOMIX 121002N 0502757E** **ODBEN 123747N 0505648E** **KAVAN 133250N 0515431E** **RIGAM 143932N 0530414E**

B404	**HARGEISA** **DEMGO 120258N 0483040E** **PURKA 131208N 0503042E** **GESIX 134440N 0512823E** **RIGAM 143932N 0530414E**	**UB404**	**HARGEISA** **DEMGO 120258N 0483040E** **PURKA 131208N 0503042E** **GESIX 134440N 0512823E** **RIGAM 143932N 0530414E**
B406	**BEN GURION** **(LARNACA)**	**UB406**	**BEN GURION** **(LARNACA)**
B407	**KING ABDULAZIZ** **MAHDI 2026.0N 03739.3E** **(PORT SUDAN)**	**UB407**	**KING ABDULAZIZ** **MAHDI 2026.0N 03739.3E** **(PORT SUDAN)**
B410	**(MUT)** **CHEKKA *Note 3 (OS)** **DAMASCUS**	**UB410**	**(MUT)** **CHEKKA *Note 3 (OS)** **DAMASCUS**
B411	**METSA 2930.0N 03500.0E** **AL SHIGAR* Notes2 and 3** **ARAR** **LOVEK 3222.1N 04440.0E** **NOLDO 3249.5N 04521.5E** **PAXAT 332056N 0460519E** **ILAM** **MALAYER** **SAVEH** **[TEHRAN] * Note 1** **DEHNAMAK** **MASHHAD**	**UB411**	**METSA 2930.0N 03500.0E** **AL SHIGAR* Notes2 and 3** **ARAR** **LOVEK 3222.1N 04440.0E** **NOLDO 3249.5N 04521.5E** **PAXAT**332056N 0460519E **ILAM** **MALAYER** **SAVEH** **[TEHRAN] * Note 1** **DEHNAMAK** **MASHHAD**
B412	**DAMASCUS** **[AMMAN] * Note 2(OS, OJ)** **AL SHIGAR** **HALAIFA** **[KING ABDULAZIZ]**	**UB412**	**DAMASCUS** **[AMMAN] * Note 2(OS, OJ)** **AL SHIGAR** **HALAIFA** **[KING ABDULAZIZ]**
B413	**(PORT SUDAN)** **DANAK 1608.0N 04129.0E** **HODEIDAH** **TAIZ** **ADEN** **ZIZAN 1151.6N 04539.2E**	**UB413**	**(PORT SUDAN)** **DANAK 1608.0N 04129.0E** **HODEIDAH** **TAIZ** **ADEN** **ZIZAN 1151.6N 04539.2E**

Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2

LOWER AIRSPACE

Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2

UPPER AIRSPACE

(GAGDO 0725.0N 04827.0E)
(PRASLIN)

B415	**DOHA** **BUNDU 2500.4N 05229.4E** **ABU DHABI AUH**
B416	**KUWAIT** **KUVER 2809.4N 05006.0E** **IMDAT 2741.0N 05111.0E** **ORSAR 2604.5N 05357.5E** **SHARJAH**
B417	**MAHSHAHR** **TULAX 2938 53N 04903 01E** **DESLU 2928.0N 04901.8E** **ALVIX 2919.3N04824.2E** **KUWAIT *See Note 3** **HAFR AL BATIN** **GASSIM** **KING ABDULAZIZ**
B418	**SEMRU 2802.0N 03203.0E** **HURGHADA** **WEJH** **MADINAH** **BIR DARB (BDB)** **KING KHALID** **KING FAHD** **PIMAL 2626.5N 05122.1E**
~~**B419**~~	~~**[DOHA]**~~ ~~**[KING FAHD] * Note3 (OB, OT)**~~ ~~**ALVON 2700.2N 05007.2E**~~ ~~**SELEG 2801.5N 04922.2E**~~ ~~**KUWAIT**~~
B424	**ITOLI 152825N 0450927E** **SABEL 185200N 05203.7E** **OTISA 201000N 0554556E** **GISKA 213503N 0574014E**
B441	**MASHHAD** **OTRUZ 363108N 0610956E** ~~**ASHGABAT**~~

(GAGDO 0725.0N 04827.0E)
(PRASLIN)

UB415	**DOHA** **BUNDU 2500.4N 05229.4E** **ABU DHABI AUH**
UB416	**KUWAIT** **KUVER 2809.4N 05006.0E** **IMDAT 2741.0N 05111.0E** **ORSAR 2604.5N 05357.5E** **SHARJAH**
UB417	**MAHSHAHR** **TULAX 2938 53N 04903 01E** **DESLU 2928.0N 04901.8E** **ALVIX 2919.3N04824.2E** **KUWAIT*See Note 3** **HAFR AL BATIN** **GASSIM** **KING ABDULAZIZ**
UB418	**SEMRU 2802.0N 03203.0E** **HURGHADA** **WEJH** **MADINAH** **BIR DARB (BDB)** **KING KHALID** **KING FAHD** **PIMAL 2626.5N 05122.1E**
~~**UB419**~~	~~**[DOHA]**~~ ~~**[KING FAHD] * Note3 (OB, OT)**~~ ~~**ALVON 2700.2N 05007.2E**~~ ~~**SELEG 2801.5N 04922.2E**~~ ~~**KUWAIT**~~
UB424	**ITOLI 152825N 0450927E** **SABEL 185200N 05203.7E** **OTISA 201000N 0554556E** **GISKA 213503N 0574014E**
UB441	**MASHHAD** **OTRUZ 363108N 0610956E** ~~**ASHGABAT**~~

Designation Désignation Designación	Significant points Points significatifs Puntos significativos		Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2		1	2

LOWER AIRSPACE		UPPER AIRSPACE

B451	**DEHNAMAK** **BOJNORD (BRD)** **DOLOS 375006N 0580200E** **(ASHGABAT)**		**UB451**	**DEHNAMAK** **BOJNORD (BRD)** **DOLOS 375006N 0580200E** **(ASHGABAT)**
B457	**BAHRAIN** **ELOSA 2548.8N 05142.6E** *** Note7** (*segment ELOSA-REXOD*) **ABU DHABI** **LABRI 240344N 0553842E** **EGROK 235253N 0560126E** **LAKLU 232235N 0570401E** **TOLDA 223720N 0583503E** **REXOD211230N 0613830E**		**UB457**	**BAHRAIN** **ELOSA 2548.8N 05142.6E** *** Note7** (*segment ELOSA-REXOD*) **ABU DHABI** **LABRI 240344N 0553842E** **EGROK 235253N 0560126E** **LAKLU 232235N 0570401E** **TOLDA 223720N 0583503E** **REXOD 211230N 0613830E**
B466	**NAWABSHAH 2613.1N 06823.1E** **KANDAHAR 312900N 0655400E** **CHARN 351000N 0610800E**			
B505	**LALDO 251806N 0563600E** **NADSO 244957N 0574926E** **EGTAL 2434 58N 06037 24E** *Note designator changed from B525 to* *B505 as B525 already assigned in AFI* *Region)*			
B524	**NADSO 244957N 0574926E** **ALPOR 2404 42N 06120E**			
B526	**(ASMARA)** **HODEIDAH** **RIYAN** **RIGAM 143932N 0530414E**		**UB526**	**(ASMARA)** **HODEIDAH** **RIYAN** **RIGAM 143932N 0530414E**
B535	**(DJIBOUTI)** **ADEN** **RIYAN** **KAPET 1633 22N 0530614E** **SALALAH** **MARMUL(MRL)**		**UB535**	**(DJIBOUTI)** **ADEN** **RIYAN** **KAPET 1633 22N 0530614E** **SALALAH** **MARMUL(MRL)**
~~**B538**~~	~~**(GAZIANTEP)**~~ ~~**ALEPPO**~~ ~~**KARIATAIN**~~ ~~**DAMASCUS * Note 2(OS)**~~		~~**UB538**~~	~~**(GAZIANTEP)**~~ ~~**ALEPPO**~~ ~~**KARIATAIN**~~ ~~**DAMASCUS * Note 2 (OS)**~~

Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2
LOWER AIRSPACE	

Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2
UPPER AIRSPACE	

B540	**TOTOX 215030N 0622230E** **ITUDO 2347N 0580113E** **PASOV 243841N 0565037E** **KUPMA 245148N 0562648E** **BUBIN 245742N 0560642E**

B544	**(GAZIANTEP)** **ALEPPO** **TANF** **TURAIF** **AL SHIGAR** **HALAIFA** **MADINAH** **RABIGH** **KING ABDULAZIZ** **ABHA** **NOBSU** ~~**SANA'A**~~ **KRA**	**UB544**	**(GAZIANTEP)** **ALEPPO** **TANF** **TURAIF** **AL SHIGAR** **HALAIFA** **MADINAH** **RABIGH** **KING ABDULAZIZ** **ABHA** **NOBSU** ~~**SANA'A**~~ **KRA**
~~**B545**~~	~~**(MUT)**~~ ~~**BALMA 3428.9N 035 3.0E**~~ ~~**KHALDEH**~~ ~~**AMMAN * Note 3&4 (OJ)**~~	~~**UB545**~~	~~**(MUT)**~~ ~~**BALMA 3428.9N 035 3.0E**~~ ~~**KHALDEH**~~ ~~**AMMAN * Note 3&4(OJ)**~~
B549	**TAMUD 171700N 0495500E** **ITELI 171310N 0502605E** **GOGRI 170752N 0510857E** **TONRO 165850N 0522235E** **PUTRA 165432N 0525631E** **LADAR 165324N 0534655E** **MUTVA 165325N 0543201E** **KIVEL 165306N 0553633E**	**UB549**	**TAMUD 171700N 0495500E** **ITELI 171310N 0502605E** **GOGRI 170752N 0510857E** **TONRO 165850N 0522235E** **PUTRA 165432N 0525631E** **LADAR 165324N 0534655E** **MUTVA 165325N 0543201E** **KIVEL 165306N 0553633E**
G183	**(KAROL 3252.0N 03229.0E)** **PASOS** **EL ARISH** **TABA** **NUWEIBAA**		
G202	**(VELOX 3349.0N 03405.0E)** **SILKO 3347.9N 03435.0E** **KHALDEH* Note 4 (OS)** **DAKWE 3338.9N 03555.0E**	**UG202**	**(VELOX 3349.0N 03405.0E)** **SILKO 3347.9N 03435.0E** **KHALDEH * Note 4(OS)** **DAKWE 3338.9N 03555.0E**

Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2
LOWER AIRSPACE	

Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2
UPPER AIRSPACE	

	DAMASCUS **TANF** **MODIK 3328.1N 03901.0E** **RAPLU 3323.0N 04145.5E** **PUSTO 3321.0N 04245.0E** **BGD** **PARUN 3324.2N 04502.0E** **RAGET 3330.8N 04553.8E** **ILAM** **KHORAM ABAD** **ESFAHAN** **NODLA** **BIRJAND** **KAMAR 3239.0N 06044.0E** **DILARAM** **KANDAHAR** **(ZHOB)** **(RAHIM YAR KHAN)**
G206	**DILARAM** **KABUL** **SABAR 3537.0N 07131.0E** **(PURPA 3656.5N 07524.5E)** *** Note 3**
G208	**(PANJGUR)** **ZAHEDAN** **DARBAND** **NODLA 325330N 0545850E** **ANARAK** **TEHRAN** **ZANJAN** **UROMIYEH** **ALRAM 3743.0N 04437.0E** **(SIIRT)**
G452	**SHIRAZ** **KERMAN** **ZAHEDAN** **(RAHIMYAR KHAN)**
G462	**BAHRAIN** **PIMAL2626.5N 05122.1E** *** Note 7 between AUH and URITO** **URITO 2616.1N 05148.8 E** **BALUS 2545.9N 05304.4E** **ABU DHABI**

	DAMASCUS **TANF** **MODIK 3328.1N 03901.0E** **RAPLU 3323.0N 04145.5E** **PUSTO 3321.0N 04245.0E** **BGD** **PARUN 3324.2N 04502.0E** **RAGET 3330.8N 04553.8E** **ILAM** **KHORAM ABAD** **ESFAHAN** **NODLA** **BIRJAND** **KAMAR 3239.0N 06044.0E** **DILARAM** **KANDAHAR** **(ZHOB)** **(RAHIM YAR KHAN)**
UG206	**DILARAM** **KABUL** **SABAR 3537.0N 07131.0E** **(PURPA 3656.5N 07524.5E)** *** Note 3**
UG208	**(PANJGUR)** **ZAHEDAN** **DARBAND** **NODLA 325330N 0545850E** **ANARAK** **TEHRAN** **ZANJAN** **UROMIYEH** **ALRAM 3743.0N 04437.0E** **(SIIRT)**
UG452	**SHIRAZ** **KERMAN** **ZAHEDAN** **(RAHIMYAR KHAN)**
UG462	**BAHRAIN** **PIMAL2626.5N 05122.1E** *** Note 7 between AUH and URITO** **URITO 2616.1N 05148.8 E** **BALUS 2545.9N 05304.4E** **ABU DHABI**

Designation Désignation Designación	Significant points Points significatifs Puntos significativos		Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2		1	2
LOWER AIRSPACE			UPPER AIRSPACE	

G650	KING ABDULAZIZ RASKA 1908.0N 03903.0E (ASMARA)		UG650	KING ABDULAZIZ RASKA 1908.0N 03903.0E (ASMARA)
G652	ADEN IMPOS 183136N 0511848E DUDRI 190000N 0520000E TOKRA 220925N 0553350E TAPDO 2424N 06120 E		UG652	ADEN IMPOS 183136N 0511848E DUDRI 190000N 0520000E TOKRA 220925N 0553350E TAPDO 2424N 06120 E
G660	(PORT SUDAN) BOGUM 2006.6N 03803.0E KING ABDULAZIZ ABU DHABI * Note3 (OE, OM)		UG660	(PORT SUDAN) BOGUM 2006.6N 03803.0E KING ABDULAZIZ ABU DHABI * Note3 (OE, OM)
G662	[DAMASCUS] [GURIAT] * Notes 1 and 3 (OS, OJ) AL SHIGAR HAIL GASSIM KING KHALID		UG662	[DAMASCUS] [GURIAT] * Notes 1 and 3 (OS, OJ) AL SHIGAR HAIL GASSIM KING KHALID
G663	KING KHALID KING FAHD SHIRAZ YAZD TABAS MASHAD		UG663	KING KHALID KING FAHD SHIRAZ YAZD TABAS MASHAD
G664	APLON 3352.0N 03204.0E BEN GURION AMMAN		UG664	APLON 3352.0N 03204.0E BEN GURION AMMAN
G665	ABADAN SHIRAZ * Note 5 (OI) NABOD 2816.1N 05825.8E EGSAL 2716.8N 06249.0E (PANJGUR)		UG665	ABADAN SHIRAZ * Note 5 (OI) NABOD 2816.1N 05825.8E EGSAL 2716.8N 06249.0E (PANJGUR)
G666	SHIRAZ * Note 7 (OI) LAMERD LAVAN ORSAR 2604 .5N 05357.5E DESDI 2536.1N 05442.5E MIADA 245112N 0545736E ABU DHABI (AUH)		UG666	SHIRAZ * Note 7 (OI) LAMERD LAVAN ORSAR 2604.5N 05357.5E DESDI 2536.1N 05442.5E MIADA 245112N 0545736E

Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2
LOWER AIRSPACE	

Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2
UPPER AIRSPACE	

G667	**PUTMA 3748.0N 05157.6E** **NOSHAHR** **TEHRAN** **SAVEH** **AHWAZ** **ABADAN** **ALSAN 2957.1N 04814.9E** **FALKA** **KUWAIT** **WAFRA** **MAGALA** **KING KHALID** **WADI AL DAWASIR** **NEJRAN** **SANA'A** **PARIM 123142.7N 0432712E** **(DJIBOUTI)**
G668	**ZHOB** **GHAZNI** **RAPTA 3727.0N 06538.0E**
~~**G669**~~	~~**KARIATAIN *Note 1,2&3 (OJ)**~~ ~~**TONTU 3148.1N 03811.2E**~~ ~~**AL SHIGAR**~~ ~~**AL JOUF**~~ ~~**RAFHA**~~ ~~**SOLAT 2909.7N 04638.2E**~~ ~~**KUWAIT**~~ ~~**SESRA 2908.1N 04854.9E**~~ ~~**NANPI 2905.0N 04932.0E**~~ ~~**BUSHEHR**~~ ~~**VATOB 285126N 0511636E)**~~ ~~**[SHIRAZ[**~~
G670	**RASHT** **LALDA 3817.1N 04943.0E** **(BAKU)**
G671	**TANF** **HAWIJA** **MOSUL** **UROMIYEH * Notes 2 and 3**
G674	**MADINAH** **GASSIM 2617.9N 04346.8E**

UG667	**PUTMA 3748.0N 05157.6E** **NOSHAHR** **TEHRAN** **SAVEH** **AHWAZ** **ABADAN** **ALSAN 2957.1N 04814.9E** **FALKA** **KUWAIT** **WAFRA** **MAGALA** **KING KHALID** **WADI AL DAWASIR** **NEJRAN** **SANA'A** **PARIM 123142.7N 0432712E** **(DJIBOUTI)**
UG668	**ZHOB** **GHAZNI** **RAPTA 3727.0N 06538.0E**
~~**UG669**~~	~~**KARIATAIN *Note 1,2&3 (OJ)**~~ ~~**TONTU 3148.1N 03811.2E**~~ ~~**AL SHIGAR**~~ ~~**AL JOUF**~~ ~~**RAFHA**~~ ~~**SOLAT 2909.7N 04638.2E**~~ ~~**KUWAIT**~~ ~~**SESRA 2908.1N 04854.9E**~~ ~~**NANPI 2905.0N 57N 04932.0E**~~ ~~**BUSHEHR**~~ ~~**VATOB 285126N 0511636E**~~ ~~**[SHIRAZ]**~~
UG670	**RASHT** **LALDA 3817.1N 04943.0E** **(BAKU)**
UG671	**TANF** **HAWIJA** **MOSUL** **UROMIYEH * Notes 2 and 3**
UG674	**MADINAH** **GASSIM 2617.9N 04346.8E**

Designation Désignation Designación	Significant points Points significatifs Puntos significativos		Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2		1	2
LOWER AIRSPACE			UPPER AIRSPACE	

G775	**(ASHGHABAT)** **ORPAB 3742N 05834.5E** **MASHHAD** **[BIRJAND] * Note 1** **ZAHEDAN**		**UG775**	**(ASHGHABAT)** **ORPAB 3742N 05834.5E** **MASHHAD** **[BIRJAND] * Note 1** **ZAHEDAN**
G781	**(VAN)** **BONAM 3802.9N 04418.0E** **UROMIYEH** **ROVON 3716 01N 0455322E** **ZANJAN**		**UG781**	**(VAN)** **BONAM 3802.9N 04418.0E** **UROMIYEH** **ROVON 3716 01N 0455322E** **ZANJAN**
G782	**KING ABDULAZIZ** **RAGABA** **KING KHALID** **MAGALA** **WAFRA 2837.3N 04757.5E** **KUWAIT**		**UG782**	**KING ABDULAZIZ** **RAGABA** **KING KHALID** **MAGALA** **WAFRA 2837.3N 04757.5E** **KUWAIT**
			UG783	**PURDA 210805N 0510329E** **TANSU 224136N 0542828E** **NIGEL230146N 0551430E** **ELUDA 235107N 0552905E** **ALN 241535N 0553623E** **GIDIS 243600N 055600E** **BUBIN 245742N 0560642E**
~~**G787E**~~ **G216**	**LAKLU 232235N 0570401E** **SEEB(MCT)** **DORAB 235033N 0594746E** **ALPOR 240441N 0612000E** **LATEM** **(KC)**		~~**UG787E**~~ **UG216**	**LAKLU 232235N 05704 01E** **SEEB(MCT)** **DORAB 235033N 0594746E** **ALPOR 240441N 0612000E** **LATEM** **(KC)**
~~**G787W**~~ **A454**	**(KC)** **PARET** **TAPDO 242400N 0612000E** **VUSET 235540N 0590812E** **PASOV 243841N 0565037E**		~~**UG787W**~~ **UA454**	**(KC)** **PARET** **TAPDO 242400N 0612000E** **VUSET 235540N 0590812E** **PASOV 243841N 0565037E**

Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2

LOWER AIRSPACE	

Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2

UPPER AIRSPACE	

Designation	Significant points
G792	**(TURKMENBASHI)** **MASHAD** **CHARN 3510.0N 06108.0E** **HERAT** **KANDAHAR** **ASLUM 3101N 06637E** **(RAHIM YAR KHAN)**
G795	**FALKA 2926.2N 04818.3E** **TASMI 300120N 0475505E** **BSR 303132.4N 0472112E** **RAFHA**
G796	**KABUL** **JALALABAD** **LAJAK 335600N 0703000E** **HANGU 332906N 0710018E**
G799	**PMA** **DAFFINAH**
L126	**PUSTO 3321.0N 04245.0E** **SOGUM 3412.2N 04354.9E** **MIGMI 3345.9N 04527.4E** **ILAM**

Designation	Significant points
UG792	**(TURKMENBASHI)** **MASHAD** **CHARN 3510.0N 06108.0E** **HERAT** **KANDAHAR** **ASLUM 3101N 06637E** **(RAHIM YAR KHAN)**
UG795	**FALKA 2926.2N 04818.3E** **TASMI 300120N 0475505E** **BSR 303132.4N 0472112E** **RAFHA**
UG796	**KABUL** **JALALABAD** **LAJAK 335600N 0703000E** **HANGU 332906N 0710018E**
UG799	**PMA** **DAFINAH**
UL124	**(VAN)** **BONAM** **URUMIYEH (UMH)** **ZANJAN(ZAJ)** **SAVEH (SAV)** **YAZD(YZD)** **KERMAN(KER)** **KEBUD 273558N 0625028E** **(PANJGUR)**
UL125	**DULAV 3857N 04537.9E** **TABRIZ (TBZ)** **ZANJAN** **PAROT 360940N 0495756E** **TEHRAN** **ANARAK** **DARBAND** **ZAHEDAN** **DANIB 2909.5N 06120.1E** **(PANJGUR)**
UL126	**PUSTO 3321.0N 04245.0E** **SOGUM 3412.2N 04354.9E** **MIGMI 3345.9N 04527.4E** **ILAM**

Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2
LOWER AIRSPACE	

Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2
UPPER AIRSPACE	

L200   AMMAN *Notes 2 and 3 (OJ)
PASIP 3300.0N 03855.2E
RAPLU 3323.0N 04145.5E

UL200   AMMAN *Notes 2 and 3 (OJ)
PASIP 3306.0N 03856.0E
RAPLU 3323.0N 04145.5E

L223   SIRRI
NALTA 250242N 0553955E
TARDI 243418N 0560915E
LAKLU 232235N 05704 01E

UL223   UROMIYEH
SANANDAJ
KHORAM ABAD
MESVI 312920N 0495701E
LAMERD
SIRRI * Note 7 (OI, OM)
NALTA 250242N 0553955E
TARDI 243418N 0560915E
LAKLU 232235N 05704 01E

UL300   LUXOR
GIBAL2437.2N03634.7E
YENBO 2408.8N 03803.9E
DAFINAH 2317.0N 04143.2E

L301   RASKI 230330N 0635200E
VAXIM 231900N 0611100E
RAGMA 232301N 0603846E
MIBSI 234139N 0575523E

UL301   AAU 5153N 07523 38.6E
NOBAT 210902.5N 0880000.1E
RASKI 230330N 0635200E
VAXIM 231900N 0611100E
RAGMA 232301N 0603846E
MIBSI 234139N 0575523E

L305   DOHA
ITITA 2544.2N 05418.7E

L306   TOKRA 220925N 0553350E* * Note-
(OO)
DEMKI 224941N 0562308E
LAKLU 232235N 0570401E

UL306   TOKRA 220925N 0553350E
 * Note-   (OO)
DEMKI 224941N 0562308E
LAKLU 232235N 0570401E

L315   CAIRO * Note 3 (HE)
HURGHADA
GIBAL 2437.2N 03634.7E

UL315   CAIRO * Note 3 (HE)
HURGHADA
GIBAL 2437.2N 03634.7E
LABID 2408.8N 03803.9E

L317   LOPAS 343003N 0433834E
ALVIS 343004N 0435518E
DASUR 343006N 0442417E
DENKI 322228N 0455122E
MUTLO 321019N 0445703E
GETID 351551N 0425559E
NADID 352611N E0460145E

UL317   LOPAS 343003N 0433834E
ALVIS 343004N 0435518E
DASUR 343006N 0442417E
DENKI 322228N 0455122E
MUTLO 321019N 0445703E
GETID 351551N 0425559E
NADID 352611N E0460145E

Version :April 2007

Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2
LOWER AIRSPACE	

Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2
UPPER AIRSPACE	

L321   **KATAB 292501N 0290506E**
            KUNKI 290726N 0291949E
            LUGAN 224205N 0313722E
            SML 222118N 0313719E

UL321   **KATAB 292501N 0290506E**
            KUNKI 290726N 0291949E
            LUGAN 224205N 0313722E
            SML 222118N 0313719E

UL322   **MUMBAI * Note 7&1**
            SUGID 1933.1N 06921.0E
            BOLIS 2033.5N 065 00.0E
            REXOD 2112.5N 06138.5E

UL333   **DASIS**
            TABRIZ
            RASHT
            ORSOK 362236N 0523020E
            AMBEG 351737N 0553059E
            TASLU 342632N 0574234E
            SOKAM 331316N 0603754E

L417   **RAMPI 3516.7N 04356.3E**
            SOGUM 3412.2N 04354.9E
            BGD
            LOVEK 3222.1N 04440.0E

UL417   **RAMPI 3516.7N 04356.3E**
            SOGUM 3412.2N 04354.9E
            BGD
            LOVEK 3222.1N 04440.0E

UL425   **KING ABDULAZIZ**
            MALIK 2053.4N 03949.6E
            AL BAHA
            BISHA
            WADI AL DAWASIR
            EGREN 202236N 0464422E
            ASTIN 200410N 0495320E
            DIRAS 195235N 0513704E
            GOBRO 193622N 0534741E
            BOVOS 182230N 0575844E
            ASPUX 174406N 0600006E
            (TRIVANDRUM)

L513   **KHALDEH**
            CHEKKA
            LEBOR 3415.9N 03635.0E
            DAMASCUS * Note 3 (OS)
            BUSRA 3220.0 N 03637.0 E
            HAZEM 3214.0 N 03638.0 E
            QUEEN ALIA
            QATRANEH (QTR)

UL513   **KHALDEH**
            CHEKKA
            LEBOR 3415.9N 03635.0E
            DAMASCUS * Note 3 (OS)
            BUSRA 3220.0 N 03637.0E
            HAZEM 3214.0 N 03638.0E
            QUEEN ALIA
            QATRANEH (QTR)

Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2
LOWER AIRSPACE	

Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2
UPPER AIRSPACE	

L519   MIADA 245112N 0545736E
            *Note 7
            KUMUN 254000N 0551512E

UL519   ABU DHBI (AUH) * Note 7
            MIADA 245112N 0545736E

UL550   WAFRA *Note7 (OE)
            BOSID 2842.4N 04652.6E
            VATIM 2851.6N 04444.7E
            RASMO 2857.2N 04331.3E
            ORSAL2902.8N 04210.8E
            NIMAR 2906.6N 03954.4E
            KITOT 2902.1N 03450.8E*Note 7
            NUWEIBAA
            TABA
            EL ARISH
            PASOS
            (KAROL 3252.0N 03229.0E)

L555   TOTOX 215030N 0622230E
            TUMET 222307N 0595702E
            TOLDA 224008N 0583624E
            TULBU 230005N 0571827E

UL555   TOTOX 215030N 0622230E
            TUMET 222307N 0595702E
            TOLDA 224008N 0583624E
            TULBU 230005N 0571827E

UL556   EGREN 202236N 0464422E
            NONGA 205048N 0492014E
            PURDA 210805N 0510329E
            Note:- 7 (OO, OB)
            IMDAM 202416N 0550801E
            HAIMA 195813N 0561651E
            KUTVI 184306N 0582642E

UL560   ARDABIL 3819.9N 04824.9E
            * Note 3&4 (OI)
            SEVAN 4032.0N 04456.9E

UL566   ~~PAKER 115500N 0463500E~~
            ~~KAPET 163322N 0530614E~~
            ASMAK 162327N 0524634E
            UKNEN 160542N 0522012E
            PURUG 151204N 0510142E
            KUSOL 144009N 0501534E
            NOTBO 142609N 0495530E
            EMABI 141627N 0494139E
            SOKEM 134235N 0485329E
            DATEG 123549N 0471627E

Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2
LOWER AIRSPACE	

Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2
UPPER AIRSPACE	

UL572	**KAMISHLY (KML)** **LESRI 3704.3N 04113.8E**
UL573	**DAFINAH 231658N 0414310E** **WEJH 261045N 0362917E**
UL601	**(BAGLUM –BAG 04004.2 03248.6)** *** Note 7** **ADANA 3656.4N 03512.6E** **TUNLA 3553.0N 0360200E)** **KARIATAIN 3412.8N 03715.9E**
UL602	**BAHRAIN** **ALVON 270009N 0500711E*Note 7** **SELEG 280130N 0492212E** **RAPSI 282326N 0490551E** **DARVA 284814N 0484734E** **ALVIX 2919.3N04824.2E** **FALKA 292611N 0481819E** **TASMI 300120N 0475505E** **BASRAH** **LOVEK322206N 0444000E** **DELMI331911N 0431731E** **ELEXI 344237N 0411054E** **DRZ 351724N 0401124E** **KUKSI 364508N 0374910E** **GAZ 365701N 0372824E**
UL607	**SITIA (SIT)* Note 7** **PAXIS 3357.1N02720.0E** **OTIKO 3134.4N 02936.6E** **ALEXANDRIA (AXD)**
UL613	**EL DABA (DBA)*Note 7** **SOKAL 3236.0N 02737.1E** **TANSA 3400.0N 02649.0E**

L617	**AXD** **ASNIR 323848N 0282142E** **TANSA 340000N 0264900E**
L631	**TOTOX 215030N0622230E** **SEVLA 233321N 0591122E**
L750	**ZHOB 3121.3N 06927.6E** **ROSIE 3140.0N 06900.0E** **MAXIM 3246.2N 06727.4E** **HORST 3327.6N 06627.5E**

UL617	**AXD** **ASNIR 323848N 0282142E** **TANSA 340000N 0264900E**
UL631	**TOTOX 215030N0622230E** **SEVLA 233321N 0591122E**
UL750	**ZHOB 3121.3N 06927.6E** **ROSIE 3140.0N 06900.0E** **MAXIM 3246.2N 06727.4E** **HORST 3327.6N 06627.5E**

Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2
LOWER AIRSPACE	

Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2
UPPER AIRSPACE	

	VELDT 3430.0N 06454.1E **RANAH 3535.0N 06312.0E** **(AFGAN-3824.0N 05817.0E**
L764	**SEEB (MCT)** **ALMOG 233524N 0574940E** **IVETO 233520N 0570704E** **PAXIM 240245N 0561631E**
M203	**PUSTO 3321.0N 04245.0E** **LOVEK 3222.1N 04440.0E** **DISAR 3131.3N 04613.4E**
M300	**LOTAV 2037N 0605700E** **EMURU 221535N 0584950E**
M301	**PURAD 145500N 0415354E** **SANA'A SAA** ~~**KAPET 163322N 0530614E**~~ **ASMAK162327N 0524634E**
M320	**KING FAHD** **JUBAIL** **KUWAIT**

	VELDT 3430.0N 06454.1E **RANAH 3535.0N 06312.0E** **(AFGAN-3824.0N 05817.0E**
UL764	**SEEB (MCT)** **ALMOG 233524N 0574940E** **IVETO 233520N 0570704E** **PAXIM 240245N 0561631E**
UL768	**PIMAL 2626.5N 05122.1E** **ALVON2700.2N 05007.2E** **COPPI 2750.6N 04744.0E** **HFR** **VATIM 2851.6N 04444.7E** **RAFHA (RAF)** **ARAR (AAR)** **OVANO3148.0N 03909.9E** **OTILA 3201.5N 03901.9E**
UL883	**REXOD 211230N 0613830E** **UMILA 211555N 0584738E** **SITOL 211604N 0552514E** **PURDA 210805N 0510329E** **ALRIK 220631N 0482535E** **PMA N243251N 0394219E**
UM203	**PUSTO 3321.0N 04245.0E** **LOVEK 3222.1N 04440.0E** **DISAR 3131.3N 04613.4E**
UM300	**(CALICUT)** **LOTAV 2037N 0605700E** **EMURU 221535N 0584950E**
UM301	**PURAD 145500N 0415354E** **SANA'A SAA** ~~**KAPET 163322N 0530614E**~~ **ASMAK162327N 0524634E**
UM309	**KIND KHALED** ~~**NASIR**~~**EGMAN** **221444N 0400315E**
UM320	**KING FAHD** **JUBAIL** **KUWAIT**

Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2
LOWER AIRSPACE	

Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2
UPPER AIRSPACE	

UM321	~~**RAGHBA**~~ ~~**HAIL**~~ **HALAIFA 262602N 0391609E** **KING KHALED**

~~**M508**~~ **N638**	**KING KHALED** **OVEKU 250955N 0445701E** **MADINAH**

~~**UM508**~~ **UN638**	**KING KHALED** **OVEKU 250955N 0445701E** **MADINAH**

M551	~~**AVAVO 1646.3N 05526.1E**~~ **KIVEL 165306N 0553633E** **DAXAM 171612N 0544715E**

UM551	**DONSA1435.3N06344.0E** **ANGAL1614.1N 06000.1E** ~~**AVAVO 1646.3N 05526.1E**~~ **OTOTO 164004N 0570435E** **KIVEL 165306N 0553633E** **DAXAM 171612N 0544715E**

M552	**(RAHIM YAR KHAN)** **BIRJAND (BJD)** **DEHNAMAK(DHN)** **TEHERAN (TRN)** **ZANJAN** **TABRIZ (TBZ)**

UM552	**(RAHIM YAR KHAN)** **BIRJAND (BJD)** **DEHNAMAK(DHN)** **TEHERAN (TRN)** **ZANJAN** **TABRIZ (TBZ)**

M561	**KISH** ~~*** Note 3&4 (OI)**~~ **MOBET 2645.3N 05609.8E** **EGSAL 2716.8N06249.0E** **PANJGUR**

UM561	**RATUN 2646.2N05108.0E *See Note 7** **MIDSI 2641.7N05154.7E** **KISH** ~~*** Note 3&4 (OI)**~~ **GHESHM** **MOBET 2645.3N 05609.8E** **EGSAL 2716.8N06249.0E** **PANJGUR**

UM573	**TEHERAN (TRN)** **TABRIZ 3808.3N 04613.9E**

UM574	**(MALE)** **(POPET) 0713.7N06813.6E** **NABIL 1222.0E0600.0E** **RIGAM 143932N 0530414E** ~~**ODAKA 1440.6N05234.0E**~~ ~~**SYN 1557.7N04847.2E**~~ ~~**HELAL 1716.0N04422.0E**~~ **NOBSU 171554N 0431318E** **ABHA 1814.4N04239.5E** **JEDDAH**

Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2
LOWER AIRSPACE	

Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2
UPPER AIRSPACE	

M628 **EGVAN 230127N 0561907E**
TULBU 230005N 0571827E
GEVED 230105N 0575111E
GIDAN 230104N 0582232E
KAXEM 225103N 0595243E
PARAR 222630N 0630700E

UM628 **DAFINAH 231700N 0414312E**
KIPOM 225316N 0501518E
MIGMA 225035N 0512749E
KITAP 224928N 0522923E
ALPEK 224648N 0535942E
EGVAN 230127N 0561907E
TULBU 230005N 0571827E
GEVED 230105N 0575111E
GIDAN 230104N 0582232E
KAXEM 225103N 0595243E
PARAR 222630N 0630700E

M634 **ANGAL 161406N 0600006E**
~~**UBTEN 120814N0495611E**~~
VEDET 120134N 0512410E

UM634 **ANGAL 161406N 0600006E**
~~**UBTEN 120814N0495611E**~~
VEDET 120134N 0512410E

M651 **ATBOT 171418N 0464706E**
ADEN
(HARGEISA)

UM651 **ATBOT 171418N 0464706E**
ADEN
(HARGEISA)

M762 **REXOD 211230N 0613830E**
SUR 223159N 0592829E
ALMOG 233524N0574940E
TAPRA 242607N 0563803E
VAXAS 244308N 0561807E
* Note 7 (OM, OO)
BUBIN 245742N 0560642E

UM877 **VUSET 235540N 0590812E**
KUSRA 232426N 0582611E

M881 **(BANNU -BN)**
LAJAK 3356.0N 07030.0E
JALAL 3430.0N 07045.0E
MATAL 3600.0N 07100.0E
ANWAR 3652.0N 07034.0E
(GARRI- 3825.0N 07034.0E)

UM881 **(BANNU -BN)**
LAJAK 3356.0N 07030.0E
JALAL 3430.0N 07045.0E
MATAL 3600.0N 07100.0E
ANWAR 3652.0N 07034.0E
(GARRI- 3825.0N 07034.0E

UM999 **(LUXOR)**
DEDLI 2242 32N 03737 19E
OSAMA 2215 54N 03817 34E
KING ABDULAZIZ (JDW)

Designation	Significant points
Désignation	Points significatifs
Designación	Puntos significativos
1	2

	LOWER AIRSPACE

Designation	Significant points
Désignation	Points significatifs
Designación	Puntos significativos
1	2

	UPPER AIRSPACE

N303   **(HARGEISA)**
PARIM 1231.7N 04327.2E
RIBOK 1547N 04152.5E
LABNI 1656.3N 04109.4E

UN303   **(HARGEISA)**
PARIM 1231.7N 04327.2E
RIBOK1547N 04152.5E
LABNI 1656.3N 04109.4E

UN315   **ASPUX 174406N 0600006E**
KUTVI 184306N 0582642E
Note:- 7 (OO/OB)
SITOL 211604N 0552514E
LOTOS 220000N 0503912E
RAPMA 232256N 048028E
RESAL 240649N 0470427E
KING KHALED

UN316   **HALAIFA 262603N 0391609E**
PASAM 273045N 0345542E

UN318   ~~TONTU 314804N 0381110E~~
~~RAGOM 313227N 0381656E~~
GURIAT (GRY)
ORKAS 3047.4N 03846.3 E
NEVOL 3024.7N 03938.6E
VELAL2946.0N 04038.4E
TAMRO 2838.6N 04240.8E
MOGON 2738.8N 04445.9E
TAGSO 2727.7N 04545.2E
KUSAR 2647.7N 04902.3E
KFA

UN319   **ZAHEDAN**
TABAS (TBS)
DASHT-E-NAZ (DNZ)
ULDUS- 3800.0N 05101.0E

N324   **NALTI 221858N 0500751E**
OBNAM 211843N 0503532E
PURDA 210805N 0510329E
GOBRO 193622N 0534741E
MRL 180832N 0551040E

UN324   **NALTI 221858N 0500751E**
OBNAM 211843N 0503532E
PURDA 210805N 0510329E
GOBRO 193622N 0534741E
MRL 180832N 0551040E

N519   **KHI -245436N 0671036E**
SAPNA 233000N 0675000E
PRN 213824N 0693948E
TAXUN 211906N 0701520E
EXOLU 201248N 0713412E
(BBB- 190506N 0725230E

Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2
LOWER AIRSPACE	

Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2
UPPER AIRSPACE	

UN555 **BELGAUM**
     BISET 1823.4N 06918.1E
     KATBI 1931.6N 06500.0E
     LOTAV 2037.0N 06057.0E

N563 **REXOD 211230N 0613830E*Note 7**
     (OO.OM)
     EMURU 221357N 0585338E
     TULBU 230005N 0571827E
     MEKNA 223309N 0560815E
     SODEX 234954N 0553202E
     NOBTO 235525N 0551840E
     AUH 242612N 0543900E

UN563 **(BANGALORE)**
     REXOD 211230N 0613830E*Note 7
     (OO.OM)
     EMURU 221357N 0585338E
     TULBU 230005N 0571827E
     MEKNA 223309N 0560815E
     SODEX 234954N 0553202E
     NOBTO 235525N 0551840E
     AUH 242612N 0543900E

UN569 **JDW 214045N 0390958E**
     ~~**NASIR**~~ **EGMAN** **221642N 0400318E**
     LOTOS
     Note:- 7 (OB/OO)
     TOKRA 220925N 0553350E
     UMILA 211555N 0584738E
     LOTAV 203700N 0605700E

N571 **PARAR 2226.5 N 06307E* Note 7**
     (OO)
     RAGMA 230600N 0610539E
     * Note 7 (OO, OM)
     VUSET 235540N 0590812E
     MENSA 245750N 0563249E ATBOR
     251007N 0551947E
     RANBI 251908N 0544500E
     BALUS 254554N 0530424E

UN571 **(SUGID- 1933.1 N 06921.0E)**
     PARAR 2226.5 N 06307E* Note 7
     (OO OM)
     RAGMA 230600N 0610539E
     * Note 7 (OO)
     VUSET 235540N 0590812E
     MENSA 245750N 0563249E
     ATBOR 251007N 0551947E
     RANBI 251908N 0544500E
     BALUS 254554N 0530424E

N629 **TARDI 243418N 0560915E *Note 7**
     (OO)
     NOSMI 241757N 0563002E
     RAGUD 234701N 0571644E
     ~~**SEEB (MCT)**~~
     GEPOT 231446N 0580053E
     GIDAN 230104N 0582232E
     TOTOX 215030N 0622230E

UN629 **TARDI 243418N 0560915E*Note 7**
     (OO)
     NOSMI 241757N 0563002E
     RAGUD 234701N 0571644E
     ~~**SEEB (MCT)**~~
     GEPOT 231446N 0580053E
     GIDAN 230104N 0582232E
     TOTOX 215030N 0622230E

~~**N638**~~ ~~**KING KHALED**~~
(M508) ~~**PMA 243251N0394219E**~~

~~**UN638**~~ ~~**KING KHALED**~~
(UM508) ~~**PMA 243251N0394219E**~~

Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2

LOWER AIRSPACE	

Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2

UPPER AIRSPACE	

Designation	Significant points
UN644	**(DERA ISMAIL KHAN)** **GHAZNI (GN)** **LEMOD 3610.0N 06417.5E** **(MEKOL -3730.0N 06200.0E)** **(TABIP-3900.0N 05820.0E**
N764 **N767**	**NOBSU 171554N 0431318E** **RIN 144015N 0492329E** **SOCOTRA 123749N 0535429E** **SUHIL 120000N 0550000E** **PARAR 222630N 0630700E** **SEVLA 233321N 0591122E** **SEEB (MCT) * Note 7**
UN764 **UN767**	**NOBSU 171554N 0431318E** **RIN 144015N 0492329E** **SOCOTRA 123749N 0535429E** **SUHIL 120000N 0550000E** **PARAR 222630N 0630700E** **SEVLA 233321N 0591122E** **SEEB (MCT) * Note 7**
UN881	**RASKI 230330N 0635200E** **SETSI 230412N 0614410E** **MUSRU 230256N 0592223E** ***Note 7** **GIDAN 230104N 0582232E**
UP146	**RASHT** **AGINA 3919.4N 04405.2E** **(AGRI)**
P302	**HALAIFA*Note 3(OE,OJ)** **GURIAT** **HAZEM**
UP302	**HALAIFA *Note 3(OE,OJ)** **GURIAT** **HAZEM**
UP307	**SHJ** ~~**VOR**~~ **Note 7 (OM,OO)** **PARAR 222630N 0630700E**
P312	**RIYAN** **PAKER 1155.0N0463500E** **(HARGEISA)**
UP312	**RIYAN** **PAKER 1155.0N0463500E** **(HARGEISA)**
P316	**SALALLAH * Note 7 (OO)** **DAXAM** **GAGLA 180505N 0552410E** **RADAX 220809N 0580230E** **SEEB (MCT)**
UP316	**SALALLAH * Note 7 (OO)** **DAXAM 171612N 0544715E** **GAGLA 180505N 0552410E** **GIVNO 195011N 0563059E** **MOBAB 201032N 0564415E** **GISKA 213503N 0574014E** **RADAX 220809N 0580230E** **SEEB (MCT)**

Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2
LOWER AIRSPACE	

Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2
UPPER AIRSPACE	

UPPER AIRSPACE

~~UP318N~~
<mark>UP518</mark>   NOBAT 2109 02N 0680000E
        KABIM 2330 00N 06628 00E
        PAXUR-2400N 0660000E
        PARET 2527.2N 06451.5E
        PANJGUR * Note 7 (OI)

P319   PANJGUR * Note 7 (OI)
          DOSTI 255800N 0650300E
          KHI -255436N 0671036E
          SAPNA 2330N 06750E
          PAXUR 2400N 06600E
          BILAT 205824N 06800E

UP319   PANJGUR * Note 7 (OI)
            DOSTI 255800N 0650300E
            KHI -255436N 0671036E
            SAPNA 2330N 06750E
            PAXUR 2400N 06600E
            BILAT 205824N 06800E

UP323   ~~ANODA 0958.1N 07224.0E~~
            ~~GOLEM 1157.7N 0672202E~~
            <mark>DONSA 1435.3N06511.6E</mark>
            GIDAS 142004N0600000E
            ~~KADER151300N 05500E~~
            N~~IDOD 151115N 0552354E~~
            ~~PATAP 152744N0532929E~~
            ~~AL-GHAIDAH~~
            <mark>NODMA 1526.0N05334.0E</mark>
            THAMUD 1717.0N 04955.0E
            ~~BISHA 1958.7N 04237.5E~~
            <mark>WDR</mark>
            JEDDAH

P500   (DERA ISMAIL KHAN - DI)
           (BANNU -BN)
           (HANGU- 3329.1N 07100.4E)
           (PESHAWAR-PS)
           (CHITRAL -3553.2N 07148.0E)
           (GERRY-3612.0N 07135.0E)
           PADDY- 3628.0N 07138.0E
           FIRUZ 3640.0N 07138.0E

UP500   (DERA ISMAIL KHAN - DI)
            (BANNU -BN)
            (HANGU- 3329.1N 07100.4E)
            (PESHAWAR-PS)
            (CHITRAL -3553.2N 07148.0E)
            (GERRY-3612.0N 07135.0E)
            PADDY- 3628.0N 07138.0E
            FIRUZ- 3640.0N 07138.0E

P513   BUBAS 245938N 0570003E
           GERAR 240600N 0573616E
           MIBSI 234139N 0575523E
           SEEB (MCT) * Note 7

UP517   WAFRA
            GOVAL
            KMC

Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2
LOWER AIRSPACE	

Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2
UPPER AIRSPACE	

UP555   **NUWEIBAA*See Note 3**
                  RASDA 3306.0N 03057.0E
                  (KAVOS)

P557   **NUBAR 220000N 0313806E*SeeNote 6&7**
           MISUK 290507N 0290621E
           KATAB 292501N0290506E

UP557   **NUBAR 220000N 0313806E*SeeNote 6&7**
                  MISUK 290507N 0290621E
                  KATAB 292501N0290506E

P559   **(LARNACA)**
           KUKLA 3414.6N 3444.8E
           KHALDEH (KAD)
           DAKWE 3338.9N 03555.0E
           * Note 4 (OS)
           DAMASCUS
           TONTU 3148.1N 03811.2E
           * Note 3(OS,OJ)

UP559   **(LARNACA)**
                  KUKLA 3414.6N 3444.8E
                  KHALDEH (KAD)
                  DAKWE 3338.9N 03555.0E
                  DAMASCUS
                  TONTU 3148.1N 03811.2E
                  * Note 3 (OS,OJ)
                  TURAIF (TRF)
                  KAVID 3035.9N 04011.8E
                  TOKLU 2942.1N 04202.4E
                  RASMO 2857.2N 04331.3E
                  KMC
                  MUSKO 2726.7N 04737.1E
                  KEDAT 2721.8N 04759.0E
                  JUBAIL (JBL)
                  ALVON 2700.2N 05007.2E
                  RATUN 2646.2N 05108.0E

UP567   **BIRJAND**
                  ODKAT 3540.6N 05457.2E
                  DASHT-E-NAZ -3638.7N 05311.4E
                  (ULDUS -3800.0N 05101.0E)

P570   **KITAL 2003N 06018E**
           MIBSI 234139N 0575523E

UP570   ~~**TRIVENDRUM**~~
                  ~~**VISET1831 12N 06229 64E**~~
                  KITAL 2003N 06018E
                  MIBSI 234139N 0575523E

P571   **LABNI 16 620N 0410921E**
           NISMI 162415N 0421838E
           ~~**SANA'A (SAA)**~~
           RIN
           VEDET 120134N 0512410E

UP571   **LABNI 165620N 0410921E**
                  NISMI 162415N 0421838E
                  ~~**SANA'A (SAA)**~~
                  RIN
                  VEDET 120134N 0512410E

Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2
LOWER AIRSPACE	

Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2
UPPER AIRSPACE	

UP574 (BELGAUM)
(BISET- 1823.4N 06918.1E)
TOTOX 215030N 0622230E
* Note 7 (OO)
KUSRA 231726N 0585102E
MIBSI 234138N 0575525E
LUDAL 235023N 0574305E
SOLUD 243223N 0564421E
GISMO 244743N 0562236E
BUBIN 245742N 0560642E
KUMUN 254000N 0551512E
* Note 7 (KUMUN-PAPAR)
PAPAR 264000N 0542700E
SHIRAZ
ESFAHAN
TEHRAN
ULDUS

UP634 LALDO 251806N 0563600E
ATBOR 251007N 0551947E

UP891 MAGALA
EGNOV
EMILU
ASVIR
KUWAIT

P899 PARAR 222630N 0630700E *Note 7
(OO,OM)
MIBSI 234139N 0575523E
PAXIM 240245N 05617631E
ITRAX 241248N 0554749E
AL AIN (ALN)
ABU DHABI

UP899 PARAR 222630N 0630700E*Note 7
(OO,OM)
MIBSI 234139N 0575523E
PAXIM 240245N 05617631E
ITRAX 241248N 0554749E
AL AIN (ALN)
ABU DHABI

UP975 (ELAZIG)*Note7
(DYB) 384225N 0391328E
LESRI 370420N 0411348E
KANOK 3634.0N 04141.0E
SOGUM 341212N 0435454E
ETBOM 332143N 0444813E
NOLDO 324930N 0452130E
PUSMO 304444N 0473547E
SIDAD 295231N 0482944E
LONOS 283414N 0492344E

Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2
LOWER AIRSPACE	

Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2
UPPER AIRSPACE	

	TESSO 282852N 0492723E
	MIXAR 270800N 0503300E
	RATUN 264613N 0510759E

R205	**ANARAK**
	BIRJAND
R219	**SHARJAH * Note 7 (OB, OM)**
	RATUN 2646.2N 05108.0E
	KING FAHD * Note 7 (OB)
	BOROP 2653 17 N 04852 03E
	KEDAT 2721 49N 04759 01E
R401	**AMPEX 0810.0N 05500.0E**
	SUHIL 1200.0N 05500.0E
	~~**KADER 1506.0N 05500.0**E~~
	<mark>**NIDOD 151115N 0552354E**</mark>
	<mark>**KIVEL 165306N 0553633E**</mark>
	~~**AVAVO 1647.1N 05526.1E**~~
	HAIMA
	DEMKI 224941N 0562308E
	MUSAP241754N 0555245E
	GIDIS 243600N 0555600E
	RAS AL
	DARAX
	<mark>**GHESHM**</mark>
R402	**LAKLU 232235N 0570401E**
	HAIMA (HAI)
R456	**KITAL200300N 0601800E**
	(MALE)
R462	**(JIWANI)**
	DENDA 2442.5N 06054.8E
	VUSET 235540N 0590812E
	MIBSI 234139N 0575523)
	***Note 7 (OO)**
R650	**LUXOR**
	HURGHADA
	SHARM EL SHEIKH
	NUWEIBAA
	NALSO 2932.0N 03453.0E

UR205	**ANARAK**
	BIRJAND
UR219	**OTILA 3201.5N 03901.9E*Note 7**
	MODAD
	SOKAN
	RAFIF
	SULAF
	FIRAS
UR401	**AMPEX 08 10.0N 055 00.0E**
	SUHIL 1200.0N 05500.0E
	~~**KADER 1506.0N 05500.0**E~~
	<mark>**NIDOD 151115N 0552354E**</mark>
	<mark>**KIVEL 165306N 0553633E**</mark>
	~~**AVAVO 1647.1N 05526.1E**~~
	HAIMA
	DEMKI 224941N 0562308E MUSAP
	241754N 0555245E
	GIDIS 243600N 0555600E
	RAS AL KHAIMAH
	DARAX
	<mark>**GHESHM**</mark>
UR402	**LAKLU 232235N 0570401E**
	HAIMA (HAI)
UR456	**KITAL200300N 0601800E**
	(MALE)
UR462	**(JIWANI)**
	DENDA 2442.5N 06054.8E
	VUSET 235540N 0590812E
	MIBSI 234139N 0575523E
	***Note 7 (OO)**
UR650	**LUXOR**
	HURGHADA
	SHARM EL SHEIKH
	NUWEIBAA
	NALSO 2932.0N 03453.0E

Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2

LOWER AIRSPACE

Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2

UPPER AIRSPACE

R651	**TANF** **SHATRA**		**UR651**	**TANF** **SHATRA**
R652	**TURAIF** ***Note 7(OE)** **GURIAT** **QATRANEH** **AQABA** **METSA 2930.0N 03500.0E**		**UR652**	**TURAIF** ***Note 7(OE)** **GURIAT** **QATRANEH** **AQABA** **METSA 2930.0N 03500.0E**
~~**R653**~~	~~**JERUSALEM * Note 4(OJ, OS)**~~ ~~**RAMTHA**~~ ~~**DAMASCUS**~~		~~**UR653**~~	~~**JERUSALEM * Note 4(OJ, OS)**~~ ~~**RAMTHA**~~ ~~**DAMASCUS**~~
R654	**ZANJAN** **SAVEH** **ESFAHAN** **YAZD** **KERMAN** **NABOD 2816.1N 05825.3E** **CHAH BAHAR (CBH)** **EGTAL 243458N 0603724E** **VAXIM 231900N 0611100E**		**UR654**	**MEGRI** **ZANJAN** **SAVEH** **ESFAHAN** **YAZD** **KERMAN** **NABOD 2816.1N 05825.3E** **CHAH BAHAR (CBH)** **EGTAL 243458N 0603724E** **VAXIM 231900N 0611100E**
R655	**(LARNACA)** **CHEKKA** **KARIATAIN**		**UR655**	**(LARNACA)** **CHEKKA** **KARIATAIN**
R658	**SEEB** **MELMI 2647.0N 05723.0E** **BANDAR ABBAS**		**UR658**	**SEEB** **MELMI 2647.0N 05723.0E** **BANDAR ABBAS**
R659	**SHIRAZ** **DOHA** **MARMI 241400N 0511330E** **MIGMA 225035N 0512749E** **PURDA 210805N 0510329E** **ASTIN 200410N 0495320E** **TULIS 173033N 0462616E** ~~**ALHAZM 161230N 0444742E**~~ ~~**SANA'A**~~ **TATNA 171429N 0461418E** **RAGNI 163454N 0454815E** **LOPAD 161651N 0453738E**		**UR659**	**SHIRAZ** **DOHA** **MARMI 241400N 0511330E** **MIGMA 225035N 0512749E** **PURDA 210805N 0510329E** **ASTIN 200410N 0495320E** **TULIS 173033N 0462616E** ~~**ALHAZM 161230N 0444742E**~~ ~~**SANA'A**~~ **TATNA 171429N 0461418E** **RAGNI 163454N 0454815E** **LOPAD 161651N 0453738E**

Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2
LOWER AIRSPACE	

Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2
UPPER AIRSPACE	

ITOLI 152825N 0450927E
OBNAM 144541N 0444448E
GEVEL 141229N 0442547E
NOPVO 135436N 0441536E
TAZ 134149.53N 0440818.98E
PARIM 123142N 0432712EE

ITOLI 152825N 0450927E
OBNAM 144541N 0444448E
GEVEL 141229N 0442547E
NOPVO 135436N 0441536E
TAZ 134149.53N 0440818.98E
PARIM 123142N 0432712EE

R660	**(ERZERUM)** **DASIS 38 54.5N 044 12.5E** **TABRIZ** **RASHT** **TEHRAN**	**UR660**	**RASHT** **TEHRAN**
R661	**DULAV 3857.0N 04537.9E** **TABRIZ** **ZANJAN** **RUDESHUR** **VARAMIN** **DEHNAMAK**	**UR661**	**DULAV 3857.0N 04537.9E** **TABRIZ** **ZANJAN** **RUDESHUR** **VARAMIN** **DEHNAMAK**
		UR674	**SABLE 185158N 0520339E** **LOTEL 180926N 0514103E** **PASUL 180341N 0513803E** **GOGRI 170752N 0510857E** **OBTAS 164633N 0505756E** **RARBA 161021N 0503920E** **UKORA 152407N 0501547E** **NAKAD 150056N 0500402E** **DANAN 144010N 0495334E** **XABIL 142924N 0494809E** **EMABI 141627N 0494139E** **PAXED 135027N 0492759E** **DEMGO 120258N 0483040E**
R775	**LUXOR (LXR) 254458N 0324607E** **DEDLI 2242 32N 03737 19E** **KING ABDULAZIZ** **DANAK 1608.0N 04129.0E** **(ASSAB)**	**UR775**	**KING ABDULAZIZ** **DANAK 1608.0N 04129.0E** **(ASSAB)**
R777	**DANAK 1608.0N 04129.0E** **SANA'A** **TAIZ** **ARABO 1238.8N 04404.0E** **TORBA 1210.6N 04402.1E**	**UR777**	**DANAK 1608.0N 04129.0E** **SANA'A** **TAIZ** **ARABO 1238.8N 04404.0E** **TORBA 1210.6N 04402.1E**

Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2

LOWER AIRSPACE

Designation Désignation Designación	Significant points Points significatifs Puntos significativos
1	2

UPPER AIRSPACE

LOWER AIRSPACE

R784　　**SHARJAH**
　　　　　ORSAR2604.5N 05357.5E
　　　　　DURSI 2712.3N 05201.7E
　　　　　IMDAT 2740.0N 05113.0E
　　　　　ALNIN 2840.9N 05001.6E
　　　　　NANPI 2905.0N 04932.0E
　　　　　SIDAD 2952.5N 04829.7E
　　　　　PUSMO 304444N 0473547E
　　　　　ALVET 313500N 0471500E
　　　　　ITSOP 330422N 0454208E
　　　　　GONSI 332622N 0451837E
　　　　　SIGNI 340006N 0444200E
　　　　　RAMPI 351642N 0435618E
　　　　　KATOT 360000N 0432700E
　　　　　KABAN 3715.0N 04239.0E
　　　　　(SIIRT)

R785　　**TURAIF**
　　　　　ZELAF 3257.0N 03800.0E
　　　　　KARIATAIN
　　　　　BANIAS
　　　　　NIKAS 3511.6N 03543.0E

R794　　**ULDUZ 3810.0N 05020.0E**
　　　　　NOSHAHR
　　　　　DEHNAMAK
　　　　　TABAS
　　　　　BIRJAND * Note 5 (OI)

R799　　~~**SILPA 184953N0510158E**~~
　　　　　~~**PATAP 152744N 0532929.5E**~~
　　　　　IMPOS 183136N 0511848 E
　　　　　PASUL 180341N 0513803^E
　　　　　TONRO 165850N 0522235^E
　　　　　ASMAK 162327N 0524634^E
　　　　　ENADO 153333N 0532015E

UPPER AIRSPACE

UR784　**SHARJAH**
　　　　　ORSAR 2604.5N 05357.5E
　　　　　DURSI 2712.3N 05201.7 E
　　　　　IMDAT 2740.0N 05113.0E
　　　　　ALNIN 2840.9N 05001.6E
　　　　　NANPI 2905.0N 04932.0E
　　　　　SIDAD 2952.5N 04829.7E
　　　　　PUSMO 304444N 0473547E
　　　　　ALVET 313500N 0471500E
　　　　　ITSOP 330422N 0454208E
　　　　　GONSI 332622N 0451837E
　　　　　SIGNI 340006N 0444200E
　　　　　RAMPI 351642N 0435618E
　　　　　KATOT 360000N 0432700E
　　　　　KABAN 3715.0N 04239.0E
　　　　　(SIIRT)

UR785　**TURAIF**
　　　　　ZELAF 3257.0N 03800.0E
　　　　　KARIATAIN
　　　　　BANIAS
　　　　　NIKAS 3511.6N 03543.0E

UR794　**ULDUZ 3810.0N 05020.0E**
　　　　　NOSHAHR
　　　　　DEHNAMAK
　　　　　TABAS
　　　　　BIRJAND * Note 5 (OI)

UR799　**SILPA 184953N0510158E**
　　　　　PATAP 152744N 0532929.5E
　　　　　IMPOS 183136N 0511848 E
　　　　　PASUL 180341N 0513803^E
　　　　　TONRO 165850N 0522235^E
　　　　　ASMAK 162327N 0524634^E
　　　　　ENADO 153333N 0532015E

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Appendix 5.3B to the Report on Agenda Item 5.3

FUTURE ATS ROUTE REQUIREMENTS

IDENT.	START POINT	END POINT	DESCRIPTION	FIRS CONCERNED	FLIGHT LEVEL BAND	PRIORITY	REQUESTED BY (DATE)	REMARKS
A412	JERUSALEM	TANF	JERUSALEM AMMAN ZELAF 3257.0N 03800.0E TANF	Amman Damascus Tel-Aviv			IATA	
B419	DOHA	KUWAIT	[DOHA] [KING FAHD] * Note3 (OB, OT) ALVON 2700.2N 05007.2E SELEG 2801.5N 04922.2E KUWAIT	Bahrain Jeddah Kuwait			IATA	Military restrictions. Saudi Arabia is ready to implement.
B538	GAZIANTEP	DAMASCUS	(GAZIANTEP) ALEPPO KARIATAIN DAMASCUS	Damascus			IATA	Segment GAZIANTEP-ALEPPO implemented (B544)
B545	BALMA	AMMAN	(MUT) BALMA 3428.9N 035 3.0E KHALDEH AMMAN	Amman Beirut Ankara			IATA	
G660	KING ABDULAZIZ	ABU DHABI	KING ABDULAZIZ ABU DHABI * Note3 (OE, OM)				IATA	Military restrictions

IDENT.	START POINT	END POINT	DESCRIPTION	FIRS CONCERNED	FLIGHT LEVEL BAND	PRIORITY	REQUESTED BY (DATE)	REMARKS
G662	DAMASCUS	KING KHALID	[DAMASCUS] [GURIAT] AL SHIGAR HAIL GASSIM KING KHALID	Amman Damascus			IATA	
G664	APLON	AMMAN	APLON 3352.0N 03204.0E BEN GURION AMMAN	Amman Tel-Aviv			IATA	
R653	JERUSALEM	DAMASCUS	JERUSALEM RAMTHA DAMASCUS	Damascus Tel-Aviv			IATA	
XXXX	ARI (Agri)	NT (Nakhchivan)	ARI (Agri) AAAAA (TUR/IRN BDRY) BBBBB (IRN/AZE BDRY) NT (Nakhchivan)	Ankara (TUR) Tehran Yerevan (AZE)			Turkey (2002)	

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INCIDENTS DATA REPORTING MECHANISM

Taking into consideration the deficiencies noted in the reporting process of incidents involving State aircraft, as an interim measure, the following flow chart is a suggested process which may facilitate feedback on State aircraft incidents:
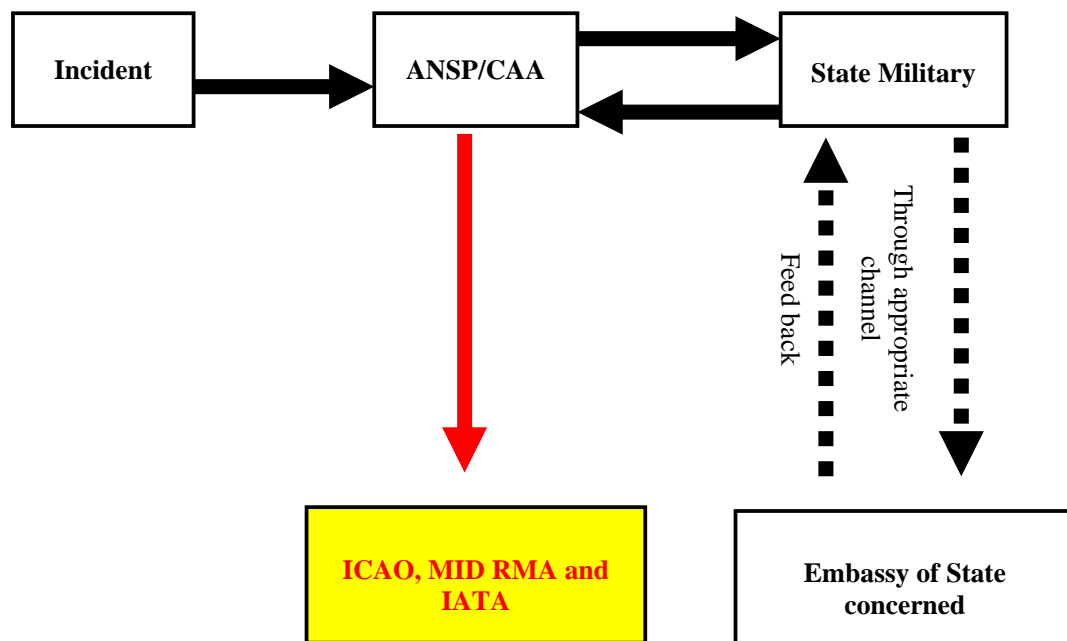
MIDANPIRG/10
Appendix 5.3D to the Report on Agenda Item 5.3

PROCEDURES FOR THE HANDLING OF UNCOORDINATED FLIGHTS CROSSING THE RED SEA AREA

Uncoordinated flights operating within the Red Sea area shall implement the following procedures:

1.   Committing all uncoordinated flights over the Red Sea to squawk the Radar Code A2000. *The representative of IATA was assigned the task of notifying concerned airlines operating in this region of the importance of such issue. States are also requested to report to IATA and the MID RMA any aircraft that do not use the Radar Code A2000.*

2.   Uncoordinated flights should maintain a single flight level (FL) while crossing the Red Sea from south to north, namely FL300.

3.   Uncoordinated flights should maintain a single flight level (FL) while crossing the Red Sea from north to south, namely FL290, unless otherwise is coordinated.

4.   Uncoordinated flights crossing the Red Sea should provide their flight details on the working frequencies of the concerned Air Traffic Control Centres (ACCs), namely Sana'a, Jeddah, Khartoum, and Cairo and notify these Centres of the following data: call sign, direction, altitude, time of crossing the reporting points along the boundaries of the FIR.

5.   Uncoordinated flights crossing the Red Sea should transmit their flight details 10 minutes prior to crossing the boundaries of the concerned FIR and the compulsory reporting points in addition to listen on to the appropriate frequencies in order to identify other civil aircraft that may conflict with them and represent risk of collision.

6.   Civil Aviation Authorities of the concerned States should instruct their ACCs to develop procedures for the communication of appropriate information regarding uncoordinated flights; survey and register irregularities by these uncoordinated flights; and find a mechanism in coordination with Regional Offices and other international bodies to commit these flights to conformity with the reached recommendations.

7.   Increase the awareness of Air Traffic Controllers at ACCs in the concerned States of this situation and of the potential risks; in addition to benefit from radar facilities for the monitoring of non-conforming flights.

8.   All flights flying in the center of the Red Sea and maintaining RVSM Flight levels (between FL290-FL410) should be RVSM approved in accordance with the MID Region requirements.

9.   Unless otherwise coordinated, all the abovementioned flights, in case of non-compliance with the Region's requirements for flying in an RVSM area, should be allocated two Flight levels, namely FL250 and FL260.

10. All navigational information regarding aircraft on direct routes in the center of the Red Sea and considered unidentified by the Air Traffic Control Centres should be sent via either AFTN or any other means.

11. *IATA will assist in requesting civil flights operating within Sana'a FIR to operate on established ATS routes.

12. The agreement above should be added in the form of Letters of Agreement (LOAs) between the ACCs of the concerned Arab States.

Note:-
- ** Included in the agreement at the request on Yemen*

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Appendix 5.3E to the Report on Agenda Item 5.3

DUTIES AND RESPONSIBILITIES OF THE MID RMA

The Middle East Regional Monitoring Agency (MID RMA) for RVSM and RNP implementation has the following duties and responsibilities:

a) to establish and maintain a central registry of State RVSM approvals of operators and aircraft using the Middle East Region airspace where RVSM is applied;

b) to facilitate the transfer of approval data to and from other RVSM regional monitoring agencies;

c) to establish and maintain a data base containing the results of height-keeping performance monitoring and all altitude deviations of 300 ft or more within Middle East Region airspace, and to include in the database the results of MID RMA requests to operators and States for information explaining the causes of observed large height deviations;

d) provide timely information on changes of monitoring status of aircraft type classifications to State authorities and operators;

e) to assume overall responsibility for assessing compliance of operators and aircraft with RVSM height-keeping performance requirements in conjunction with RVSM introduction in the Middle East Region;

f) to provide the means for identifying non-RVSM approved operators using Middle East airspace where RVSM is applied; and notifying the appropriate State approval authority;

g) to conduct readiness assessments and safety assessments as an aid for the Middle East RVSM Task Force for decision making in preparation for RVSM implementation in those FIRs where RVSM is not yet implemented;

h) to carry out post-implementation safety assessments with a view to verify that the defined safety level continues to be met;

i) to establish and maintain a database containing the results of navigation error monitoring;

j) to prepare, each year a report setting out the results of navigation error monitoring for the preceding six-month period. This report shall be presented to the ICAO Middle East Regional Office, Cairo, and States as part of their decision process related to safety management;

k) to conduct safety assessments in conjunction with expansion or changes to the RNP route structure within the Middle East Region;

l) to assist States in carrying out safety assessments in relation to requirements identified within the framework of safety management programmes likely to have an impact on the safety of air navigation at a sub-regional level; and

m) to liaise with other Regional Monitoring Agencies and organizations to harmonise implementation strategies.

Note: The MID RMA will be guided by the working principles indicated in the RMA Manual available on the ICAO website.

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AGREED PRINCIPLES FOR THE ESTABLISHMENT OF THE MID RMA

The agreed principles for the establishment of the MID RMA are as follows:

1. **SCOPE OF RMA**

    That the scope of the RMA will be:

    a) RVSM Post-implementation safety assessment

    b) RNP/RNAV
       − B-RNAV
       − T-RNAV

    c) Safety Management Systems (SMS)

    d) Readiness and safety assessment work in preparation for RVSM implementation in those FIRs where RVSM is not yet implemented.

2. **MANAGEMENT OF RMA**

    That the MID RMA will be an autonomous body managed by a board comprised of one member of each of the Participating States and will report its activity to MIDANPIRG through the ATM/SAR/AIS Sub Group.

3. **HOSTING OF THE MID RMA**

    The MID RMA will be hosted by Bahrain.

Middle East Regional Monitoring Agency

(MID RMA)

MEMORANDUM

OF AGREEMENT

Bahrain - 27 February, 2006

MEMORANDUM OF AGREEMENT
on the establishment, operation and management of the
Middle East Regional Monitoring Agency (MID RMA)
and its funding by the Participating States

1.   PARTIES

1.1   The Parties to this memorandum of agreement are: Bahrain, Egypt, Iran, Jordan, Kuwait, Lebanon, Oman, Saudi Arabia, Syria and Yemen.

2.   AGREEMENT

- CONSIDERING the urgent need to institute a programme, on a regional basis, for monitoring the height-keeping performance of aircraft operating in RVSM airspace;

- CONSIDERING the Parties' earlier decision that the Middle East Regional Monitoring Agency (MID RMA) will be funded entirely by the participating States and that the budget estimate for the first year, be paid by the Parties on equal basis;

The Parties have agreed as follows:

1.   The Parties to this memorandum of agreement, referred to hereunder as Participating States agree to establish the Middle East Regional Monitoring Agency (MID RMA) and undertake to become its members;

2.   The MID RMA shall be managed as a Regional programme; shall have legal personality and shall act through the MID RMA Board;

3.   The overall objective of the MID RMA is the promotion of safety of air navigation in the Middle East Region through the operation and management, on a sound and efficient basis, of a permanent MID Regional Monitoring Agency;

4.   The MID RMA Board, in which each Participating State is entitled to appoint one member, shall retain overall direction and responsibility for the supervision and operation of the MID RMA in accordance with the relevant obligations of the Participating States under the Convention on International Civil Aviation and its Annexes. The Board shall elect its chairman. It shall inter-alia, supervise and direct the MID RMA, follow-up its activities and reports and assign its priorities. It shall also secure the commitment of Participating States for funding the MID RMA in accordance with agreed funding mechanism and for provision of necessary data for the MID RMA;

5.   The MID RMA's scope, duties and responsibilities will be those agreed by the Board's first meeting and could be revised by the Board. The MID RMA will be assigned clear tasks in a step-by-step approach starting with RVSM height monitoring and RVSM post-implementation safety assessment, having in mind the end objectives, which will include RNP/RNAV and SMS. The MID RMA duties and responsibilities will include, but will not be limited to the following:

   - collecting and analysing RVSM data received from MID States as well as from Eurocontrol/FAA, IATA and airlines;

   - collecting data on aircraft approved by various States for operation within RVSM airspace in the MID Region and enter such data in the MID RMA database;

   - verification of the effectiveness of the approval process by States;

   - establishing a database for reporting height deviations of aircraft;

   - verification that the target level of safety on implementation of RVSM is met and maintained;

- monitoring the effectiveness of the altimetry system modifications to enable aircraft to meet the required height keeping performance criteria;

- evaluation of the stability of altimetry system error;

- undertake monitoring missions to States as required;

- determine in the light of analysis made of data received and of missions conducted, whether compliance with required safety standards is maintained and initiate corrective action as needed in each case; and

- submit a report to each Board meeting on MID RMA activities, its analysis of data and any identified departure from RVSM Safety limits, for its consideration and action as appropriate.

6. The Participating States have accepted Bahrain's offer to host the MID RMA in Bahrain to enable the early establishment and functioning of the MID RMA;

7. Bahrain will provide the offices, equipment and local personnel needed for the MID RMA operations and pay for the initial set up of the MID RMA without waiting for MID States' contributions. The advance payment made by Bahrain shall be recovered through States' contributions in compliance with the agreed funding mechanism;

8. Based on the agreed funding mechanism for the first year of operation of the MID RMA, the cost for the establishment of the MID RMA, its operation and management for the first year shall not exceed the estimated amount of US$ 300,000, which shall be borne by the Participating States on equal basis;

9. The funding mechanism and consequent contributions of Participating States may be modified in subsequent years by decision of the Board;

10. The MID RMA staff shall be composed of:

1.	MID RMA Manager/Team Leader	(Part Time)
2.	One Assistant MID RMA Officer	(Full Time)
3.	Database Specialist	(Part Time)

11. The MID RMA Manager/Team Leader shall manage the project on day-to-day basis and effect coordination with the Chairman of the MID RMA Board. He shall submit the MID RMA reports to the Board with copies to the ICAO Regional Office in Cairo;

12. Bahrain shall monitor the progress of the MID RMA, maintain financial accounting and provide general support and timely reporting;

13. Participating States authorize the MID RMA Board Chairman to negotiate on behalf of the MID RMA an agreement with ICAO and Bahrain specifying ICAO's role as the custodian of the funds collected for the purpose of this agreement, in compliance with ICAO's Financial Regulations and Rules;

14. This Memorandum of Agreement shall come into effect on the date it has been signed by the Participating States;

15. Any amendment to this Memorandum of Agreement, shall be carried out by the parties to this agreement;

16. Any dispute arising out of or relating to this Memorandum of Agreement, shall be settled by direct consultation between the Participating States concerned;

17. Any Participating State may withdraw from this Memorandum of Agreement by giving a prior notice of **six (6) months** to other Participating States. The obligations assumed by the Participating States under this Memorandum of Agreement shall continue to exist after the

withdrawal from this Memorandum of Agreement to the extent necessary to permit the orderly finalization of activities, the withdrawal of personnel, the distribution of funds and assets and the settlement of contractual obligations. Additional funds, if necessary, to cover the above mentioned expenditures shall be provided by the Participating States.

18.   The hosting of the MID RMA by Bahrain may be terminated at the request of Bahrain, with two years advance written notification to the MID RMA Board to allow sufficient time for selection of an alternative location and necessary arrangements for transfer of the MID RMA.

19.   All correspondence relating to the implementation of this Agreement, shall be addressed to:

MID RMA
Chairman of the MID RMA Board
C/o Ministry of Transportation
P.O. Box 586
Bahrain International Airport
Manama - Bahrain

With copy to the:

ICAO Regional Director
ICAO Middle East Regional Office
Egyptian Civil Aviation Complex, Airport Road
P.O Box 85, Airport Post office, Terminal One
11776, Cairo, Egypt

Agreed on behalf of MID RMA States

State	Signature	Title	Date
Bahrain		A.D. REZA AIR NAVICATION	27/2/06
Egypt		ATS Safety Manager	28/2/2006
Iran		CAO, N. REZAEI NAMDIK	21, 03, 2006
Jordan		Director ATM	28/2/2006
Lebanon		CHIEF AIR NAV DEPT	27th Feb 2006
Kuwait		DY DGCA for NBA	27/2/2006
Oman		A DGCAM	27th Feb 2006
Saudi Arabia		RJSM / MANGUR	27 5 200C
Syria		Director General	21. March 2006
Yemen		Chairman of Cama	21.03.2006

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Appendix 5.3H to the Report on Agenda Item 5.3

Custodian Agreement
between ICAO, the Middle East Regional Monitoring Agency
(MID RMA), and Bahrain.

Whereas the Middle East Regional Monitoring Agency (MID RMA) desires to request the International Civil Aviation Organization (ICAO) to perform certain custodian functions with respect to the funds collected from the member States of the MID RMA;

Whereas the member States of the MID RMA, under the Memorandum of Agreement on the Establishment, Operation and Management of the Middle East Regional Monitoring Agency (MID RMA) and its Funding by the Participating States, have authorized the MID RMA Board Chairman to negotiate on behalf of the MID RMA an agreement with ICAO and Bahrain specifying ICAO's role as the custodian of the funds collected for the purpose of the Memorandum of Agreement;

Whereas Bahrain agrees under the Memorandum of Agreement to host the MID RMA in Bahrain and undertakes to monitor the progress of the MID RMA, maintain financial accounting and provide general support and timely reporting;

The Parties have agreed as follows:

1.   The Custodian Functions of ICAO

1.1   In accordance with the apportionment provided by the MID RMA Board, ICAO shall use its best efforts to assist in collecting the funds from each of the member States of the MID RMA by issuing a request for payment to each member State.

1.2   ICAO shall act as the custodian of the funds collected under subparagraph 1.1, to the extent defined as follows:

        a)   Creating a fund for the MID RMA, in compliance with existing ICAO financial Rules and Regulations.

        b)   depositing the funds received into the MID RMA fund mentioned in subparagraph 1.1 and issuing acknowledgements of receipts to individual States when funds are received;

        c)   recording the funds received in the MID RMA fund and tracking accrued interest;

        d)   reporting on funds received and balance of funds to the RMA Board via its chairman on a quarterly basis;

        e)   subject to availability of funds, reimbursing Bahrain on the basis of a certified request for payment by the Chairman of the MID RMA Board on a semi-annual basis;

2.   Administration Fees of ICAO

2.1   ICAO shall be entitled to receive ten per cent (10%) of the funds collected, as administration fees.

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3. **Exclusion of ICAO's Responsibility and Liability**

3.1   ICAO has no responsibility to certify that funds spent by Bahrain are for the purpose for which they were intended. Nor shall any form of verification or audit be performed on expenditure related to the MID RMA. Any request for audit shall be commissioned by the MID RMA Board and contracted with an independent external auditor.

3.2   ICAO is under no obligation to provide an itemized statement of expenditure since it has no responsibility for the budget of the MID RMA Board.

3.3   ICAO shall not receive invoices for payment to third parties nor shall it be required to make any disbursements other than to Bahrain for reimbursement of their costs.

3.4   In no event shall ICAO be held liable for any claim or damage arising from the execution of this Agreement. Without limiting the generality of the foregoing, ICAO shall not be liable for:

a)   the failure to collect from member States which are in default. Following two reminders sent to the States by ICAO, it shall be the sole responsibility of the MID RMA Board to engage in further collection action or to enforce any applicable sanctions with respect to members States which are in default;

b)   the loss of the funds, such as in the course of their deposits, transmissions or transfers;

c)   any deficit position of the MID RMA fund.

3.5   The MID RMA shall indemnify, hold and save harmless, and defend, at its own expense, ICAO, its officials, agents, servants and employees, from and against all suits, claims, demands and liability of any nature or kind, including their costs and expenses, arising out of the acts or omissions of the MID RMA or the MID RMA's employees, officers, agents or sub-contractors, in the performance of this Agreement.   This provision shall extend, *inter alia*, to claims and liability in the nature of workmen's compensation claims, product liability and liability arising out of the use of patented inventions or devices, copyrighted material or other intellectual property by the MID RMA, its employees, officers, agents, servants, or sub-contractors. The obligations under this clause do not lapse upon termination of this Agreement.

4. **Compliance with ICAO Financial Regulations and Rules**

4.1   ICAO shall be bound by its Financial Regulations and Rules in all matters under this Agreement. No provision of this agreement shall be interpreted in conflict with the Financial Regulations and Rules.

5. **Settlement of Disputes**

5.1   Any dispute, controversy or claim arising out of or relating to this Agreement shall be settled amicably through negotiation and consultation between the Parties.

6.   Immunity of ICAO

6.1   Nothing in or relating to this Agreement shall be deemed a waiver, express or implied, of any immunity from suit or legal process or any privilege, exemption or other immunity enjoyed or which may be enjoyed by ICAO, its officers and staff, either pursuant to the Convention on the Privileges and Immunities of the Specialized Agencies or other conventions, agreements, laws or decrees of an international character.

7.   Language of Correspondence

7.1   All reports, correspondence and other information shall be in English.

8.   Notices

8.1   All correspondence between the Parties shall be sent in writing to the following offices and addresses:

a)	**ICAO:**	International Civil Aviation Organization
		Technical Co-operation Bureau
		999 University Street
		Montreal, Québec
		H3C 5H7
	Tel:	++ 514-954-8219 Ext. 8082
	Fax:	++ 514-954-6287
	E-mail:	vdorofeyev@icao.int
b)	**MID RMA:**	Middle East Regional Monitoring Agency
		(MID RMA)
		C/o Civil Aviation Affairs
		P.O. Box: 586
		Manama, Bahrain
	Tel:	++ 973 17 32 91 50
	Fax:	++ 973 17 32 91 60
	E-mail:	midrma@batelco.com.bh
c)	**Bahrain:**	The Under Secretary
		Civil Aviation Affairs
		Bahrain International Airport
	Tel:	++ 973 17 321 100
	Fax:	++ 973 17 329 066
	E-mail:	aralgaoud@caa.gov.bh

9.   Amendment to the Agreement

9.1   This Agreement may be amended by an instrument in writing signed by each of the Parties.

Termination or Renewal of the Agreement

10.1   This Agreement is concluded initially for a term of two (2) years. It shall be automatically renewed at the time of expiration, unless one Party notifies the other Parties by a prior written notice of three (3) months that it intends to terminate this Agreement at the end of the term.
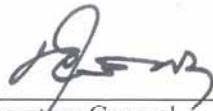
10.2   ICAO may terminate this Agreement at any time by providing prior written notice of three (3) months.

11.   Entry into Force

11.1   This Agreement shall come into force at the time of signature by all the Parties.

Acknowledged and agreed:

For ICAO

Secretary General
9 May 2006

For Bahrain

Under   Secretary   Civil
Aviation Affairs
6/June/ 2006

For MID RMA Member States

Chairman of MID RMA Board
3rd June 2006

— END —

IMPLEMENTATION OF AN RMA COST RECOVERY ARRANGEMENT

A STEP-BY-STEP PROCEDURE

On the basis of the existing guidelines on the establishment of a multinational ICAO air navigation facility/service, the implementation of an RMA and the associated cost recovery arrangement could include the following steps:

a) define, at a PIRG meeting, the RVSM monitoring function as a Multinational ICAO Air Navigation Facility/Service in accordance with the existing guidelines on the establishment and provision of a multinational ICAO air navigation facilities/services, included in the regional air navigation plan concerned;

b) agree to a cost sharing arrangement based on, for example, distance flown or number of flights within the airspace for which each of the respective States has assumed responsibility, it being understood that distance flown may offer more precision while allocation based on the number of flights is simpler to administer;

c) find and assign a State or an existing organization or agency to establish and operate the RMA (the PIRG's responsibility);

d) develop and establish an administrative agreement to regulate the establishment and operation of the RMA, including the cost sharing arrangement and procedures for collection of contributions from the participating States (the PIRG, assisted by the ICAO Regional Office);

e) sign the administrative agreement (DGCAs or some other authorized person in the participating States);

f) establish and operate the RMA as a Multinational ICAO Air Navigation Facility/Service in accordance with the administrative agreement (the assigned operator); and

g) recover the contributions to the financing of the RMA through additions to the cost bases for route charges and transfer the amounts to the RMA operator (each State).

MIDDLE EAST REGIONAL MONITORING AGENCY (MID RMA) BOARD

TERMS OF REFERENCE

The Terms of Reference of the MID RMA Board are as follows:

1. The Board will be responsible for overall supervision, direction, and management of the MID RMA project.

2. The Board will elect a Chairperson.

3. The elected Chairperson will be the contact point/coordinator on behalf of the MID RMA Board members to oversee the MID RMA project in coordination with ICAO.

4. The Board will review and update the MID RMA work plan on a yearly basis and/or whenever required.

5. The Board will meet at least once a year or when deemed necessary to review/update, consider, and approve:

    i.   the MID RMA safety reports;
    ii. matters related to funding mechanism, costs, accounting, etc; and
    iii. the duties, responsibilities and scope of the MID RMA.

6. The Board through its Chairperson will report its activity to MIDANPIRG through the ATM/SAR/AIS Sub-Group.

Composition:

The MID RMA Board will consist of focal points nominated by each Participating MID Region State as signatories on their behalf with ICAO Technical Cooperation Bureau (TCB) in relation with the MID RMA project.

The MID RMA Board meetings will be attended by:

- The Board members
- ICAO Regional Office, as permanent observer; and
- Other Organizations (EUROCONTROL, FAA, IATA, etc) as observes on ad-hoc basis and as required.

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Appendix 5.3K to the Report on Agenda Item 5.3

MID RMA PROJECT ACTION PLAN/TIMELINES

Item No.	Actions	Responsible	Apr 07	May 07	Jun 07	Jul 07	Aug 07	Sep 07	Oct 07	Nov 07	Dec 07	Jan 08
1	Payment of Contribution for the first year of operation of the MID RMA	Iran, Lebanon and Syria		▬								
2	Payment of Contribution for the second year of operation of the MID RMA	Iran		▬								
3	Initial payment of US$ 150,000 to the MID RMA for year 2 of operation of the MID RMA, based on a certified request by the MID RMA Board Chairman	MID RMA Board Chairman + ICAO	█									
4	Complementary payment to the MID RMA for year 2 of operation of the MID RMA, based on a certified request by the MID RMA Board Chairman	MID RMA Board Chairman + ICAO				█	█	█	█			
5	Issuance of invoices for the payment of contributions for 2008	ICAO			▬							
6	Payment of contributions for 2008	MID RMA Member States								▬		
7	Presentation of the RVSM SMR 2006 to MIDANPIRG/10	MID RMA	█									
8	Convening of the MID RMA Board/5 meeting	ICAO MID + Saudi Arabia + the MID RMA Board Chairman								█	█	

Item No.	Actions	Responsible	Apr 07	May 07	Jun 07	Jul 07	Aug 07	Sep 07	Oct 07	Nov 07	Dec 07	Jan 08
9	Presentation of the progress report on the MID RMA expenditures for the second year accompanied with supporting documentation (bills) and a bank statement.	MID RMA + Bahrain								▓		
10	Provision of required data to the MID RMA	States + MID RMA	▓	▓	▓	▓	▓	▓	▓	▓	▓	▓
11	Provision of FPL/Traffic data for the month of November 2007 to the MID RMA	States + MID RMA										▓
11	Development of the SMR 2007-2008 Prior to 1 September 2008	MID RMA										

RVSM/PBN TASK FORCE

TERMS OF REFERENCE

1. Follow-up on the MID RMA operation.

2. Consider interface issues related to RVSM implementation and operations within the Region as well as with adjacent Regions.

3. To carry out studies in support of the implementation of Performance Based Navigation (PBN) in the MID Region on an evolutionary basis, taking into account the introduction of new technologies, anticipated requirements for reductions in separation standards and the work being carried out by the ICAO Review of the Separation and Air Safety Panel (SASP).

4. Determine and recommend, on the basis of these studies, the PBN strategy for the MID Region as well as areas and/or routes where RNP/RNAV should be applied.

5. Study the requirements for RNP 1/RNAV 1 in the MID Region.

6. Develop an amendment proposal to the MID Regional Supplementary Procedures concerning the implementation of PBN in the region.

7. Extract from published guidance material information as may be applicable to the Region to facilitate the implementation of PBN.

8. Assist States within the Region that require support in the implementation of RVSM and/or RNAV/RNP.

MIDANPIRG/10
Appendix 5.3M to the Report on Agenda Item 5.3

STUDY GROUP ON THE ALLOCATION OF SSR CODES

TERMS OF REFERENCE

1.   Determine the SSR Code allocation system problems in the MID Region.

2.   Determine measures that can be applied in the short term to address this system problem.

3.   Determine the advantages of single versus multiple Participating Areas (APs).

4.   Analyze the development of PAs taking into consideration the following:

–   Defining the boundaries of PAs
–   Operational consideration for the PAs
–   Volume of traffic
–   Number of adjacent FIRs
–   Climb/descent areas
–   National defense requirements
–   Automation system limitations
–   Duration of code usage within a particular FIR

5.   Determine measures that can be applied in the long term.

6.   The Study Group should have mandate to discuss with adjacent regions without having to go through ATM/SAR/AIS Sub-Group.

7.   Through the Rapporteur (Mr. Saud Humaid Al-Adhoobi from Oman) the Study Group will co-ordinate the frequency, location and time of meetings.

8.   The Study Group will consist of the following States and Organizations :

STATES

Egypt, Iran, Oman, Saudi Arabia, Syria and UAE.

ORGANIZATIONS *(AS OBSERVERS)*

IATA, ICAO and, when required, EUROCONTROL.

ATM REGIONAL CONTINGENCY PLAN
FOR ….. CTA/UTA/FIR

OBJECTIVE

This contingency plan contains arrangements to ensure the continued safety of air navigation in the event of partially or total disruption of air traffic services (ATS) and is related to ICAO Annex 11- *Air Traffic Services* Chapter 2, paragraph 2.29. The contingency plan should be designed to provide alternative routes, using existing airways in most cases, which will allow aircraft operators to fly trough or avoid airspace within the (*XXX*) CTA/UTA/FIR.

AIR TRAFFIC MANAGEMENT

ATS Responsibilities

Tactical ATC considerations during periods of overloading may require re-assignment of routes or portions thereof.

Alternative routes should be designed to maximize the use of existing ATS route structures and communication, navigation and surveillance services.

In the event that ATS cannot be provided within the (*XXX*) CTA/UTA/FIR, the Civil Aviation Authority shall publish the corresponding NOTAM indicating the following:

a) Time and date of the beginning of the contingency measures;

b) Airspace available for landing and overflying traffic and airspace to be avoided;

c) Details of the facilities and services available or not available and any limits on ATS provision (e.g., ACC, APP, TWR and FIS), including an expected date of restoration of services if available;

d) Information on the provisions made for alternative services;

e) ATS contingency routes;

f) Procedures to be followed by neighbouring ATS units;

g) Procedures to be followed by pilots; and

h) Any other details with respect to the disruption and actions being taken that aircraft operators may find useful.

In the event that the CAA is unable to issue the NOTAM, the (alternate) CTA/UTA/FIR will take action to issue the NOTAM of closure airspace upon notification by corresponding CAA or the ICAO MID Regional Office.

Separation

Separation criteria will be applied in accordance with the *Procedures for Air Navigation Services-Air Traffic Management* (PANS-ATM, Doc 4444) and the *Regional Supplementary Procedures* (Doc 7030).

Level Restrictions

Where possible, aircraft on long-haul international flights shall be given priority with respect to cruising levels.

Other measures

Other measures related to the closure of airspace and the implementation of the contingency scheme with the (*XXX*) CTA/UTA/FIR may be taken as follows:

        a)   Suspension of all VFR operations;

        b)   Delay or suspension of general aviation IFR operations; and

        c)   Delay or suspension of commercial IFR operations.

TRANSITION TO CONTINGENCY SCHEME

During times of uncertainty when airspace closures seem possible, aircraft operators should be prepared for a possible change in routing while en-route, familiarization of the alternative routes outlined in the contingency scheme as well as what may be promulgated by a State via NOTAM or AIP.

In the event of airspace closure that has not been promulgated, ATC should, if possible, broadcast to all aircraft in their airspace, what airspace is being closed and to stand by for further instructions.

ATS providers should recognize that when closures of airspace or airports are promulgated, individual airlines might have different company requirements as to their alternative routings. ATC should be alert to respond to any request by aircraft and react commensurate with safety.

TRANSFER OF CONTROL AND COORDINATION

The transfer of control and communication should be at the common FIR boundary between ATS units unless there is mutual agreement between adjacent ATS units. ATS providers should also review current coordination requirements in light of contingency operations or short notice of airspace closure.

PILOTS AND OPERATOR PROCEDURES

Pilots need to be aware that in light of current international circumstances, a contingency routing requiring aircraft to operate off of normal traffic flows, could result in an intercept by military aircraft. Aircraft operators must therefore be familiar with international intercept procedures contained in ICAO Annex 2 –*Rules of the Air*, paragraph 3.8 and Appendix 2, Sections 2 and 3.

Pilots need to continuously guard the VHF emergency frequency 121.5 MHz and should operate their transponder at all times during flight, regardless of whether the aircraft is within or outside airspace where secondary surveillance radar (SSR) is used for ATS purposes. Transponders should be set on a discrete code assigned by ATC or select code 2000 if ATC has not assigned a code.

If an aircraft is intercepted by another aircraft, the pilot shall immediately:

a)   Follow the instructions given by the intercepting aircraft, interpreting and responding to visual signals in accordance with international procedures;

b)   Notify, if possible, the appropriate ATS unit;

c)   Attempt to establish radio communication with the intercepting aircraft by making a general call on the emergency frequency 121.5 MHz and 243 MHz if equipped; and

d)   Set transponder to code 7700, unless otherwise instructed by the appropriate ATS unit.

If any instructions received by radio from any source conflict with those given by the intercepting aircraft, the intercepted aircraft shall request immediate clarification while continuing to comply with the instructions given by the intercepting aircraft.

OVERFLIGHT APPROVAL

Aircraft operators should obtain overflight approval from States/Territories/International Organizations for flights operating through their jurisdiction of airspace, where required. In a contingency situation, flights may be rerouted at short notice and it may not be possible for operators to give the required advanced notice in a timely manner to obtain approval. States/Territories/International Organizations responsible for the airspace in which contingency routes are established should consider making special arrangements to expedite flight approvals in these contingency situations.

CONTINGENCY UNIT

The ATM national contingency unit assigned the responsibility of monitoring developments that may dictate the enforcement of the contingency plan and coordination of contingency arrangements is:

Name of Agency:
Contact Person:
Telephone:
Fax:
Email:

During a contingency situation, the National Contingency Unit will liaise with the involved FIRs through the ICAO MID Regional Office.

The ICAO MID Regional Office will:

       a)   closely monitor the situation and coordinate with all affected States/Territories/International Organizations and the IATA Regional Office, so as to ensure air navigation services are provided to international aircraft operations in the MID Region;

       b)   take note of any incidents reported and take appropriate action;

       c)   provide assistance as required on any issue with the Civil Aviation Administrations involved in the contingency plan; and

       d)   keep the President of the Council of ICAO, the Secretary General, C/PCO, D/ANB and C/ATM continuously informed on developments, including activation of the contingency plan.

REROUTING SCHEME

In the event of closure the (*XXX*) CTA/UTA/FIR, aircraft operators should file their flight plans using the alternative contingency routes listed in the scheme below in order to ensure avoidance in that airspace (CTA/UTA/FIR).

Present ATS ROUTE	CONTINGENCY ROUTINGS	FIRs INVOLVED
In lieu of:	**(ATS unit)** provides ATC on the following routings: *CR1:* *CR2:* *CR3:*	**XXX**: In coordination with **XXX**
In lieu of:	**(ATS unit)** provides ATC on the following routing: *CR4:*	**XXX**: In coordination with **XXX**

All aircraft should establish and maintain contact on published VHF or HF frequencies with the (*XXX*) ATS unit (APP/ACC/FIC) responsible for the airspace being traversed.

**LIST OF POINTS OF CONTACT OF ALL CONCERNED
STATES/TERRITORIES/INTERNATIONAL ORGANIZATIONS, IATA AND ICAO MID
REGIONAL OFFICE**

State/ International Organization	Point of Contact	Telephone/Fax	E-mail
		Tel. Fax.	
		Tel. Fax.	
		Tel. Fax.	
IATA		Tel. Fax:	
ICAO	Mohamed M. Khonji Seboseso Machobane	Tel.: (202) 22764841/5 Fax: (202) 22674843	mkhonji@cairo.icao.int smachobane@icao.icao.int icaomid@cairo.icao.int

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Doc 9731-AN/958
Appendix I

IAMSAR MANUAL

(Volume I)

SAR AGREEMENTS

Notes regarding SAR agreements, and the sample agreement that begins on the following page:

Parties may be organizations within a State, maritime and/or aeronautical SAR authorities of two or more different States (particularly with neighbouring search and rescue regions), or higher authorities of two or more States, i.e., the sample agreement can be adapted for local, national, or international use.

Each section of the sample agreement may be optionally used or adapted as the Parties agree, bearing in mind consistency with the principles of international law, and the goals of IMO, ICAO and the States and organizations concerned.

It is generally advisable to include specific information, such as phone numbers or addresses, in appendices or other documents separate from the basic signed agreement.

When SRRs are addressed in the agreements, normally only the lines separating the SRRs of the Parties are described, since other delimitation of the SRRs would normally involve States other than the Parties. Agreements between national organizations may or may not need to address geographic areas of responsibility. It should be recognized among the Parties that the establishment of SRRs is mainly for ensuring the availability of SAR services, and to facilitate proper distribution of distress alerts to RCCs; SRRs should not be viewed as affecting political boundaries, and do not need to align with political boundaries if the Parties so agree for the sake of improving or simplifying SAR operations. SRR delimitation over international waters is not intended to obstruct the provision of SAR services in any way. Furthermore, the provision of SAR services within an SRR shall be without regard to the nationality or circumstances of the persons in distress.

If agreements discuss territorial entry for SAR, provisions should account for a balance of concerns for sovereignty and concerns for saving lives.

The concept of "territory" is understood to include territorial land, airspace and seas.

It is advisable that SAR agreements address sensitive issues to the degree necessary for practical SAR co-operation between or among the Parties, while emphasizing the humanitarian nature of SAR, and avoiding topics which are unrelated to SAR, or which are both politically sensitive and unnecessary.

Agreement on [Aeronautical and/or Maritime] Search and Rescue between
[name the Parties]

1.   **INTRODUCTION**

Knowing the importance of co-operation in search and rescue (SAR), and of the provision of expeditious and effective SAR services;

Desiring to support the provisions of the [International Convention on Maritime Search and Rescue of the International Maritime Organization (IMO) and/or the Convention on International Civil Aviation of the International Civil Aviation Organization (ICAO)]; and

Seeking to provide an overall plan for SAR co-ordination, use of available resources, mutual assistance, and efforts to improve SAR services;

The Parties have agreed as follows:

2.   **EXTENT OF ASSISTANCE**

The Parties agree to co-operate in the following areas:

(a)   Support each other by pooling SAR facilities as appropriate for operations within their respective search and rescue regions (SRRs);

(b)   Make, and respond to, requests for operational assistance between the designated rescue co-ordination centres (RCCs) or rescue sub-centres (RSCs) of the Parties as capabilities allow;

(c)   Develop procedures and communications appropriate for co-ordination among facilities of both Parties responding to the same distress incident, and for co-ordination between the RCCs or RSCs of the Parties;

(d)   Normally apply the guidance of the International Aeronautical and Maritime SAR Manuals regarding SAR operational procedures and communications;

(e)   Work to establish agreed procedures, which balance concerns for sovereignty and for saving lives, regarding entry of various types of SAR facilities into the territory of the other Party, solely for a search or a rescue operation; and

(f)   Enter into other collaborative SAR efforts which may include:

-    mutual visits by SAR personnel of the Parties;

-    joint training or exercises;

-    co-operation in development of SAR procedures, techniques, equipment, or facilities;

-    exchange of pertinent SAR or communications information; and

-    establishment of one or more SAR committees to provide a means for ongoing co-operation in improving SAR effectiveness.

3.   SEARCH AND RESCUE REGIONS

Establishment of SRRs is intended only to effect an understanding concerning where each Party accepts primary responsibility for co-ordinating or providing SAR services. SRRs of the Parties shall be separated by lines connecting points as follows: [appropriate co-ordinate points describing applicable lines]

4.   TERMS OF AGREEMENT

Each Party will:

(a)   Keep information readily available on availability of any SAR facilities or other resources which may be needed for implementing this Agreement.

(b)   Keep each other fully and promptly informed of all SAR operations of mutual interest, or which may involve use of facilities of the other Party;

(c)   Authorize its RCC(s) to request assistance via the RCC(s) of the other Party, and to provide all pertinent information on the distress situation and the scope of assistance needed;

(d)   Authorize its RCC(s) to promptly respond to a request for assistance from an RCC of the other Party;

(e)   Authorize its RCC(s) to promptly arrange, or arrange in advance, with other national authorities for territorial entry of SAR facilities of the other Party (including overflight or landing of SAR aircraft, and similar accommodation of surface (land or water) SAR units) as circumstances dictate for fuelling, medical, or other appropriate and available operational support, or in response to a request to the RCC of the other Party for assistance of those facilities which would involve territorial entry;

(f)   Normally fund its own activities in relation to this Agreement unless otherwise arranged by the Parties in advance, and, in any event, will not allow a matter of reimbursement of cost to delay response to persons in distress.

5.   GENERAL PROVISIONS

This Agreement:

shall enter into force . . . [provisions as appropriate];

may be amended . . . [provisions as appropriate]; and

may be terminated or superseded . . . [provisions as appropriate].

AGENDA ITEM 5:   REGIONAL AIR NAVIGATION PLANNING AND IMPLEMENTATION ISSUES:

5.4   AIS/MAP

REPORT ON AGENDA ITEM 5: **REGIONAL AIR NAVIGATION PLANNING AND IMPLEMENTATION ISSUES**

5.4 AIS/MAP

Status of implementation of AIS/MAP Services in the MID Region

5.4.1   The meeting was informed of the outcome of the ATM/SAR/AIS SG/8 pertaining to AIS/MAP matters, pursuant to the review of the report of the AIS/MAP TF/3 meeting held in Cairo, 3-5 April 2006.

5.4.2   The meeting 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, which represents the main cause for non implementation of the AIRAC system by a number of States.

5.4.3   The meeting recognized that late receipt of aeronautical information continues to be a problem for the aviation community in the MID Region. The problems will continue to expand unless all Civil Aviation Authorities place renewed emphasis to enhance the resources and capabilities of AIS organizations so that the AIS responsibilities can be efficiently accomplished.

5.4.4   Concern was also raised regarding 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.

5.4.5   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, the meeting was of view that AIS/MAP personnel has to be licensed.

5.4.6   With regard to the status of implementation of AIS automation in the MID Region, the meeting noted with concern that many AISs in the MID Region are still using manual or semi-automated processes and urged States to put the necessary resources in AIS with a view to introduce AIS automation.

5.4.7   In this regard, the question concerning the legal status of electronic AIP (eAIP) and ICAO position on this matter was raised. Taking into consideration that the development of a global standard by ICAO might take time, the meeting invited States, that have not yet done so, to publish their Integrated Aeronautical Information Package in PDF/HTML format on a CD-ROM without discontinuing the provision of the information in hardcopy.

5.4.8   Based on the above, the meeting reiterated the need to comply with MIDANPIRG/9 Conclusions 9/26, 9/27 and 9/28 and agreed to the following Conclusions:

CONCLUSION 10/50:   *USE OF EMAIL TO ENHANCE COMMUNICATION BETWEEN THE AIS COMMUNITY IN THE MID REGION*

That, with a view to enhance the communication between the AIS Community in the MID Region:

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.*

CONCLUSION 10/51:   *ADVANCE POSTING OF THE AIRAC INFORMATION ON THE WEB*

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.

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.*

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.

5.4.9   The meeting 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.

5.4.10   The meeting 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: i.e. Bahrain, Egypt and UAE, among them only two States have been certified ISO 9001:2000 (Bahrain and UAE). The meeting

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noted with appreciation that the certification process is in progress in Egypt. 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.

5.4.11   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 5.4A** to the Report on Agenda Item 5.4. Accordingly, the meeting agreed to 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.*

5.4.12   With regard to WGS-84, the meeting pointed out 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. However, the meeting noted with appreciation that geoid undulation (GUND) 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 GUND values.

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

   a)   five (5) States only have fully implemented WGS-84 including the geoid undulation. However, the majority of States have implemented WGS-84 in the horizontal plan;

   b)   three (3) States haven't yet implemented WGS-84; and

   c)   the level of implementation of GUND and quality system is still below expectations.

5.4.14   A simplified Status report of WGS-84 implementation in the MID Region is presented at **Appendix 5.4C** to the Report on Agenda Item 5.4

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Electronic Terrain and Obstacle Data (eTOD)

5.4.15   The meting recalled that on 23 February 2004, the Council of ICAO adopted Amendment 33 to Annex 15 which included, among other items, the addition of a new Chapter 10 — *Electronic Terrain and Obstacle Data*, a new Appendix 8 — *Terrain and Obstacle Data Requirements,* and a number of amendments to Appendix 1 — *Contents of Aeronautical Information Publication (AIP)* and Appendix 7 — *Aeronautical Data Quality Requirements.*

5.4.16   The meeting was apprised of the outcome of the ATM/SAR/AIS SG/8 and AIS/MAP TF/3 meetings related to the subject of electronic Terrain and Obstacle Data (eTOD) and recommended that a Collaborative approach be followed by MID States for the implementation of eTOD Requirements and for the harmonization and coordination of eTOD implementation activities on a regional basis. The meeting agreed also to the establishment of the electronic Terrain and Obstacle Data Working Group (eTOD WG).

5.4.17   The meeting recalled that the applicability dates for Amendment 33 to Annex 15 are as follows:

a)   20 November 2008 for those parts of the amendment related to the availability of terrain and obstacle data in accordance with Area 1 specifications and for the availability of terrain data in accordance with Area 4 specifications; and

b)   18 November 2010 for those parts of the amendment related to the availability of terrain and obstacle data in accordance with Area 2 and Area 3 specifications.

5.4.18   The meeting noted with concern that time for implementation of Amendment 33 to Annex 15 is becoming very critical. With a view to expedite the process of implementation of Annex 15 new provisions, the meeting agreed to the following Conclusions and Decision:

CONCLUSION 10/56:   *ROADMAP FOR THE IMPLEMENTATION OF eTOD REQUIREMENTS*

That, MID States:

a)   develop their plans related to the implementation of eTOD requirements; and

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.

CONCLUSION 10/57:   *COLLABORATIVE APPROACH FOR THE IMPLEMENTATION OF eTOD REQUIREMENTS*

That, in order to expedite the implementation of eTOD requirements, MID States:

a)   develop a high level policy for the management of a national eTOD programme;

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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*

c) *secure the necessary resources for the eTOD programme.*

DECISION 10/58:   ***ESTABLISHMENT OF AN eTOD WORKING GROUP***

*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.*

5.4.19   The meeting was also apprised of the outcome of the MID eTOD Seminar held in Cairo from 11 to 14 December 2006. It was noted that, with a view to assist States and expedite the process of implementation of eTOD requirements, the MID eTOD Seminar has been organised in Cairo, as a SIP approved by the ICAO Council for the year 2006. The seminar addressed different subjects related to the implementation of eTOD, especially:

     1-   Electronic Terrain, Obstacle and Aerodrome Mapping Information

         a)   Terrain Data

         b)   Obstacle Data

         c)   Aerodrome Mapping Data

     2-   Benefits derived from eTOD (use by different applications)

     3-   Data capture methodologies and technologies (Remote Sensing Technologies)

     4-   Certification, Maintenance and Temporal Considerations of Data

     5-   Data Product Specifications

     6-   Feature Catalogues and Metadata

     7-   Implementation strategy (case of a representative aerodrome)

     8-   Institutional aspects, cost recovery issue, etc.

5.4.20   The meeting noted that the Seminar developed six (6) Recommendations as at **Appendix 5.4E** to the Report on Agenda Item 5.4 and recognized that the MID eTOD Seminar provided States with a better understanding of the planning and implementation issues related to the provision of eTOD and a forum for open discussions where issues related to the implementation of eTOD requirements were appropriately addressed. Accordingly, the meeting agreed to the following Conclusion:

CONCLUSION 10/59:   *FOLLOW UP ON THE OUTCOME OF THE MID eTOD SEMINAR*

      That,

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*

b) *necessary follow-up action is to be taken by States and ICAO with a view to implement them.*

Global AIS Congress

5.4.21   The meeting recalled that the Global AIS Congress was held in Madrid, Spain from 27 to 29 June 2006. The event was facilitated by EUROCONTROL in partnership with ICAO and organized by a Consortium composed of representatives from Australia, Canada, China, EUROCONTROL, Japan, South Africa and the United States.

5.4.22   The meeting noted that the ATM/SAR/AIS SG/8 meeting was apprised of the outcome of the Global AIS Congress and recalled that the Congress considered the essential role of AIS in the evolving world of ATM. It identified the key drivers for change, looked at the many complex issues associated with evolution and explored what must be done to ensure that aeronautical information of the right scope and quality is made available. The Congress began to define a future high-level view as to the shape, nature and content of a strategy for the evolution of AIS and in the provision and management of aeronautical information in general. It reviewed technologies that will facilitate change in a practical and affordable way.

5.4.23   The Conclusions and Recommendations of the Congress are at **Appendix 5.4F** to the Report on Agenda Item 5.4. In order to prevent diverging developments in the future and realising the safety critical nature of aeronautical information, the meeting agreed with the Congress that ICAO should take the lead at the global level with regard to the transition from AIS to AIM, as called for by AN-Conf/11.

5.4.24   The meeting noted that ICAO HQ, based on the briefing made by EUROCONTROl related to the Global AIS Congress outcome, recognized that the Congress addressed important issues that have to be integrated into ICAO's Air Navigation Integrated Programme. The meeting was also informed that ICAO agreed to take the lead to address all the Recommendations of the Global AIS Congress. However, it was recognized that this will require support from States and international organizations. In this regard, it was highlighted that EUROCONTROL has agreed to provide the required support and that work is in progress to develop and implement a project plan/work programme according to a Letter of Understanding (LOU) between the two organizations.

5.4.25   Based on the above, the meeting agreed to the following Conclusion:

CONCLUSION 10/60:   *FOLLOW-UP ON THE OUTCOME OF THE GLOBAL AIS CONGRESS*

      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.

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MID Region AIS/MAP Timelines

5.4.26   The meeting recalled that MIDANPIRG/9 under Conclusion 9/30 endorsed the AIS/MAP Timelines initially developed by the AIS/MAP TF/2 as an internal planning tool for the implementation of specific AIS/MAP related subjects.

5.4.27   Taking into consideration the new ICAO provisions related to the AIS/MAP field, introduced particularly by Amendment 33 to Annex 15, the meeting reviewed and updated the MID Region AIS/MAP Timelines and the Terms of Reference and Work Programme of the AIS/MAP Task Force as at **Appendices 5.4G** and **5.4H** to the Report on Agenda Item 5.4, respectively.

5.4.28   Accordingly, the meeting developed the following Conclusion and Decision which will replace and supersede MIDANPIRG/9 Conclusion 9/30 and Decision 9/32:

CONCLUSION 10/61:   *AIS/MAP TIMELINES FOR THE MID REGION*

> *That, the AIS/MAP Timelines for the MID Region be updated as at **Appendix 5.4G** to the Report on Agenda Item 5.4.*

DECISION 10/62:   *REVISED TERMS OF REFERENCE AND WORK PROGRAMME OF THE AIS/MAP TASK FORCE*

> *That, the Terms of Reference and Work Programme of the AIS/MAP Task Force be updated as at **Appendix 5.4H** to the Report on Agenda Item 5.4.*

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.

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:

    − Mr. Abdul Nasser A. Al-Emadi from Bahrain (*Rapporteur of the Group*)

    − Mr. Mahfouz Mostafa Ahmed from Egypt

    − Ms. Hanan Akram Qabartai from Jordan

    − Mr. Ghorman Ashahre from Saudi Arabia

    − Mr. Hussein Al –Sureihi from Yemen.

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.

MIDANPIRG/10
Appendix 5.4C to the Report on Agenda Item 5.4

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	Not reported using uniform format
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	N	N	N	N	N	N	N	N	N	Not reported using uniform format
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 |

**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, 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 (NGA, NASA, ESRI, etc) 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 Office.

Note: The hosting State/Rapporteur will be designated in coordination between the ICAO MID Regional Office and all MID States.

MIDANPIRG/10
Appendix 5.4E to the Report on Agenda Item 5.4

RECOMMENDATIONS OF THE MID eTOD SEMINAR

RECOMMENDATION 1:   eTOD IMPLEMENTATION AWARENESS CAMPAIGNS

Taking into consideration the adopted dates of applicability of eTOD provisions introduced by AMDT 33 to Annex 15 and the resources required for the implementation of these new provisions, the States' AIS should take the lead and carry out awareness campaigns at national level to promote a better understanding of the planning and implementation issues related to eTOD.

RECOMMENDATION 2:   MANAGEMENT OF A NATIONAL eTOD PROGRAMME

States, in accordance with the strict management principles and procedures, should:

a) develop a high level framework and a detailed planning including priorities and timelines for the implementation of a national eTOD programme;

b) adopt/follow a collaborative approach involving all concerned parties in the implementation of eTOD provisions; and

c) 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.

RECOMMENDATION 3:   COORDINATION AND EXCHANGE OF EXPERIENCE FOR THE
                      IMPLEMENTATION OF eTOD REQUIREMENTS

Implementation of eTOD provisions should be considered as a global matter concerning all ICAO Regions, which thereby necessitates coordination and exchange of experience between States, ICAO and other national/international organizations involved.

RECOMMENDATION 4:   COORDINATION BETWEEN STATES AND DATA PROVIDERS/
                      INTEGRATORS FOR THE PROVISION OF eTOD

Collaboration between States and data providers/integrators should be considered.

RECOMMENDATION 5:   RESPONSIBILITY FOR THE PROVISION OF eTOD

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.

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.

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

CONCLUSIONS & RECOMMENDATIONS

CONCLUSIONS

1.   The Global AIS Congress agreed that ATM is dependant on the availability of timely high quality aeronautical information and that the nature and scope of such information was quickly evolved from the narrow requirements instantiated in ICAO Annex 15. In consequence, the Global AIS Congress agreed that change was needed and these needs were driven by, amongst other factors:

   a) The increased reliance on computerisation both in the air and on the ground (ground-based ATM systems, avionics, flight dispatch solutions, procedure design tools, etc) and that dependence on available, timely, high integrity aeronautical information.

   b) That the provision of aeronautical information of the integrity required by ATM could no longer be reliant on paper-based and mainly manual processes and that AIS must quickly migrate to electronic media and automated processing to provide the total quality environment to satisfy its customers needs;

   c) Emerging technology such as data exchange models and communications protocols that allowed the safe and timely exchange of digital and interoperable information in a secure way;

   d) The growing user requirements for more broad-based provision of aeronautical information the scope of which is currently for broader than that encompassed in Annex 15 required to support present operations and emerging concepts and applications such as Collaborative Decision Making (CDM) and system-wide Information Management.

2.   The Global AIS Congress supported the recommendation of the ICAO 11th Air Navigation Conference (Autumn 2003) specifically 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 interoperability; 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.

3.	The Global AIS Congress in recognizing the global nature of aeronautical information provision and its exchange called for an active, coordinated global approach to the evolution of AIS in accordance with the recommendations of the 11th Air Navigation Conference and agreed that this should include all stakeholders of AIS. The objective should be to develop and agree a practical, business oriented and validated, and affordable roadmap for change on which States and Industry (in the broadest sense) could build investment, staffing and training plans to support change. It was noted that the Global AIS Congress strongly identified the need for a Global Forum and asked ICAO working with international organizations and States give consideration as to how such a forum could be established.

4.	The Global AIS Congress agreed that salient to change was the adoption by ICAO of a common aeronautical information model in accordance with the recommendation 1/8/b of the 11th Air Navigation Conference as it was an essential component of change. Moreover, the Global AIS Congress recognised that the AIXM was the only candidate and recommended that V5.0 (the GML based version) should be adopted by ICAO as the global standard.

5.	The Global AIS Congress recognised the global nature of the AIXM and supported the ongoing work to define a means of providing for the further evolution of the model in a managed and supported (technically and financially) way. The proposed Global Board approach was endorsed as a way forward.

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 considers 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																		
		1994	95	96	97	98	99	2000	01	02	03	04	05	06	07	08	09	2010
Global	WGS-84 Implementation																	
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																	
Global	WGS-84 Geoid undulation (GUND) Implementation																	
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																	

Middle East — Aeronautical Information Services Implementation		1994	95	96	97	98	99	2000	01	02	03	04	05	06	07	08	09	2010
Global	Quality System Implementation																	
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																	
Global	Quality System Certification																	
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																	

Middle East — Aeronautical Information Services Implementation																		
		1994	95	96	97	98	99	2000	01	02	03	04	05	06	07	08	09	2010
Global	Implementation of an automated NOF and pre-flight Information System																	
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																	
Global	Harmonization of AIS, MET and flight plan information to support combined AIS/MET/FPL pre-flight briefing.																	
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																	
Global	Interrogation of aeronautical databases from the aircraft for combined automated AIS/MET/FPL in-flight briefing.	SARPs not yet available																
MID Region																		
States	Afghanistan																	
	Bahrain																	
	Egypt																	
	Iran, Islamic Rep. Of																	
	Iraq																	
	Israel																	
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	Qatar																	
	Saudi Arabia																	
	Syrian Arab Republic																	
	United Arab Emirates																	
	Yemen																	

Middle East — Aeronautical Information Services Implementation																	
		1994	95	96	97	98	99	2000	01	02	03	04	05	06	07	08	09	2010
Global	Publication of the Integrated Aeronautical Information Package on a CD-ROM and on the website.													▓	▓	▓	▓	▓	▓
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																		
Global	Implementation of a fully automated AIS Database/System.	SARPs not available																
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																		
		1994	95	96	97	98	99	2000	01	02	03	04	05	06	07	08	09	2010
Global	Vertical reference system (EGM 96) Implementation													▓	▓	▓	▓	▓	▓
MID Region														▒	▒	▒	▒	▒	▒
States	Afghanistan																		
	Bahrain																		
	Egypt																		
	Iran, Islamic Rep. of																		
	Iraq																		
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	Oman																		
	Qatar																		
	Saudi Arabia																		
	Syrian Arab Republic																		
	United Arab Emirates																		
	Yemen																		

Middle East — Aeronautical Information Services Implementation																		
		1994	95	96	97	98	99	2000	01	02	03	04	05	06	07	08	09	2010
Global	Provision of eTOD for Area 1 and 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																	
Global	Provision of eTOD for Area 2 and Area 3																	░
MID Region States	Afghanistan																	░
	Bahrain																	
	Egypt																	
	Iran, Islamic Rep. of																	
	Iraq																	
	Israel																	
	Jordan																	
	Kuwait																	
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	Qatar																	
	Saudi Arabia																	
	Syrian Arab Republic																	
	United Arab Emirates																	
	Yemen																	

**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.

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

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)
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
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
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
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
14	Propose an AIS/MAP training action plan for the MID Region	B	2008
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) 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**

a)   MIDANPIRG Provider States; and

b)   IATA and IFALPA as observer

AGENDA ITEM 5:   REGIONAL AIR NAVIGATION PLANNING AND IMPLEMENTATION ISSUES:

5.5   CNS

MIDANPIRG/10
Report on Agenda Item 5.5

REPORT ON AGENDA ITEM 5: **REGIONAL AIR NAVIGATION PLANNING AND IMPLEMENTATION ISSUES**

5.5 CNS

Aeronautical Telecommunication

5.5.1 The meeting noted that CNS/MET SG/7 meeting updated the AFTN/CIDIN directory and incorporated actions emanated from MIDANPIR/9 also noted that the meeting further discussed issues related to the circuits in the MID Region.

5.5.2 The meeting noted that ICAO established a register for Air Traffic Services (ATS) Message Handling System (AMHS) named AMHS Management Domains and Addressing Information Register, to facilitate the orderly, systematic and worldwide implementation of the AMHS, which is to replace the ageing AFTN and CIDIN. The first version of the AMHS Management Domains and Addressing Information Register is now available on the Aeronautical Communications Panel (ACP) website: http://www.icao.int/anb/panels/acp/index.cfm

5.5.3 The meeting encouraged States to continue using digital high-speed circuits as per MIDANPIRG/9 Conclusion 9/38 in order to eliminate deficiencies related to the low speed circuits and to facilitate the migration to the ATN in the MID Region.

5.5.4 The meeting noted that CNS/MET SG/7 addressed the development of the work progress in the Aeronautical Communications Panel for development of SARPs for Internet Protocol Suite (IPS) and considering the need to ensure harmonization of procedures and protocol. The meeting also noted that it is expected that draft SARPS for a complete IPS based ATN will be available at the first meeting of the ACP (May 2007), consequently the meeting agreed that ICAO MID Regional Office conduct a seminar under title Communication Infrastructure and consequently approved the following Conclusion replacing MIDANPIRG/9 Conclusion 9/40.

CONCLUSION 10/63: *ORGANIZATION OF COMMUNICATION INFRASTRUCTURE SEMINAR*

> *That, MID States:*
>
> *a) support ICAO MID Regional Office in organizing Communication Infrastructure Seminar/Workshop during year 2007 by hosting this event; and*
>
> *b) participate in the Seminar/Workshop by sending their appropriate experts.*

5.5.5 The meeting noted that CIDIN implementations in Europe are expected to be withdrawn (or are withdrawn) and replacement of CIDIN systems is believed to take place using IPS (TCP/IPv6), eventually, migration to IPv6 in Europe is foreseen. This triggers the issue of the sustainability of CIDIN in the MID Region, in particular if manufacturers have difficulties in maintaining CIDIN.

5.5.6 The meeting strongly recommended that, should there be a need in the MID Region for replacing CIDIN, implementation of IPv6 protocols is to be considered, since this would extremely facilitate introduction of the TCP/IPv6 ATN.

5.5.7   The meeting supported the transitions that had taken place in some States over recent years, the AFTN network using the ICAO provisions, based upon the use of telex machines in the AFTN, have been replaced by low-cost desk top computers, emulating AFTN stations using the relevant ICAO standards. Where such improvements have been based on a network using TCP/IP v4, conversion of these networks in the ATN can be done efficiently and at low cost. Introducing particular ATN applications can take place.

5.5.8   The meeting was informed about the end goal of ICAO that the IPS based ATN will eventually be implemented on a global basis. However, in achieving this goal, careful attention is to be given to the current implementations of AFTN, CIDIN and ISO/OSI based ATN. Hence provisions for continuation of CIDN, AFTN and ISO/OSI are being developed to secure the implementation of the ATN that will take place on the basis of regionally agreed requirements.

5.5.9   The meeting was appraised of the IPS based ATN being easy expandable (scaleable), more reliable, easier interconnection, flexible, de facto industry standard, IPS standards open and freely available and that a large variety of equipment and software of the shelf available and at low cost.

5.5.10   Based on the above the meeting agreed to the following Conclusion:

CONCLUSION 10/64:   *IMPLEMENTATION OF IPS BASED ATN*

> *That, MID States:*
>
> a) *consider the developments towards an IPS based ATN internet and to take these into account when considering developing plans for upgrading the aeronautical communications infrastructure; and*
>
> b) *update the ICAO MID Regional Office with their ATN and AMHS Plans.*

Spectrum Management

5.5.11   The meeting noted the establishment of an Ad-Hoc action group for the support of Aeronautical Frequency bands, and urged states to provide the names of their nominees in order for the group start its tasks, in this regard agreed to the following Decision:

DECISION 10/65:   *TERM OF REFERENCE OF THE AD-HOC ACTION GROUP*

> *That, the Terms of Reference and Work Programme of the Ad-Hoc Action Group is adopted as at **Appendix 5.5A** to the Report on Agenda Item 5.5*

5.5.12   The meeting was appraised of the ICAO Position for the ITU World Radio communication Conference 2007 (WRC-07) which is aiming at protecting aeronautical spectrum for radio-communication and radio navigation systems required for current and future safety-of-flight applications. In particular, it stresses that safety considerations dictate that exclusive frequency bands must be allocated to critical safety aeronautical systems and that adequate protection against harmful interferences must be ensured.

MIDANPIRG/10
Report on Agenda Item 5.5

5.5.13   In this regard the meeting noted ICAO MID Office activities as it had convened a seminar on radio spectrum from 4 to 6 June 2006, participated in the Egyptian preparatory meeting for WRC-07, and provided the ICAO position for WRC-07 to the ninth Arab Spectrum Management Group meeting (13-18 January 2007) .

5.5.14   The meeting recognized that active support from States is the only mean to ensure that the results of the WRC-07 reflect civil aviation's need for spectrum (Assembly ResolutionA32-13 refers). States are therefore, requested to ensure that, representatives from civil aviation administrations are included in their national delegations to the WRC-07, where a delegation from ICAO will participate in the work of the conference and will assist States, accordingly the meeting agreed to the following Conclusions:

CONCLUSION 10/66:   *SUPPORT ICAO POSITION FOR WRC 07*

> *That, MID States*
>
> *a)   support ICAO position during the ITU WRC 07; and*
>
> *b)   Civil Aviation Authorities, aviation experts participate with their national delegations to the ITU WRC 07*

CONCLUSION 10/67:   *FUTURE SUPPORT FOR ICAO POSITION WITH REGARD TO WRC*

> *That,*
>
> *a)   the Ad-Hoc Action Group for the support of Aeronautical Frequency Bands; is to follow-up the developments related to ICAO position regarding future ITU in order to highlight it to the MID States; and*
>
> *b)   MID States Civil Aviation Authorities, experts participate with their appropriate ministerial delegations in the drafting of the national radio plans in the support of ICAO position.*

5.5.15   The meeting was updated by Bahrain and Egypt of their active participation in the various Regional/National preparatory meetings towards the support of the ICAO position for WRC-07.

MID VSAT Project

5.5.16   The meeting was apprised of the VSAT technology being a good choice for providing a communication platform for aviation due to its inherent flexibility, and ease of implementation. The meeting also noted the progress of the African NAFISAT project where three MID States had already signed the MOU with the provider, and was of the view that many deficiencies and communication difficulties with the AFI Region would be resolved when NAFISAT is implemented.

5.5.17   The meeting recalled that the MID VSAT Feasibility Study was completed and made available to MID States, neighbouring States in the AFI Region and aeronautical partners.

5.5.18   The meeting discussed thoroughly the obstacles in the implementation of the MID VSAT and agreed on a clear strategy for the proper implementation of the project as in **Appendix 5.5B** to the Report on Agenda Item 5.5.

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5.5.19   The meeting realized that the MID VSAT is needed to be implemented as soon as possible since it will be resolving many communication deficiencies between States and will be playing essential support for future CNS/ATM systems, and agreed to form the required structure. Accordingly the meeting agreed to the following Conclusion:

CONCLUSION 10/68:   MID VSAT PROJECT FINALIZATION

That, in order to expedite the implementation of the MID VSAT Project, concerned MID States commit themselves to the project, by signing the Memorandum of Understanding (MOU) leading to form a structure for managing the MID VSAT Project.

5.5.20   The meeting noted that there is an increase in the MET activities requiring continuous involvement of MET experts from MID States in MET meetings. CNS and MET experts from the MID Region States have been meeting simultaneously during the CNS/MET Sub-Group meetings, and most of the time the members of the meeting are divided into two separate groups i.e CNS Group and the MET Group, which are held in two separate meetings in order that CNS experts have their full time dedicated to CNS issues and the MET experts concentrate on MET topics.

5.5.21   In order to enhance the efficiency of the MIDANPIRG subsidiary bodies, the meeting agreed that the CNS/MET Sub-Group splits into two separate Sub-Groups i.e. the CNS Sub-Group and the MET Sub-Group. Moreover the meeting dissolved the AFS/ATN Task Force and proposed to include the AFS/ATN activities within the CNS Sub-Group meeting. The meeting agreed to the following Decisions:

DECISION 10/69:   DISSOLVING THE CNS/MET SUB-GROUP AND ESTABLISHMENT OF
                                        A CNS SUB-GROUP AND A MET SUB-GROUP

That,

a) *the CNS/MET Sub-Group is dissolved; and*

b) *a separate CNS Sub-Group and a separate MET Sub-Group are established.*

DECISION 10/70:   DISSOLUTION OF THE AFS/ATN TASK FORCE

That, the AFS/ATN Task Force is dissolved and its work programme is to be incorporated in the activities of the CNS Sub-Group.

5.5.22   The meeting thanked the Chairman of the AFS/ATN Task Force for his professionalism and efficiency in managing the work of the Task Force. The Chairman of the dissolved AFS/ATN TF updated the meeting that the AFS/ATN Task Force conducted 10 meetings and its work contributed a lot for the enhancement of the communication infrastructure and preparation of the guidance documentations for the MID Region.

TERMS OF REFERENCE OF THE

**AD-HOC ACTION GROUP FOR THE SUPPORT OF AERONAUTICAL
FREQUENCY BANDS**

Terms of Reference (TOR)

1.   Raise awareness of the National Telecommunication Regulatory Authorities on the aviation
     spectrum use and importance for protection.
2.   Ensure proper support to ICAO Positions in WRC from MID region States.
3.   Participate in the WRC Preparatory meeting.

Composition

The Group will be composed of experts nominated by MID Region Provider States.

Working Arrangements

The representatives shall maintain continuity in the work of the Group, by using communication
facilities particularly e-mails to keep the Members and the Secretary in permanent touch with each
other, the group shall meet during the CNS Sub-Group meetings.

Reporting

The Group will present its report to MIDANPIRG through the CNS Sub-Group.

No.	Associated Strategic Objective	Task	Action Proposed/In Progress	Action By	Target Date
1	D- Efficiency E- Continuity	Support the ICAO position WRC-07	Coordinate the issue of supporting ICAO Position with the respective Administrations and regional telecommunications organizations in the Region and before WRC 07	Ad-Hoc WG	Sept 2007
2	D- Efficiency E- Continuity	Support for Preparation of Agenda Item of WRC 10	Coordinate the long term support to ICAO on elements of establishing WRC-10 Agenda Item to ensure future spectrum availability for AMS(R)S;	Ad-Hoc WG CNS SG	Sep 2009
3	D – Efficiency	Study radio frequency spectrum needs for civil aviation, arising from the introduction of new technologies.	Present and support ICAO position for spectrum needs for civil aviation, arising from the introduction of new technologies in ITU	Ad-Hoc WG CNS SG	On-going

----

STRATEGY FOR THE IMPLEMENTATION OF MIDVSAT

The MIDVSAT project was developed by experts from the MID Region after extensive studies for several years and considering the following:

      a)   Decrease communication deficiencies in the Region

      b)   Support for future CNS/ATM systems

      c)   Integration with other VSAT networks

      d)   Improve aviation safety by providing higher availability and better performance

      e)   Easy upgrading of the bandwidth

      f)   Control and Visibility on failure areas

      g)   Economical way of communication for many States

      h)   Reach of network to areas where it is impossible for traditional network to reach.

      i)   Trouble shooting with local Communication services providers
          is becoming time consuming and very exhausting process

A general strategy for the implementation of MIDVSAT in the MID Region is proposed as follows:

1)   Each State to study/define its requirements for joining the MIDVSAT project.

2)   Based on above (1) the concerned State should agree to form structure to manage the project.

3)   States may consider requesting assistance from ICAO (TCB), in cases when such is needed.

4)   Membership to join the MIDVSAT is open to all MID States at all times.

AGENDA ITEM 5:   REGIONAL AIR NAVIGATION PLANNING AND IMPLEMENTATION ISSUES:

5.6   MET

REPORT ON AGENDA ITEM 5:   **REGIONAL AIR NAVIGATION PLANNING AND IMPLEMENTATION ISSUES**

5.6   MET

5.6.1   The meeting was informed of the outcome of the Seventh Meeting of the CNS/MET Sub-Group (CNS/MET SG/7) related to MET issues.

5.6.2   The meeting recalled that the Sub-Group addressed the following subjects related to aeronautical meteorology:

  − Implementation of the World Area Forecast System (WAFS);
  − SADIS Implementation;
  − International Airways Volcano Watch (IAVW);
  − MID OPMET data procedures;
  − implementation of SIGMET procedures; and
  − review of the MET part of the MID ANP/FASID.

World Area Forecast System (WAFS) Implementation

5.6.3   The meeting noted that at the request of the WAFS Operations Group (WAFSOPSG), the WAFS developments included the provision of significant weather (SIGWX) forecasts in chart form using the industry standard Portable Network Graphics (PNG) graphical format, which had been developed to assist States that were not in a position to receive and decode BUFR-coded SIGWX forecast. The PNG charts were provided, on a trial basis, through the SADIS satellite services (SADIS 1G and 2G and FTP service). This requirement had been implemented by mid-September 2005 by WAFC London and by early October 2005 by WAFC Washington for all of the PNG formatted charts.

5.6.4   It was recalled that the results of the survey undertaken by ICAO Secretariat on the implementation of BUFR-coded SIGWX forecasts by States during 2006 showed that 60% of States that responded were in a position to receive BUFR-coded SIGWX forecasts. Based on the PNG-formatted trials, a number of users have indicated their preference that the PNG-formatted SIGWX charts be maintained on the SADIS. In view of the slower-than-expected pace of implementation, the WAFSOPSG/3 meeting had agreed that SIGWX forecasts in the PNG form would continue to be provided as a back-up to BUFR-coded forecasts at least until 2010.

SADIS Implementation

5.6.5   The meeting noted that the dissolved CNS/MET SG/7 meeting was apprised of the outcome of the eleventh meeting of the SADIS Operations Group (SADISOPSG/11) held in Cairo, Egypt, 23-26 May 2006. It was recalled that according to Conclusion 9/15 of the SADISOPSG, the SADIS 1G service would be available in addition to the SADIS 2G service only until 31 December 2008. This means that SADIS 1G users have less than two years to make the transition to the SADIS 2G service before the legacy SADIS 1G service is terminated.

5.6.6   The meeting noted that two international SADIS seminars were held in Bangkok and Paris during July and September 2006, respectively. The primary purpose of these events was to provide SADIS users with an opportunity to discuss their current and future hardware and software requirements with the vendors and the SADIS stakeholders and discuss any issues associated with the migration from the legacy SADIS 1G service to the new SADIS 2G service. Since the States in the MID Region had not attended the SADIS seminars held so far, the meeting agreed to the following Conclusion:

CONCLUSION 10/71:   INTERNATIONAL SADIS SEMINAR

> *That, the SADIS Provider State be invited to consider arranging, in coordination with ICAO, an international SADIS seminar in the MID Region to support the transition to the SADIS Second Generation (2G) service.*

International Airways Volcano Watch

5.6.7   The meeting agreed that although there are no active volcanoes in the MID Region, the potential exists that at some time, volcanic ash could spread from the neighbouring regions and become an aviation hazard in the airspace used in the MID Region. It was highlighted, in this regard, that major volcanic eruptions can affect large airspace areas, sometimes far away from the volcano causing serious safety problems for aviation.

5.6.8   In light of the above, as a first step, it was suggested that a volcanic ash exercise be carried out to test the issuance and reception of volcanic ash advisories (VAA) and volcanic ash (VA) SIGMET. The scenario for the eruption and motion of the ash cloud would be initiated by the Volcanic Ash Advisory Centre (VAAC) Toulouse. The first test would be undertaken during 2007.

5.6.9   The meeting noted that the objective is to ensure the smooth implementation of the International Airways Volcano Watch (IAVW) in the MID Region in case of an actual volcanic eruption that would affect the MID Region and to test the use of the correct routing and the heading for VAA and VA SIGMETs.

5.6.10   Based on the above, the meeting agreed to the following Conclusion:

CONCLUSION 10/72:   MID REGION VOLCANIC ASH TEST

> *That,*
>
> a) *the MID Regional Office issue a State letter to review the MET and ATS procedures to raise the awareness of the volcanic ash problem;*
>
> b) *the Volcanic Ash Advisory Centre (VAAC) Toulouse is invited to carry out a test once a year on the issuance of volcanic ash SIGMETs; and*
>
> c) *the MET Sub-Group monitor the results of the test and take the appropriate action.*

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MID OPMET Data Procedures

5.6.11   The meeting recalled that FASID Tables MET 2A and 2B govern the exchange of METAR/SPECI and TAF, and SIGMET, respectively and include complex inter-and intra-regional OPMET exchanges. These tables reflect the regional air navigation (RAN) agreements called for by Annex 3. The tables should, in principle, be current at all times since they detail the MET information required by users and form the basis for MET charges.

5.6.12   The meeting noted that the FASID Table MET 2A had been replaced by Annex 1 to the *SADIS User Guide* (SUG) in the AFI, ASIA/PAC, and EUR, Regions. Annex 1 to the SUG provides a global list of requirements for METAR/SPECI and TAF to be broadcast on the AFS satellite broadcasts (i.e. SADIS/ISCS). In the case of the MID Region, the Regional OPMET Bulletin Exchange (ROBEX) scheme could be considered to cater for any additional intra-regional exchanges and could be expanded, if required.

5.6.13   It was also noted that the database is kept up-to-date by the ICAO MET Section and the most up-to-date version can be accessed, at all times, from the open SADISOPSG website. In view of the foregoing, the meeting agreed that there is no longer a need to include a FASID Table MET 2A in the MID FASID and that a simple link (i.e. a URL address) to the global database be provided under the heading of FASID Table MET 2A.

5.6.14   With regard to FASID Table MET 2B, the meeting noted that no requirements are listed in Annex 1 to the *SADIS User Guide* concerning SIGMET. However, all SIGMET are required to be disseminated by the Meteorological Watch Office (MWOs) to the SADIS and ISCS uplink stations, in accordance with Annex 3. Accordingly, the meeting agreed that whilst the provisions related to SIGMET be retained in the ANP (BORPC and MET provisions), the FASID Table MET 2B should be deleted.

5.6.15   Based on the above, the meeting agreed to the following Conclusion:

CONCLUSION 10/73:   FUTURE OF THE FASID TABLES MET 2A AND MET 2B

> *That,*
>
> a) *in view of the similarity of the requirements contained in FASID Table MET 2A and Annex 1 to the SUG, and in the interest of ensuring the currency of the requirements for OPMET exchange at all times, the content of the MID FASID Table MET 2A be limited to the appropriate URL-address of the SADISOPSG website:*
>
> *(i.e. www.icao.int/anb/sadisopsg); and*
>
> b) *the FASID Table MET 2B be deleted from the MID FASID.*
>
> *Note. ─ It is important to retain the provisions related to SIGMET in the BORPC and MET provisions of the ANP.*

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Review of the MET part of the ANP/FASID

5.6.16   The meeting recalled that the eleventh meeting of the SADISOPSG formulated Conclusion 11/9 calling for the Secretariat to consider developing a database oriented version of global FASID Table MET 1A, in time for the SADISOPSG/12 meeting. This database was considered necessary in order to maintain the currency of the database-oriented Annex 1 to the *SADIS User Guide,* which includes the requirement for TAF and which should be, by definition, consistent with FASID Table MET 1A.

5.6.17   The meeting agreed that with the advent of the global database, it would be redundant if the requirements related to forecast (TAF and TREND) provided at international aerodromes were repeated in the regional FASID Table MET 1A. Accordingly, the meeting agreed that FASID Table MET 1A be deleted from the MID FASID and that a simple link (i.e. a URL address) to the global database be provided under the heading of FASID Table MET 1A. However, it was emphasized that the availability of TAF and TREND are subject to RAN agreement and that therefore, the role of MIDANPIRG would remain unchanged in ensuring that the content of the database pertinent to the MID Region is up-to-date.

5.6.18   The meeting recognized also that it is essential that the content of the database reflects the requirements of the users (IATA, IFALPA, etc.) since TAF and TREND should be issued in response to user requirements, not based on an arbitrary decision by the State concerned. Such user requirements could be reconfirmed regularly at the MET SG Meetings.

5.6.19   Based on the above, the meeting agreed to the following Conclusion:

CONCLUSION 10/74:   FUTURE OF THE FASID TABLE MET 1A

        That, the content of the MID FASID Table MET 1A:

        a) *be simplified by deleting Column 6 ("area of coverage of charts") and Column 7 ("AFTN routing areas of destination"); and*

        b) *be available only through the global database "Forecasts (TAF and TREND) to be issued at international aerodromes" to which a URL address is provided under the heading of the FASID Table MET 1A.*

AGENDA ITEM 5: REGIONAL AIR NAVIGATION PLANNING AND IMPLEMENTATION ISSUES:

5.7 TRAFFIC FORECASTING

REPORT ON AGENDA ITEM 5: **REGIONAL AIR NAVIGATION PLANNING AND INPLEMENTATION ISSUES**

5.7 **TRAFFIC FORECASTING**

5.7.1   The meeting was briefed on the activities of the Traffic Forecasting Sub-Group since MIDANPIRG/9. In this regard, the meeting noted that the Sub-Group held its second meeting in Cairo from 1 to 3 May 2006 to review an updated set of forecasts of aircraft movements to, from and within the MID region. The forecast is attached at **Appendix 5.7A** to the Report on Agenda Item 5.7.

5.7.2   The meeting was presented with a set of updated forecasts of passenger and aircraft movements up to year 2020 extracted from ICAO database, airline schedules and the Official Airline Guide (OAG). A detailed peak-period analysis of Muscat FIR for the period from July 2003 to May 2004, as in **Appendix 5.7B** to the Report on Agenda Item 5.7, used as part of the inputs to the database on the air traffic of the region was highlighted.

5.7.3   Accordingly, the meeting agreed to the following Conclusion superseding and replacing MIDANPIRG/9 Conclusion 9/58:

CONCLUSION 10/75:   *UPDATED TRAFFIC FORECASTING REQUIREMENTS IN THE MID REGION*

That,

a) *Membership of the Traffic Forecasting Sub-Group shall include all members of MIDANPIRG and that meetings of the Sub-Group shall be open to all MID States;*

b) *the Secretariat coordinate with other international and regional organizations; including IATA, with a view to establishing a MID database to support regional traffic forecasting activities;*

c) *MID States continue their support to the Traffic Forecasting Sub-Group by ensuring that their respective nominees to the membership of the Sub-Group include, as much as possible, forecasting experts, air traffic management experts and, when required, financial analysts to carry out business case and cost/benefit analysis;*

d) *MID States continue to avail required FIR and other data to the Traffic Forecasting Sub-Group in the format agreed by the Sub-Group to facilitate the development of forecasts and other air navigation planning and implementation parameters; and*

e) *the Secretariat continue organizing workshops, seminars and other training programmes with a view to upgrading regional traffic forecasting capabilities.*

MIDANPIRG/10
Appendix 5.7A to the Report on Agenda Item 5.7

UPDATED FORECASTS

**PRELIMINARY AIRCRAFT MOVEMENTS FORECASTS
FOR THE MIDDLE EAST REGION**

May 2006

**PREPARED BY:
ECONOMIC ANALYSIS AND DATABASES SECTION
INTERNATIONAL CIVIL AVIATION ORGANIZATION (ICAO)**

1.   INTRODUCTION

1.1   The MIDANPIRG Traffic Forecasting Sub-Group (TF SG) superseded, in 2004, the Middle East Traffic Forecasting Group (MER TFG) which was set up in 1998 with the objective of developing traffic forecasts and other planning parameters in support of the planning of air navigation services in the AFI region. The TF SG has, so far, held one meeting in September 2004.

1.2   This report provides forecasts prepared by the Economic Analysis and Databases section of ICAO Secretariat for discussion by the TF SG at its meeting in Cairo from 1 to 3 May 2006.

2.   GLOBAL OUTLOOK

2.1   Economic Trends and Prospects

2.1.1   The demand for air passenger travel is primarily determined by income levels and demographics, and the cost of air travel. World energy demand, supply and prices are critically important both to economic progress and to the cost of travel. Hence, the airline industry is highly vulnerable to economic cycles and fluctuations in fuel prices.

2.1.2   Between 1994 and 2004, the aggregate world economy measured in terms of Gross Domestic Product (GDP) grew at an average annual rate of 3.4 per cent in real terms. Growth rates varied across regions, from a high of 4.4 per cent for Asia/Pacific to a low of 2.3 per cent for Europe. Between 1994 and 2004, the world population increased at an average annual rate of 1.3 per cent. Hence, the world's GDP per capita increased, during the same period, at an average annual rate of 2.1 per cent.

2.1.3   The world economy is expected to grow by 4.3, 4.4 and 4.2 per cent in 2005, 2006 and 2007, respectively. Over the long period up to 2020, the world economy is projected to grow at an average annual rate of 3.0 per cent in real terms.

2.1.4   The reasonably positive economic outlook augurs well for global traffic demand over the forecast period.

2.2   Historical Traffic Trends

2.2.1   Total scheduled airline traffic, measured in terms of total tonne-kilometres performed, grew at an average annual rate of 5.3 per cent between 1994 and 2004. Passenger- kilometres grew at an average rate of 5.1 per cent per annum and freight tonne-kilometres at nearly 6.1 per cent per annum.

2.2.2   In broad terms, the pattern of traffic growth over the 1994-2004 period was a reflection of economic conditions experienced over this period. The economic slowdown in 1991 had a serious effect on air traffic. The recovery in traffic in 1992, which occurred despite continuing poor economic performance, was achieved at a cost of significantly reduced revenue yield. Although real yields declined further in 1993 and 1994, the stimulating effect on traffic demand was less dramatic than had been the case in 1992. On the other hand, economic growth began to provide a more solid foundation for traffic growth. These trends continued until 1997 but reversed in 1998 when GDP grew at only 1.9 per cent, providing for a simultaneous growth of total scheduled passenger traffic of only 2.1 per cent. In 1999 and 2000, traffic increased by 6.5 and 8.6 per cent respectively, supported by the strong performance of the world economy. The economic downturn and related decline in business and consumer confidence had a negative impact on traffic in late 2000 and in 2001, when the events of 11 September exacerbated an already difficult situation. As a result, traffic declined in 2001 by 2.9 per cent, the first decline since 1991 and only the second since 1945. In 2002, demand for air travel remained depressed and traffic grew at only 0.5 per cent.

Following declines in the first part of the year due to the outbreak of the Severe Acute Respiratory Syndrome (SARS) and the war in Iraq, traffic rebounded in the second part of 2003 and increased by 1.8 per cent for the whole year. In 2004, traffic recovery continued, mainly of the airlines in the Asia/Pacific region, the worst affected by the SARS outbreak. It was supported by improved performance of some regional economies (Africa, Asia/Pacific, Europe, North America, Latin America/Caribbean) and sustained performance of the Middle East economy, and to some extent by marginal decline of cost of travel expressed in real terms. Traffic recovered strongly in 2004 and 2005 with growth rates of 14 and 7.4 per cent respectively due mainly to strong GDP growth rates of 5.1 and 4.3 per cent respectively. However, the average annual growth during the period 2000–2005 is 4 per cent.

2.3 Air Passenger Traffic Forecast

2.3.1   The global scheduled passenger traffic forecasts for 2006 and 2007 and over the period to the year 2015 have been developed based on the economic and yield assumptions. According to those forecasts the general economic performance provides the main factor affecting traffic demand. Global passenger traffic measured in terms of passenger-kilometres is expected to grow by 6.5 per cent in 2006 and 6.2 per cent in 2007. The ICAO long term forecast over the period 2002-2015 provides for an average annual increase of 4.4 per cent.

3. OUTLOOK FOR THE MIDDLE EAST REGION

3.1 Economic Trends and Prospects

3.1.1   The economy of the Middle East region has been characterized by some pronounced cycles over the past decade. With political and economic stability in the region, GDP growth comparatively low (1.6 per cent) in 1994 regained its momentum in 1995 which was sustained, varying in strength, for the following nine years. In 2004, the economy achieved a rate of 5.5 per cent in real GDP growth, well above the 5 per cent level for the second consecutive year, benefiting from higher oil prices. Political instability and tensions continued to have a marked negative influence on tourism and air travel to and from the region. Over the period concerned, the aggregate GDP for the Middle East grew at an average annual rate of 4.1 per cent in real terms, while GDP per capita averaged a 1.8 per cent growth rate per annum.

3.1.2   Having shown some resilience to geopolitical tensions and conflicts, the Middle East economy is expected to maintain a higher than world average growth through to the end of the forecast period. The GDP for the region is expected to increase at an average annual rate of 4.5 per cent for the 2004-2010 period and 3.5 per cent for the period 2010-2020.

3.2 Middle East Airlines Air Passenger Traffic Trends and Forecast

3.2.1   Scheduled passenger traffic (in PKPs) of *the airlines of the Middle East region* increased at an average annual rate of 9.1 per cent over the 1994-2004 period, substantially higher than the world average. After a slowdown in 2001, traffic rebounded and increased by 9.7 per cent in 2002, 12.7 per cent in 2003 and 23.8 per cent in 2004.

3.2.2   Scheduled passenger traffic for the airlines of the Middle East region is expected to grow by 12 per cent in 2006 and 8.8 per cent in 2006. These rates reflect an expected good economic performance in the region. The long term average annual growth rate to the year 2015 is anticipated to be 6.4 per cent, the highest growth among all regions.

4.   GEOGRAPHICAL SCOPE AND HISTORICAL DATA

4.1   Geographical Scope

4.1.1   In order to facilitate the group's work and the forecasting process, the following major route groups to, from and within the Middle East Region have been identified:
- Between Middle East - Europe
- Between Middle East - Africa
- Between Middle East - Asia/Pacific
- Between Middle East - North America
- Intra Middle East

4.2   Historical Passengers Traffic on Major Identified Route Groups

4.2.1   It is estimated that the air traffic on the identified five major route groups to, from and within the Middle East region increased from some 20.0 million in 1993 to more than 50 million passengers in 2004 at an average annual growth rate of 8.5 per cent. The annual passengers carried and growth rates for each of the route groups concerned are illustrated in **Table 1**.

TABLE 1
Traffic By Major Route Group - 1993 -2004
(thousand passengers)

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	Average Annual Growth (1993-2004) (per cent)
AFR-MEA	3192	3412	3419	3703	3955	4113	4179	4162	4275	4676	5205	6522	
Growth (per cent)		6.9	0.2	8.3	6.8	4.0	1.6	-0.4	2.7	9.4	11.3	25.3	6.7
ASIA-MEA	5339	6369	7561	8180	8786	9181	9676	10682	11163	11844	12922	15261	
Growth (per cent)		19.3	18.7	8.2	7.4	4.5	5.4	10.4	4.5	6.1	9.1	18.1	10.0
EUR-MEA	8300	8342	8959	9917	10542	11490	12008	12897	13077	13116	14389	16547	
Growth (per cent)		0.5	7.4	10.7	6.3	9.0	4.5	7.4	1.4	0.3	9.7	15.0	6.5
INTRA MEA	2350	3261	3809	4282	4958	6511	6654	7033	7350	8592	8961	10377	
Growth (per cent)		38.8	16.8	12.4	15.8	31.3	2.2	5.7	4.5	16.9	4.3	15.8	14.5
NAM-MEA	1300		1398	1318	1362	1040	1081	1178	1025	960	1230	1536	
Growth (per cent)				-5.7	3.3	-23.6	3.9	9.0	-13.0	-6.4	28.2	24.9	1.5
TOTAL	20481	21385	25146	27401	29603	32335	33598	35953	36890	39188	42706	50243	
Growth (per cent)		4.4	17.6	9.0	8.0	9.2	3.9	7.0	2.6	6.2	9.0	17.6	8.5

4.2.2   In 2004, the highest passenger share occurred in the Middle East-Europe route group, followed by Middle East-Asia, Intra Middle East, Middle East-Africa, and Middle East-North America route groups.

4.3   Historical Average Aircraft Seat Size on Major Identified Route Groups

4.3.1   During the 1994-2005 period, the average aircraft size has decreased on the Middle East - Asia Pacific and Middle East North America route groups from 274 to 245 and from 414 to 294 seats per aircraft, respectively. This average has fluctuated in the range of 210-220 seats per aircraft for the Middle East Africa and the Middle East-Europe route groups while it has increased from around 175 to 190 seats

per aircraft for the Intra-Middle East route group, during the same period. The historical trends of the average aircraft size by route group is provided in Figure 1 below.

FIGURE 1
Average aircraft size by route group
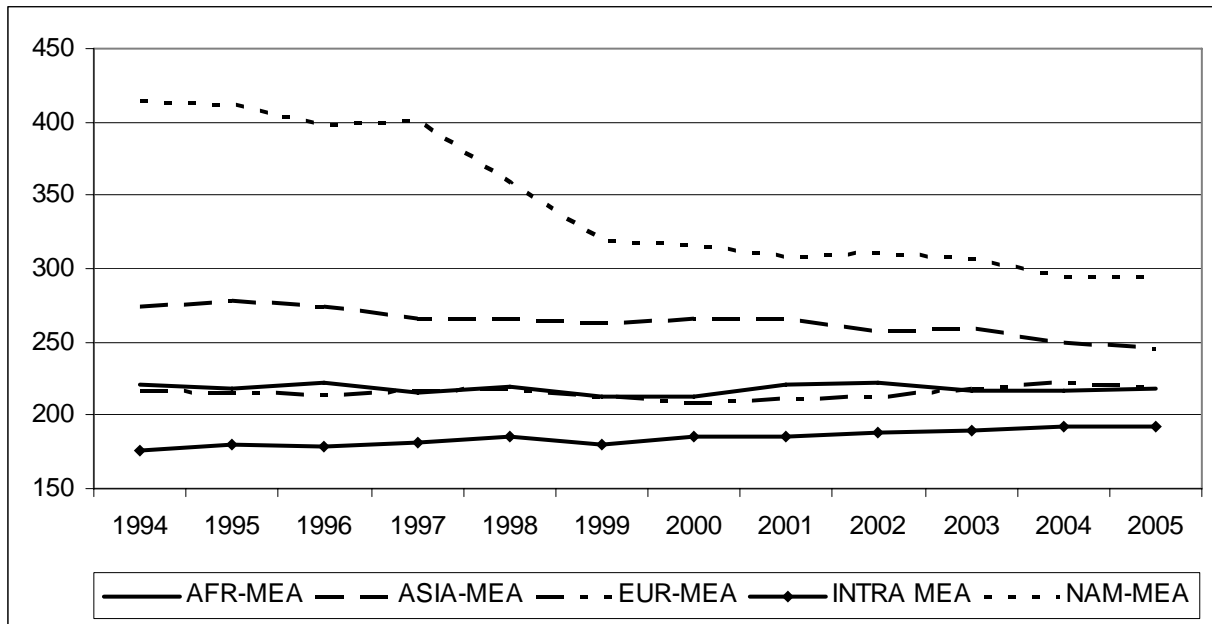
4.4 **Historical Load Factor on Major Identified Route Groups**

4.4.1 All route groups experienced increases in the Load Factors during the period 1993 to 2004. The highest load factors are those achieved on the Middle East-North America and Middle East-Asia route groups followed by load factors on the Middle East – Europe route group. Load factors on the Middle East-Africa and Intra-Middle East route groups are the lowest.

4.4.2 The historical trends in load factors for the route groups concerned are presented in **Table 2** below.

TABLE 2

LOAD FACTORS FOR THE YEARS 1993-2004

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
AFR-MEA	57.5	56.4	57.2	58.9	58.9	59.5	58.5	58.3	61.1	63.8	65.1	68.7
ASIA-MEA	66.2	63.3	63.8	61.5	65.4	67.5	66.1	68.9	69.7	72.7	69.8	72.1
EUR-MEA	62.2	59.7	60	63.8	65.9	66.2	65.9	68.1	66.3	69.1	68.1	70.6
INTRA MEA	56.9	55.9	58.4	60.2	58.3	65.1	58.9	60	61.9	61.2	63.9	66.2
NAM-MEA	49.9	N.A.	N.A.	67	71.7	67.8	66.5	71.7	72.8	75.5	75.7	78.6

4.5   Regional Economic Trends

Middle East

4.5.1   The economic trends and prospects for the Middle East region have been discussed under paragraphs 3.1.1 and 3.1.2.

Africa

4.5.2   Over the 1994 - 2004 period, the aggregate economy of the African region grew at an average annual rate of 3.7 per cent, while GDP per capita increased at a rate of 1.3 per cent per annum in real terms. Factors such as greater macroeconomic stability, modest progress in liberalizing markets and privatizing state enterprises helped the region's improved economic performance significantly. Favourable external conditions such as the rapid growth in world trade, surging private capital flows and a mini-boom in commodity prices (1994–1995) also helped. After achieving a GDP growth of 5 per cent in 1996, the aggregate economy witnessed a decline in growth rates through to 1999. The years 2000 through 2002 were not very impressive in terms of growth rates either. The contributing factors for these declines include increases in oil prices, the resurgence of civil conflict, and the losses from terms of trade resulting from weak commodity prices. The aggregate African economy is estimated to have grown at 5.1 per cent in 2004 compared to 4.6 per cent in 2003. It is anticipated to grow at an average annual growth rate of 3.6 per cent over the period 2004-2010 and 3.1 per cent over the period 2010-2020.

Asia/Pacific

4.5.3   Over the 1994 - 2004 period, the aggregate economy of the Asia/Pacific region grew at an average annual rate of 4.4 per cent in real terms, and GDP per capita increased at 3.0 per cent per annum. Asia/Pacific has achieved the largest share in the world economy and has also been the fastest growing region despite a slowdown and recession when GDP growth dropped from 3.9 per cent in 1997 to –0.3 per cent in 1998. Following a financial crisis, the region regained its economic strength and GDP continued to grow well above the world average even in 2001 (3.9 per cent) despite a global slowdown that year. In 2002, the region's economy grew by about 4.6 per cent. Despite the adverse effects of the SARS outbreak in the first half of 2003, the economy bounced back in the second half of the year with a surge in domestic demand coupled with export growth boosted by increased global activity, the upturn in demand for high technology goods, favourable exchange rates, higher consumer confidence and a boost in tourism and registered a growth rate of 5.9 per cent for 2003. The region's GDP grew at 6.5 per cent in 2004, the highest growth rate among ICAO regions.

4.5.4   Asia/Pacific GDP expressed in real terms is projected to grow at an annual average growth rate of about 4.5 per cent over the period 2004-2010 and 4.0 per cent between 2010 and 2020.

Europe

4.5.5   The aggregate economy of the European region went into decline starting in 1990, the primary reason being the serious contractions of the economies of Eastern Europe and the Commonwealth of Independent States (CIS). By 1997, total output was back to where it had been in 1989, but masked a persistent divergence between countries in Western and Eastern Europe. Over the 1994 - 2004 period, the GDP for the entire region (including the CIS), grew at an average annual rate of 2.3 per cent in real terms while the aggregate GDP per capita grew at a rate of about 1.9 per cent. It is estimated that the European

economy grew by 3.2 per cent in 2004, to which the European Union contributed 2.5 per cent. Economies of Central and Eastern European countries grew in the aggregate at around 6.1 per cent while those of the CIS grew faster, at 8.2 per cent.

4.5.6   The aggregate European economy is expected to grow at 2.3 per cent per annum over the period 2004-2020.

North America

4.5.7   Over the 1994–2004 period, the economy of the North American region grew at an average annual rate of 3 per cent in real terms and GDP per capita increased at 2.1 per cent. The U.S. economic expansion, which began in 1991, has been the longest since 1945. By the end of 2000, an economic slowdown had affected economic activities, with a worsening impact after the events of 11 September 2001. As a result, the year 2001 saw GDP growth of 0.4 per cent only. In the years 2002 to 2004 the region's economic growth showed a steady recovery with growths of 2.3, 2.9 and 4.2 per cent respectively.

4.5.8   The economy of the region is expected to grow at the annual growth rates of 2.9 and 2.5 per cent over the periods 2004-2010 and 2010-2020 respectively.

4.5.9   **Table 3** depicts the trends in the economic growth rates for the period 1993-2004.

TABLE 3

ANNUAL GDP GROWTH RATES OF RESPECTIVE REGIONS
(Per Cent)

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
NAM	3	3.6	2	2.6	3.8	4.2	4.2	4.1	0.4	2.5	3	4.2
EUR	-3.2	0.1	2	2.5	2.8	2.5	2.3	3.8	1.8	1.3	1.3	3.2
ASIA/PAC	3.7	4.3	5	3.3	2.1	-0.3	3.5	5.7	3.9	4.8	6	6.5
AFR	1.1	2.4	2.9	5	3.4	3.1	2.7	3.1	3.6	3.4	4.1	5.1
MEA	3.8	1.6	3.8	5.2	3.2	2.7	2.5	5.4	3.9	3.9	5.4	5.5

5.   5.   METHODOLOGY

5.1   The demand for air travel is primarily determined by economic developments, notably the growth of world and regional income levels as measured by the aggregate economic activities (GDP), demographic trends, and the cost of air travel measured by airline yields (gross passenger revenue per passenger kilometre flown). It is also assumed that the political and general economic climate are conducive to growth, however, no specific assumptions are made about possible political and economic scenarios beyond those implicit in the basic GDP growth rates forecast. World energy demand, supply, and prices are important to both economic progress and to the cost of air travel. It is assumed that during the forecast period there will be no major disruptions in the availability of fuel, or significant fluctuations in fuel costs for the airlines.

5.2   Econometric models were developed wherever possible to understand the cause and effect relationship between traffic and other causal factors. It was recognized, however, that even where models were developed, the forecasts should incorporate a significant element of judgement.

5.3   In route groups where consistent data were not available, forecasts were developed based on general assessments of traffic trends, economic and other relevant factors.

5.4   Forecasts of aircraft movements in a particular route-group can be derived from forecasts of passengers and assumptions about future trends in load factors and average aircraft size. The link between these variables is given by:

$$\text{Aircraft movements} = \frac{\text{passenger numbers}}{(\text{passenger/seats}) \cdot (\text{seats/aircraft})}$$

$$\frac{\text{passenger numbers}}{(\text{load factor}) \cdot (\text{aircraft size})}$$

5.5   Judgements would be necessary about whether gradual improvements in load factors could be expected from marketing initiatives and yield programs. Assumptions were made about future trends in average aircraft size based on expectations about the types of aircraft that might be introduced to the route over the forecast period. Historical trends as well as data concerning aircraft orders were also factored into the development of future trends.

5.6   Having established the aircraft movement growth rates for each of the route-groups concerned, in the manner described above, aircraft movement forecasts for the year 2020 were estimated. These forecasts were developed for each of the major route groups concerned using the 2005 OAG (Official Airline Guide) data as the base year.

6.   6.   PASSENGER TRAFFIC FORECASTS

6.1   Based on the methodology described above, passenger traffic forecasts were developed for the major route groups concerned. The traffic to, from and within the Middle East region on the five major route groups concerned for the period 2004-2020 is expected to increase at an average annual rate of 8.3 per cent. The Intra-Middle East route group is expected to experience the highest average annual growth rate of 12.7 per cent per annum, followed by Asia/Pacific-Middle East, Africa-Middle East, Europe-Middle East and North America-Middle East route groups with growth rates of 7.1 per cent, 6.7 per cent, 6.2 per cent and 3.0 per cent respectively for the period concerned as illustrated in **Table 4**.

TABLE 4

PASSENGER FORECAST TO THE YEAR 2020
(thousand passengers)

	Actual		Forecast			Average	Annual (per cent)	Growths
	1993	**2004**	**2010**	**2020**	**1993-2004**	**2004-2010**	**2010-2020**	**2004-2020**
AFR-MEA	3192	6522	9679	18512	6.7	6.8	6.7	6.7
ASIA-MEA	5339	15261	24488	45537	10	8.2	6.4	7.1
EUR-MEA	8300	16547	25112	43304	6.5	7.2	5.6	6.2
INTRA MEA	2350	10377	23753	69916	14.5	14.8	11.4	12.7
NAM-MEA	1300	1536	1834	2465	1.5	3	3	3
TOTAL	20481	50243	84866	179734	8.5	9.1	7.8	8.3

6.2   These forecasts result in a change in the shares of the various route groups in terms of passenger traffic as depicted in **Figure 2**.

FIGURE 2
Shares of selected route groups in passenger traffic

2004
3.1   13.0
20.7
32.9   30.4

2020
1.4   10.3
38.9   25.3
24.1

AFR-MEA
ASIA-MEA
EUR-MEA
INTRA MEA
NAM-MEA
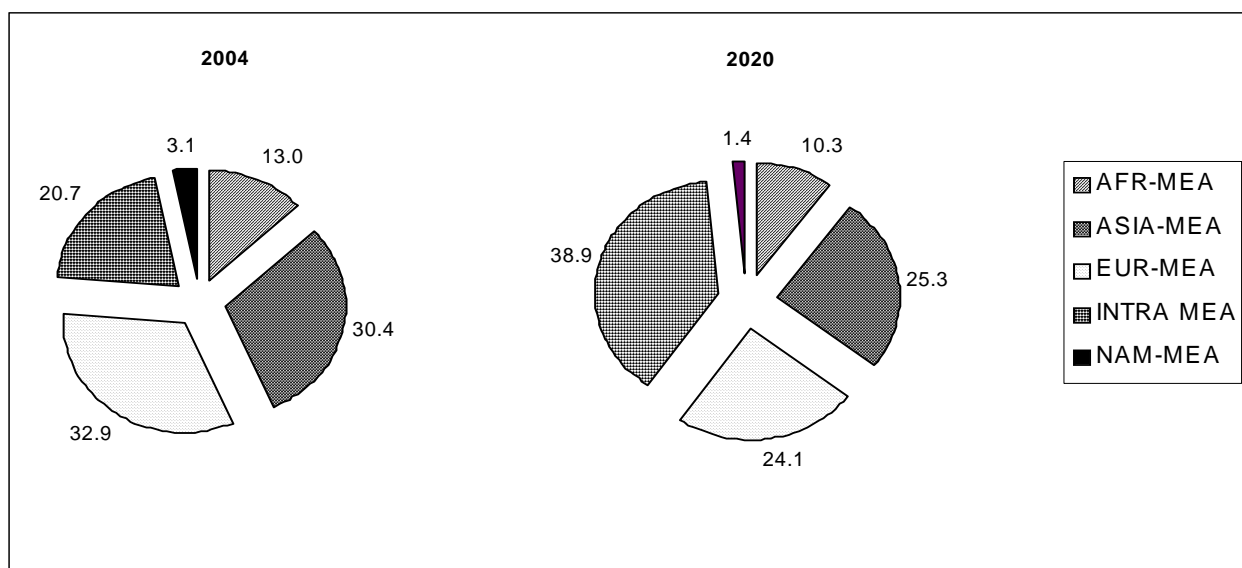
7.   7.   FORECASTS OF AIRCRAFT MOVEMENTS

7.1   In order to develop aircraft movements forecasts for the major route groups assumptions were made regarding the evolution of the average aircraft size and load factors. These assumptions are depicted in Table 5.

TABLE 5

ASSUMPTIONS ON THE EVOLUTION OF THE AVERAGE AIRCRAFT SIZE AND LOAD FACTOR OVER THE 2004-2020 PERIOD

5.7A-10

	1994	2005	2020			1993	2004	2020
AFR-MEA	221	218	220	**AFR-MEA**		57.5	68.7	73
ASIA-MEA	274	245	250	**ASIA-MEA**		66.2	72.1	77
EUR-MEA	216	219	220	**EUR-MEA**		62.2	70.6	75
INTRA MEA	176	192	200	**INTRA MEA**		56.9	66.2	70
NAM-MEA	414	294	300	**NAM-MEA**		49.9	78.6	80

7.2   Using the methodology described above, movement forecasts for the major route groups for the 2004-2020 period are depicted in Table 6.

TABLE 6
AIRCRAFT MOVEMENTS FORECAST TO THE YEAR 2015

	Actual		Forecast		Average	Annual (per cent)	Growths
	2004	**2005**	**2010**	**2020**	**2004-2010**	**2010-2020**	**2004-2020**
AFR-MEA	52412	59519	81200	150000	7.6	6.3	6.8
ASIA-MEA	117826	129862	183500	325300	7.7	5.9	6.6
EUR-MEA	125877	137032	186700	310000	6.8	5.2	5.8
INTRA MEA	140640	146687	311600	872000	14.2	10.8	12.1
NAM-MEA	6343	6816	7500	9800	2.8	2.7	2.8
TOTAL	443098	479916	770500	1667100	9.7	8.0	8.6

7.3   The total aircraft movements to/from and within the Middle East region are estimated to increase from some 443000 in 2004 to around 1667000 in 2020 at an average annual growth rate of 8.6 per cent. The resulting movements' shares for the years 2005, 2010 and 2020 are depicted in **Figure 3**.

FIGURE 3
Shares of selected route groups in aircraft movements
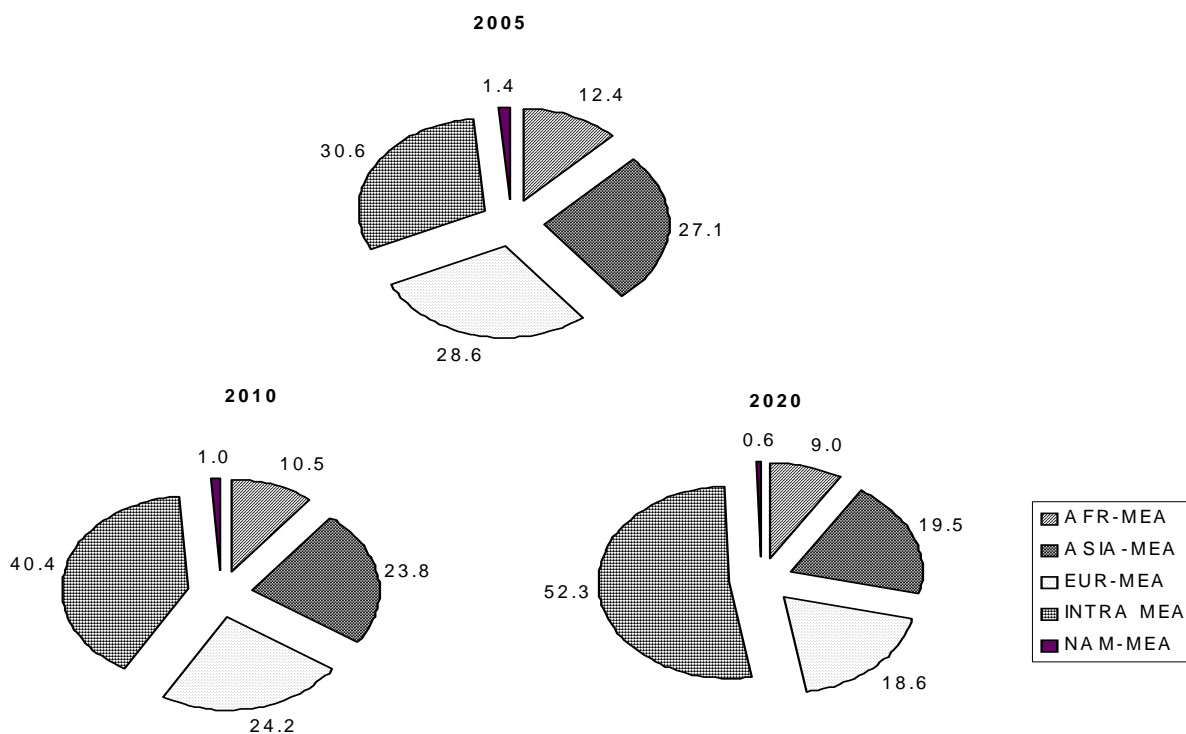
Peak-Hour Analyses

MUSCAT FIR AIRCRAFT MOVEMENT ANALYSIS
PERIOD: JULY 2003 – MAY 2004

Summary Results

The analysis of the Muscat FIR traffic data for the period July 2003 – May 2004 shows the following results:

Total traffic:	184751	aircraft movements	
Average monthly traffic:	16795	aircraft movements	
Highest monthly traffic:	19478	aircraft movements	January 2004
Lowest monthly traffic:	14427	aircraft movements	October 2003
Average daily traffic:	563	aircraft movements	
Highest daily traffic:	708	aircraft movements	11/01/2004
Lowest daily traffic:	463	aircraft movements	03/10/2004

It should be noted that data were not available for the four day period 6-9 March 2004.

Monthly and Daily Traffic Distribution

Figure 1 below shows the monthly distribution of traffic. Traffic variability is medium since monthly traffic ranges from about 15000 to about 20000 aircraft movements a month. The highest month is January 2004 and the lowest month is October 2003.

Figure 1

Muscat FIR Monthly Traffic
01 July 2003 - 31 May 2004

Month
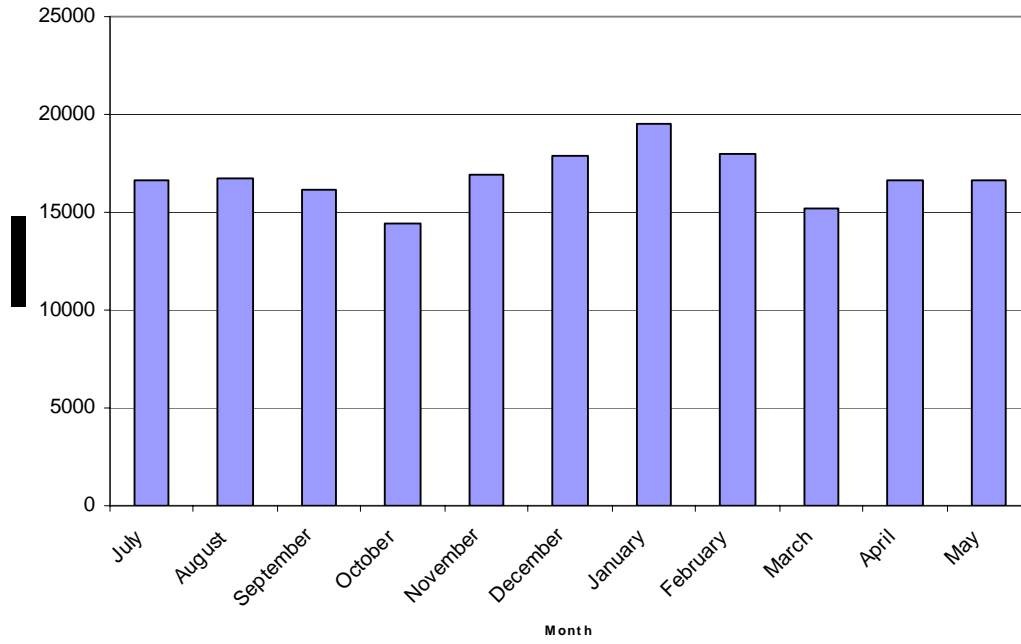
Figure 2 shows the daily distribution of traffic. It shows a steady weekly pattern, with a daily aircraft movements traffic hovering between 500 and 600. This pattern peaks in the January-March 2004 period, with a daily aircraft movements traffic hovering between 600 and 700. The figure also shows that during the peak period, there is a significant dip in traffic from 26 January 2004 to 04 February 2004. This coincides with the period of the Hajj.

Figure 2

Muscat FIR daily traffic
01 July 2003 - 31 May 2004
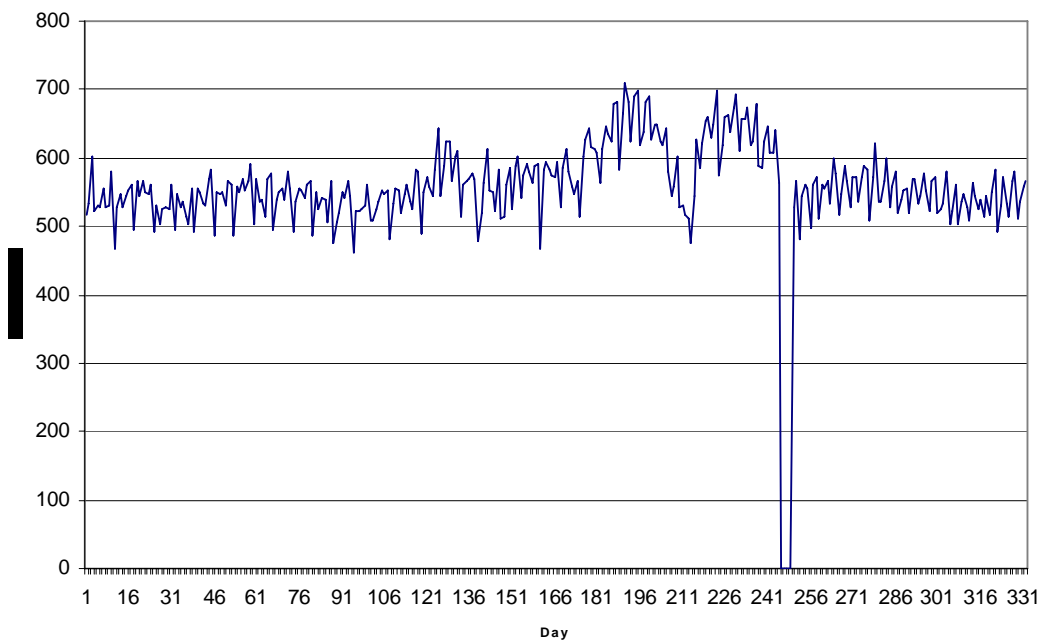
Figure 3 and Figure 4 show the theoretical and empirical distribution of traffic. The analysis of the distribution of traffic helps determine the probability of the daily traffic being at (or greater than) a certain value. The theoretical distribution is the Normal distribution, the mean of which is equal to the average daily traffic (563 movements) and the standard deviation of which is equal to the standard deviation of the daily traffic over the period concerned (48). The empirical distribution is build using the actual data. Both distributions provide similar results.

Figure 3

Muscat FIR Traffic
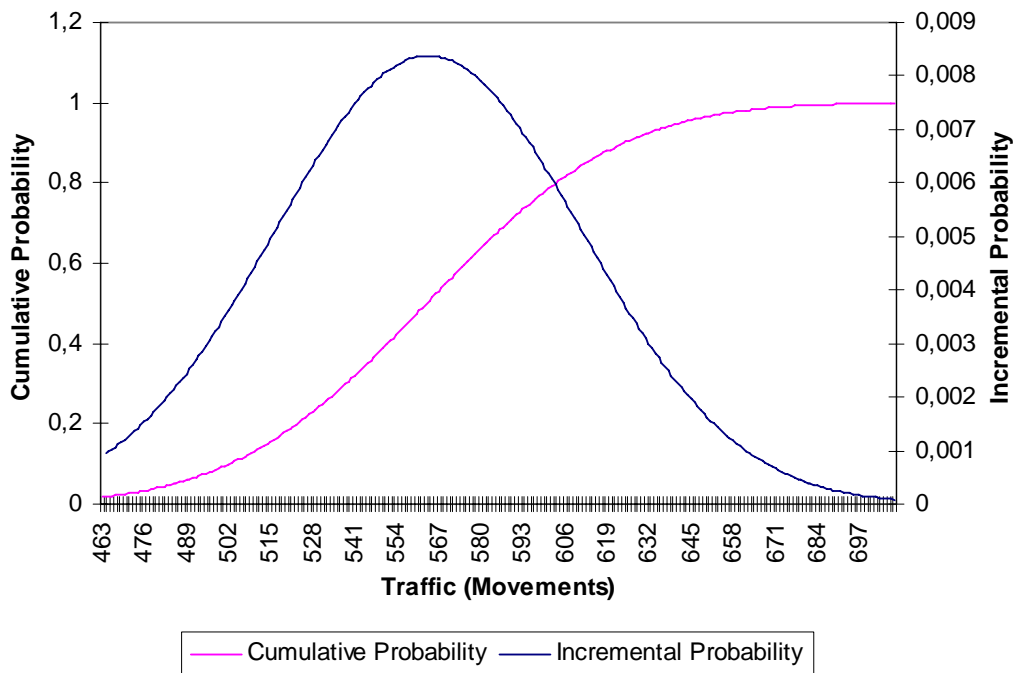
The theoretical distribution shows that there is a probability of 5 per cent that the daily traffic be greater than 642 movements and a 10 per cent chance that the daily traffic be greater than 625 movements and a probability of 20 per cent that the daily traffic be greater than 604 and a 25 per cent chance that the daily traffic be greater than 596 movements.

Figure 4

**Muscat FIR Traffic
Empirical Probability Distribution**
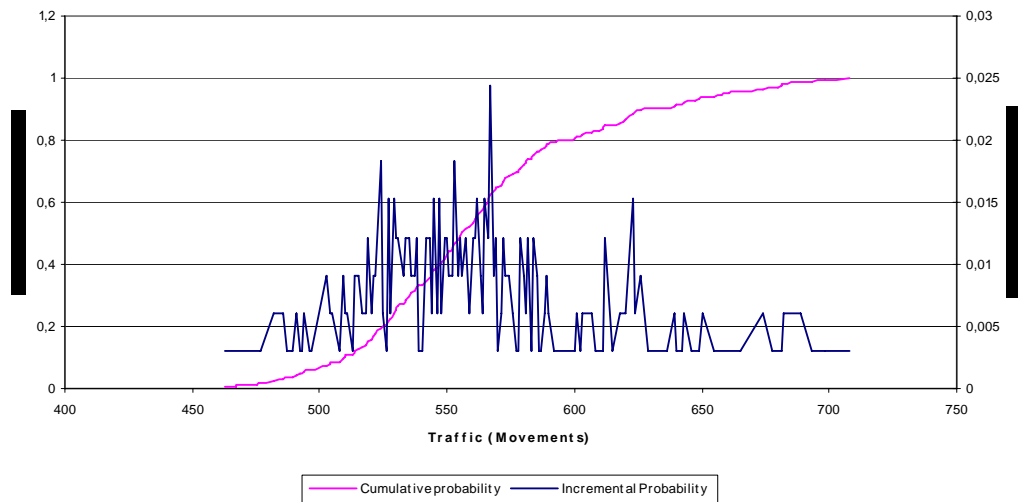
The empirical distribution shows that there is a probability of 5 per cent that the daily traffic be greater than 660 movements and a 10 per cent chance that the daily traffic be greater than 629 movements and a probability of 20 per cent that the daily traffic be greater than 598 and a 25 per cent chance that the daily traffic be greater than 584 movements.

Traffic by Aircraft Type

Figure 5 below shows the distribution of the total traffic by aircraft type. It shows that the most active aircraft type in the Muscat FIR is the Boeing 747 with a share of about 14 per cent followed by the Airbus 330, the Airbus 320, the Airbus 310, the Boeing 777, the Boeing 737 and the Boeing 767 with a share of about 12, 10, 9, 8, 8 and 7 per cent respectively. The seven aircraft types listed above represent about 66 per cent of the total aircraft movements. The detailed distribution is provided in the Appendix to this paper.

Figure 5

**Muscat FIR Traffic
Traffic Distribution by Aircraft Type
01 July 2003 - 31 May 2004**
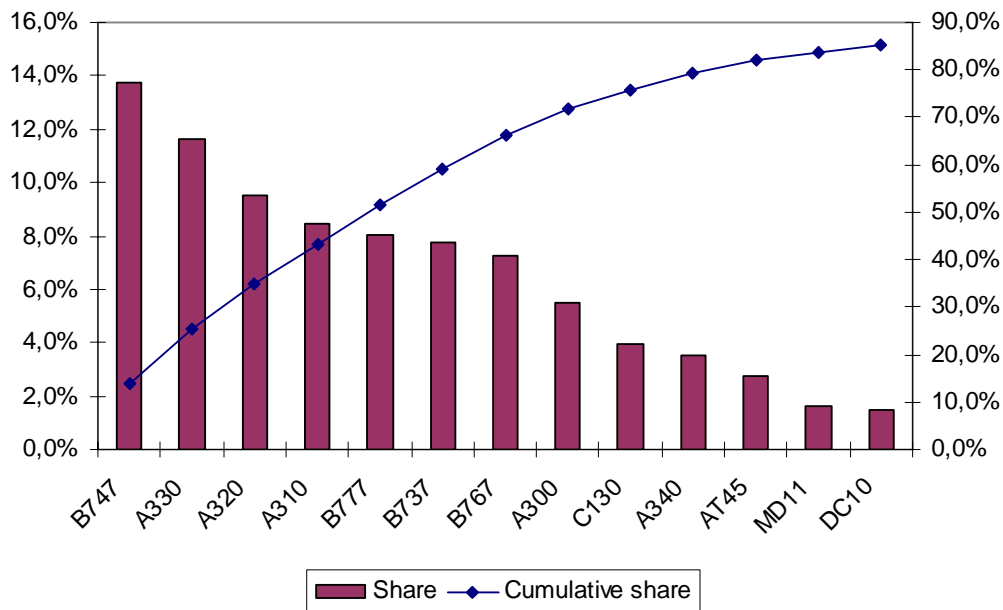
Traffic by Flight Classification

The table below shows the distribution of traffic by flight classification:

Flight classification	Movements	Share (per cent)
Inbound	18881	10.2
Outbound	18685	10.1
Overflight	135614	73.4
Within FIR	11393	6.2
Non Specified	178	0.1
Total	184751	100

This table shows that traffic is dominated by the Overflight class.

Traffic by Flight Classification and by Aircraft Type

Overflight Traffic

The main aircraft types for the overflight traffic are the A330-200, A310, A320, B747-400, B777-200, B767-300 and B747-200. Their share in the overflight traffic are 11.5, 10.1, 8.2, 7.1, 7.0, 6.9 and 6.0 per cent respectively. They all together represent 57 per cent of the overflight traffic.

Muscat FIR
Overflight Traffic Distribution by Aircraft Type
01 July 2003 - 31 May 2004
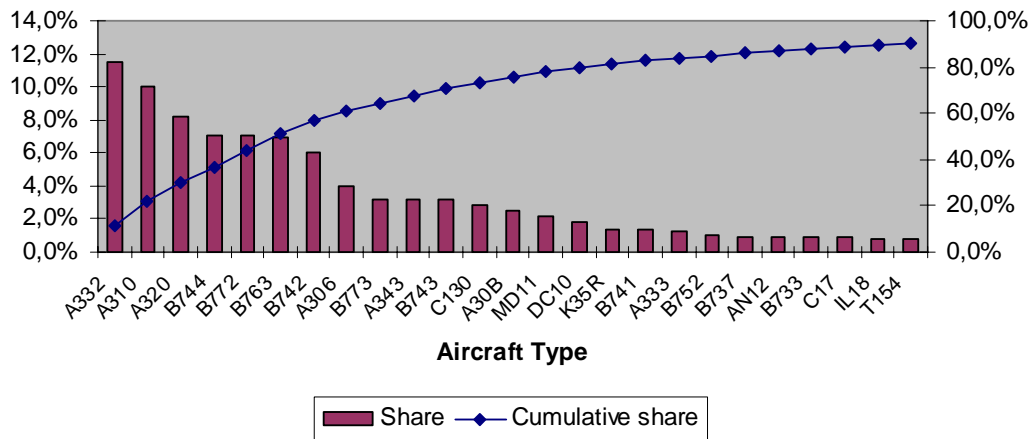
Inbound and Outbound traffic

Muscat FIR
Inbound Traffic Distribution by Aircraft Type
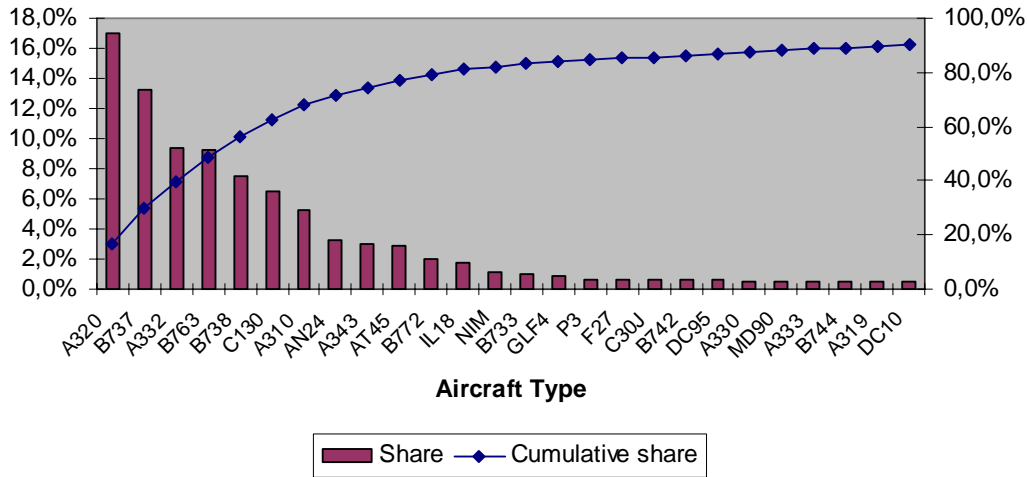
Muscat FIR
Outbound Traffic Distribution by Aircraft Type
01 July 2003 - 31 May 2004
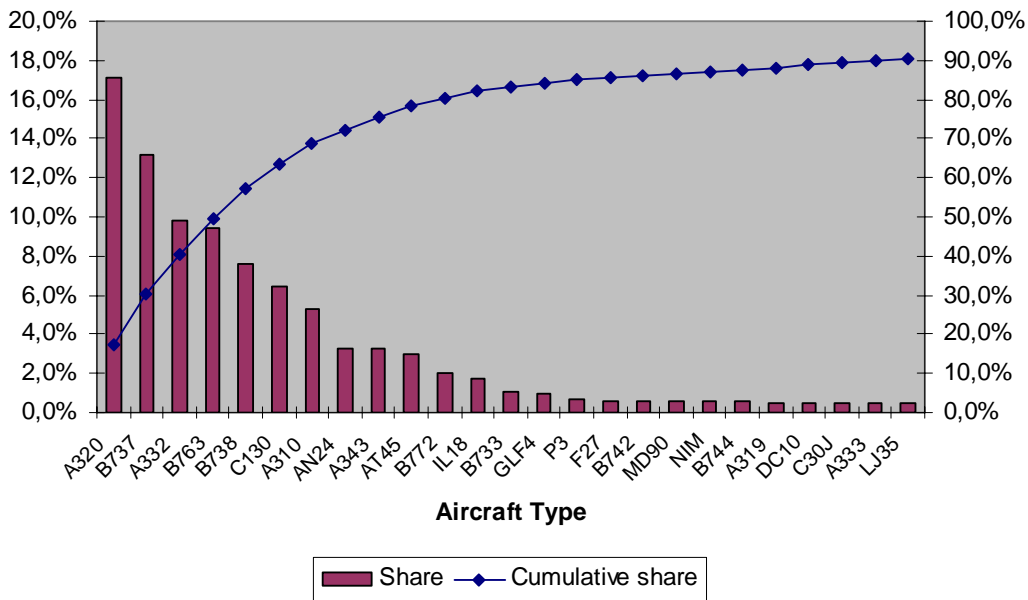
Within FIR Traffic

Muscat FIR
Within FIR Traffic Distribution by Aircraft Type
01 July 2003 - 31 May 2004

Aircraft Type

Share ──◆── Cumulative share
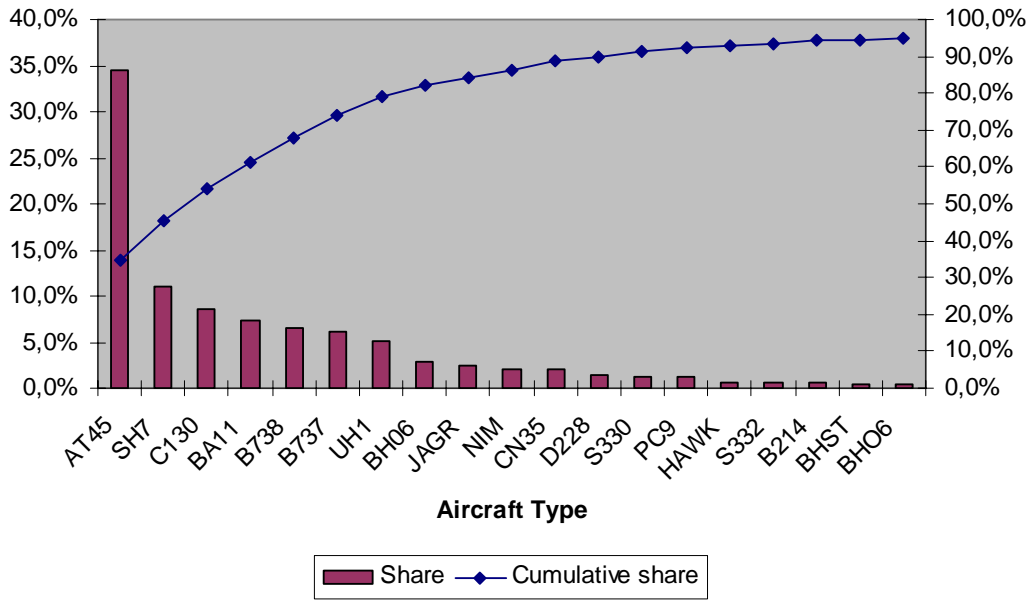
AGENDA ITEM 6:   AIR NAVIGATION SAFETY AND DEFICIENCIES

MIDANPIRG/10
Report on Agenda Item 6

REPORT ON AGENDA ITEM 6: **AIR NAVIGATION SAFETY AND DEFICIENCIES**

6.1   Under this agenda item, the meeting was apprised of the outcome of the second meeting of the Air Navigation Safety Working Group (ANS WG/2), held in Cairo from 01 to 02 March 2007 as well as outcome of AOP SG/5, ATM/SAR/AIS/8 and CNS/MET SG/7 Meetings related to air navigation safety and deficiencies

Review of Air Navigation Deficiencies in the MID Region

6.2   The meeting noted with appreciation that in an effort to enhance the process of identification, assessment, reporting and elimination of deficiencies and allow authorized users to propose updates to their deficiencies on-line, an Air Navigation Deficiencies database has been developed and is updated by MID Regional Officers on a regular basis and is available on ICAO MID Office website. The final approved list of deficiencies is currently posted in PDF format under "Restricted" documents. The website can be accessed with a username/password. A reporting form is available for MID States to report online deficiencies updates. The meeting was informed that the facility of having a secure management process will be replaced by a searching feature which is planned for a later stage. Accordingly, the meeting agreed that MIDANPIRG/9 Conclusion 9/63 is to be updated and replaced by the following Conclusion:

CONCLUSION 10/76: *ENHANCEMENT OF MID REGION'S AIR NAVIGATION DEFICIENCY DATABASE*

> *That, ICAO MID Regional Office provide searching feature for the MID Air Navigation Deficiency database on the website.*

6.3   With regard to ATM deficiencies, the meeting recalled that MIDANPIRG/9 had requested to review some of the requirements of the MID Basic ANP pertaining to ATS routes and was apprised of the outcome of the ATM/SAR/AIS SG/8 in this regard, as reflected in the list of updated ATM deficiencies.

6.4   With regard to MET deficiencies, the meeting expressed concern with respect to identification of deficiencies in the MET field in the MID Region and requested support of IATA and other user organizations. The meeting noted the related outcome of the CNS/MET SG/7 and reiterated MIDANPIRG/9 Conclusion 9/64, which is still current.

6.5   The meeting 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. The meeting was of the view to continue using the amended form by its different 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.

6.6   The updated list of deficiencies in the AOP, AIS/MAP, ATM and CNS fields using the amended form are at **Appendices 6A, 6B, 6C** and **6D** respectively. The meeting noted that some of the deficiencies have been already eliminated. However, concern was raised regarding many other deficiencies, which continue to persist for a number of years.

6.7   It was noted that the distribution of these deficiencies between the different fields is as follows: AIS/MAP: 32%, AOP: 29%, ATM/SAR: 27% and CNS: 11% as detailed in **Appendix 6E** to the report on Agenda Item 6.   The following was highlighted with regard to the root causes of non elimination of air navigation deficiencies in the MID Region in general:

- 55% of deficiencies are due to lack of a sustainable safety oversight system in the majority of MID States (in particular: appropriate legislative framework and supporting national regulations; well established civil aviation organisation where safety oversight functions and responsibilities are clearly defined and clear separation between regulatory bodies and service providers is ensured; provision of qualified personnel and expertise to carry out safety monitoring functions; provision of technical guidance and safety related information and appropriate enforcement provisions for the State' inspectors to allow them to carry out their safety oversight functions and take appropriate actions)

- 24% of deficiencies are due to lack of financial resources

- 21% of deficiencies are due to Military/political reasons.

6.8   This distribution is based on the information provided by MID States on the reasons for non-elimination of air navigation deficiencies, and observations during visits conducted by MID Office to some MID States as well as common safety oversight audit findings.

6.9   Based on the above analysis, the meeting was of the view that enhancing MID States capabilities for safety oversight would greatly contribute to the elimination of at least 50% of air navigation deficiencies in the MID Region.

6.10   Accordingly, the meeting agreed to replace MIDANPIRG/9 Conclusion 9/64 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).*

Enhancement of State's Safety Oversight Capabilities

6.11   The meeting recalled that the Directors General of Civil Aviation Conference on a "Global Strategy for Aviation Safety" (DGCA/06) held in Montreal in March 2006, agreed that "*Proper safety oversight by States is one of the basic tenets of aviation safety. In view of the continuing difficulties faced by several States and the resulting need for assistance, ICAO, States, industry, and donor organizations should direct resources towards the establishment of sustainable safety oversight solutions*" (Recommendation 1/1, b refers)

6.12   It was noted that a common deficiency identified in the majority of assessed and audited States under the USOAP is lack of an adequate safety oversight organization and infrastructure within the CAA. In the majority of cases, this has resulted from insufficient resources being provided for the CAA. As a result, such States are unable to fully comply with national and international requirements relating to the safety of civil aviation, including operations and infrastructure.

6.13   The meeting recognized the eight critical elements of a State' safety oversight system, that have been identified by ICAO as in **Appendix 6F** to the Report on Agenda Item 6, which are required for the effective implementation of safety-related policy and associated procedures and emphasized that States are expected to implement safety oversight critical elements in a way that assumes the shared responsibility of the State and the aviation community. The meeting supported the view that the effective implementation of the eight critical elements is an indication of maturity of a State's safety oversight system.

6.14   The meeting was of the view that in those States where the State is both the regulatory authority and an air traffic service provider, aerodrome operator, air operator, manufacturer or maintenance organization, the requirements of the Convention will be met, and public interest be best served, by clear separation of authority and responsibility between the State operating agency and the State regulatory authority. The approval, certification and continued surveillance procedures should be followed as though the operating agency was a non-governmental entity.

6.15   The meeting recalled the role of the "Cooperative Development of Operational Safety and Continuing Airworthiness Programme" - COSCAP programme, as a cooperative arrangement between groups of States aimed at enhancing safety and efficiency of air transport operation in a cost-effective manner and was as alternate of the view that the establishment of Regional or Sub-Regional Safety Oversight Organizations (RSOO) could cover those safety oversight activities which are not currently carried out within the framework of the available COSCAP Programme.

6.16   The meeting recognized that establishment and management of a sustainable safety oversight system require a high-level government commitment, without which a State cannot satisfactorily discharge its aviation system safety-related responsibilities in accordance with the Convention on International Civil Aviation.   The meeting recalled that guidance material on establishment and management of Sates' Safety Oversight System is contained in Doc 9734 part A.

6.17   Based on the above and in order to accelerate the improvement of MID States safety oversight capabilities; the meeting agreed to the following Conclusions:

CONCLUSION 10/78:   *ENHANCEMENT OF MID STATES' CAPABILITIES FOR SAFETY OVERSIGHT*

> *That, in order to improve aviation safety in the MID Region; MID States are urged to enhance their individual safety oversight capabilities and ensure the establishment and management of a sustainable safety oversight system.*

CONCLUSION 10/79:   *REGIONAL COOPERATION FOR SAFETY OVERSIGHT*

> *That, MID States:*
>
> a) *cooperate bilaterally and/or jointly as a group of States to make the appropriate arrangements in order to strengthen their safety oversight capabilities; and*
>
> b) *that have not yet done so, are encouraged to become a member of a COSCAP Programme.*

Implementation of Safety Programmes and Safety Management Systems

6.18   The meeting recalled that in March 2006, the ICAO Council adopted harmonized safety management provisions in Annexes 6, 11 and 14 requiring States to establish a safety programme and, as a part of such a programme, required aerodrome operators, air traffic services providers and air operators implement a Safety Management System (SMS) acceptable to the Authority. The harmonized provisions are applicable as of 23 November 2006 for national authorities, aerodromes operators and air traffic services providers and as of 1 January 2009 for air operators. The requirements impose also on States the responsibility to establish an acceptable level of safety for the activities/provision of services.

6.19   The meeting noted that the ATM/SAR/AIS SG/8 and ANS WG/2 meetings, when addressing the issue of development of Safety Programmes and implementation of SMS, recognized that one of the first steps required from an organization for the implementation of SMS is to find out exactly what is already in place within the organization and identify what remains to be developed and implemented. In SMS terms, this is called a "gap analysis". It was also pointed out that implementing SMS within an organization requires dedication and commitment from the very top of the organization involving all departments at all levels.

6.20   The meeting was apprised of the outcome of the ATM/SAR/AIS SG/8 meeting related to the implementation of ATS Safety Management System and sharing of safety-related information, which was reviewed and supported by the ANS WG/2 meeting and recognized that one of the main elements of a Safety Management System (SMS) is the collection of data and safety-related information allowing for the identification of hazards, the assessment and mitigation of associated risks. It was highlighted in this regard that the establishment of a reporting system within an organization is necessary for the identification of hazards and assessment of risks in order to implement appropriate mitigating measures. The meeting was of the view that most of the information collected in an organization's SMS might be relevant only for that organization. However, some elements could be of interest to a larger community and should be reported in the

Safety Management Programme of the responsible Civil Aviation Authority, which in turn should also analyze and report the information to an established regional/sub-regional and a global system, as appropriate.

6.21   Based on the above, the meeting urged States to put strong efforts to update their legislations to support a "just culture" reporting environment and develop and implement non-punitive reporting mechanisms as part of their safety programme. In this regard, the meeting underlined also the importance to comply with Annex 13 provisions, especially those contained in Chapter 8 "*ACCIDENT PREVENTION MEASURES*" and in Attachment E, which contains legal guidance for the protection of information from Safety Data Collection and Processing System (SDCPS). Accordingly, the meeting agreed to the following Conclusion:

CONCLUSION 10/80:   REPORTING MECHANISM AND SHARING OF SAFETY-RELATED INFORMATION

That, MID States:

a) *update their legislation to support a "just culture" reporting environment as part of their safety programme;*

b) *develop and implement non-punitive reporting mechanisms as part of their safety programme for the identification of hazards and assessment of risks in order to implement appropriate mitigating measures;*

c) *designate focal points to whom operators can send incident reports for investigation and resolution and from whom they could request information for clarification purpose; and*

d) *share information on ATS incidents and accidents.*

6.22   The meeting noted that an ICAO SMS training course aimed at officials from States' Civil Aviation Administrations has been designed. The objectives of the course are to develop participants' knowledge of safety management concepts and ICAO safety management requirements in Annexes 6, 11 and 14, and related guidance material, as well as knowledge and skills to certify and oversee the implementation of SMS by operators and service providers, in compliance with ICAO requirements. The meeting noted with appreciation that in the MID Region, the "Implementation of SMS in States" Training Course will be hosted by Egypt in Cairo at the National Air Navigation Service Company (NANSC) from 21 to 25 May 2007.

6.23   The meeting recalled MIDANPIRG/9 Conclusion 9/8: *Implementation of the ATS Safety Management Programme in the MID Region* and ALLPIRG/5 Conclusion 5/11: *Air Traffic Management (ATM) Safety Management*, and agreed to the need for the MID Region to implement safety management systems.

6.24   The meeting was informed that many States in the region had not yet implemented the required Air Traffic Services (ATS) SMS. The meeting noted however, that no precise information was available about the status of implementation of SMS within the MID States' ATS, and agreed that it was necessary to determine the gap between what existed in regard to safety management and the required ICAO level of SMS implementation.

6.25   Based on the above, the meeting agreed to the following Conclusion:

CONCLUSION 10/81:   SURVEY ON ATS SAFETY MANAGEMENT

> *That,*
>
> *a) MID States that have not yet done so, are urged to establish a safety programme in order to achieve an acceptable level of safety in the provision of ATS;*
>
> *b) in order to obtain information from MID States regarding the status of implementation of SMS within their Air Traffic Services and/or the difficulties they face to implement the required system, ICAO MID Regional Office carry out a survey on the implementation of SMS; and*
>
> *c) MID States take advantage of the SMS guidance material available and training courses offered by ICAO.*

6.26   The meeting noted the information provided by EUROCONTROL regarding safety management developments among the European Civil Aviation Commission (ECAC) Members States, in particular their experiences, successes and safety requirements material, which may be obtained from EUROCONTROL.

6.27   It was also noted that the AOP SG/5 and ANS WG/2 meetings, when reviewing the status of implementation of ICAO requirements for the establishment of States' safety programme and safety management system at aerodromes, expressed their concerns regarding the low progress achieved.

6.28   The meeting was briefed on the objectives and initial outcome of a survey that was carried out by ICAO in the second half of 2006 on the status of implementation of Annex 14 — *Aerodromes,* Volume I — *Aerodrome Design and Operations*, specifications on Aerodrome Certification and Safety Management System and indicated that the level of SMS implementation at aerodromes in the MID Region is experiencing low rate of progress and that only one State (UAE) has implemented safety management Systems at its aerodromes.

6.29   Based on the above and with a view to support harmonized implementation of SMS at aerodromes in the MID Region; the meeting agreed to the following Conclusion:

CONCLUSION 10/82:   IMPLEMENTATION OF SAFETY MANAGEMENT AT AERODROME OPERATIONS

> *That, MID States are urged to:*
>
> *a) establish a Safety Programme in order to achieve an acceptable level of safety in aerodrome operations; and*
>
> *b) ensure that a certified aerodrome operator implements a Safety Management System acceptable to the State as part of its Safety Programme*

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6.30   The meeting recalled that ICAO, currently, does not require certification for ATS even in the cases where the ATS Unit is privatized within an aerodrome which is required to be certified. However, it was emphasized that coordination between aerodrome operations and ATS shall be supported by formal procedures and documentation (Service Level Agreement, MOU, etc) and carried out in an effective manner in accordance with Doc 9774 - Manual on Certification of Aerodromes. The meeting was of the view that concept of SMS should not be limited to aerodrome operations, air traffic services and aircraft operations since the implementation of SMS in the different civil aviation fields will improve considerably safety. Accordingly, the meeting agreed to the following Conclusion:

CONCLUSION 10/83:   *REQUIREMENTS FOR THE IMPLEMENTATION OF SMS IN VARIOUS AIR NAVIGATION FIELDS*

That, taking into consideration that the implementation of Safety Management System (SMS) is a fundamental tenet for the improvement of overall aviation safety; ICAO consider development of new provisions in its appropriate Annexes requiring the implementation of SMS in various air navigation fields.

6.31   The meeting agreed to a proposal that the Air Navigation Safety Working Group (ANS WG) be changed to Air Navigation Safety Sub-Group that reports directly to MIDANPIRG. Accordingly the meeting reviewed and updated its TOR and agreed to the following Decision:

DECISION 10/84:   *CHANGE OF ANS WORKING GROUP TO ANS SUB-GROUP WITH REVISED TOR*

That,

a)   *Air Navigation Safety Working Group (ANS WG) is changed to Air Navigation Safety Sub-Group (ANS SG); and*

b)   *the Terms of Reference and Work Programme of the ANS Sub-Group are updated accordingly.*

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Appendix 6A to the Report on Agenda Item 6

Deficiencies in the AOP 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 14 Vol. IFASID Table AOP-1MID/3 RAN Rec. 1/3ASIA/PAC 3 RAN, Rec.3/1	Kabul Intl. Airport	No VASIS on RWY 11/29	01/04/2000	Operations should be restricted to daylight VMC only	F, H, S	Operations should be restricted to daylight VMC only	DGCA	Dec. 2007	U
2	Annex 14 Vol. IFASID Table AOP-1MID/3 RAN Rec. 1/3ASIA/PAC 3 RAN, Rec.3/1	Kabul Intl. Airport	No ILS RWY 11/29	01/04/2000		F, H, S		DGCA	Dec. 2007	U
3	Annex 14 Vol. 1.4.1, 1.4.3, 1.4.4	Kabul & Kandahar Intl. Airports	Implementation of Certification of Aerodromes used for international operations	23/11/2006		F, H, O	Need to establish an appropriate regulatory framework. Need to establish criteria for the certification of aerodromes. Need to develop an Aerodrome Manual for each international aerodrome and insure it includes a safety management system prior to granting the aerodrome certificate	DGCA	2010	U
4	Annex 14 Vol. 1.5.1, 1.5.2, 1.5.3 & 1.5.4	Kabul & Kandahar Intl. Airports	Implementation of Aerodrome Operations Safety Management	23/11/2006		F, H, O	Need to establish a safety programme in order to achieve an acceptable level of safety in Aerodrome Operations	DGCA	2010	U

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

Deficiencies in the AOP 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
1	Annex 14 Vol. 1.4.1, 1.4.4	Bahrain Int'l Airport	Implementation of Certification of Aerodromes used for international operations	23/11/2006		H	Need to develop an Aerodrome Manual for the international aerodrome and insure it includes a Safety management system prior to granting the aerodrome certificate.	BCAA	Jan. 2008	U
2	Annex 14 Vol. 1.5.1, 1.5.2, 1.5.3 & 1.5.4	Bahrain Int'l Airport	Implementation of Aerodrome Operations Safety Management	23/11/2006		H	Need to establish a safety programme in order to achieve an acceptable level of safety in Aerodrome Operations.	BCAA	2010	U

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

Deficiencies in the AOP Field

EGYPT

Item No	Identification		Deficiencies				Corrective Action			
	Requirement	**Facilities/ Services**	**Description**	**Date first reported**	**Remarks/ Rationale for non-elimination**		**Description**	**Executing body**	**Date of completion**	**Priority for action**
1	Annex 14 Vol. IFASID Table AOP-1MID/3 Rec. 1/3	Hurghada Int'l Airport	Apron & Taxiway lighting inadequate	01/09/2002		F	Apron &Taxiway lighting is to be improved	EAC	Dec. 2007	U
2	Annex 14 Vol. IFASID Table AOP-1MID/3 Rec. 1/3	Luxor Int'l Airport	PAPIS/VASIS not available	01/09/2002		F H		EAC	Dec. 2007	U
3	Annex 14 Vol. IFASID Table AOP-1MID/3 Rec. 1/3, ASIA/PAC/3, Rec. 4/2, 4/10	Cairo Int'l Airport	RWY 05R/23L surface is severely coated with rubber deposits, in particular TDZ	01/09/2002	Exported rubber removal equipments are planned to be in place within 2005/2006 financial budget.	H	Rubber deposits are to be removed	CAC	Aug. 2007	A
4	Annex 14 Vol. IFASID Table AOP-1 MID/3 Rec. 1/3	Hurghada Int'l Airport	Heavy rubber accretion on runway	01/09/2002		F H	Rubber coats are to be removed	EAC	Dec. 2007	A
5	Annex 14 Vol. IFASID Table AOP-1MID/3 Rec. 1/3	Luxor Int'l Airport	Runway surface rough with heavy rubber accretion	01/09/2002		F H	Rubber deposits are to be removed and RWY Surface to be refurbished	EAC	Dec. 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
6	Annex 14 Vol. IFASID Table AOP-1MID/3 Rec.1/3,ASIA/P AC/3, Rec. 4/2, 4/10	Cairo Int'l Airport	RWY 05R lights have variable luminosity	01/04/2003	Preventive maintenance is made to overcome light variable luminosity to cope with required operational safety	F	Lights to be rectified (Improved and be completely alleviated)	CAC	Oct. 2006	A
7	Annex 14 Vol. IFASID Table AOP-1MID/3 Rec. 1/3	Hurghada Int'l Airport	Runway Marking inadequate	01/04/2003		F	Markings are to be improved	EAC	Dec. 2007	A
8	Annex 14 Vol. IFASID Table AOP-1MID/3 Rec. 1/3	Sharm El Sheikh Int'l Airport	Taxiway & Apron lighting inadequate	01/09/2003		F	Apron &Taxiway lighting is to be improved	EAC	Dec. 2007	U
9	Annex 14 Vol. IFASID Table AOP-1MID/3 Rec.1/3,ASIA/P AC/3, Rec. 4/2, 4/10	Cairo Int'l Airport	Taxiway markings to stands confusing as old markings not removed. Stop markings at new Terminal 2 difficult to interpret.	01/09/2003	Problem exacerbated at night and when wet. Old markings are being removed and repainting is being done to all airport surface markings.	H	Remove old markings	CAC	Jul. 2007	A
10	Annex 14 Vol. IFASID Table AOP-1MID/3 Rec. 1/3	Sharm El Sheikh Int'l Airport	RWY 04 surface rough and undulation with heavy rubber accretion	01/09/2003		F H	Rubber deposits are to be removed and RWY Surface to be refurbished	EAC	Dec. 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
11	MID Basic ANP & FASID (Doc 9708)	Alexandria Int'l Airport	Runway is short and current distance is 7221 FT with runway all up weight maximum 68000kgs	01/07/2004	Cannot be served as an alternate	F, O	This restriction require runway upgrade and length extension, CAA has no plans, at the time being, to upgrade the said runway as it is not possible, from the engineering point of view, to upgrade these runways. However, Borg el Arab Airport runway can be used for aircraft with Take off weight greater than 68 tones.	CAC	Dec. 2007	B
13	Annex 14 Vol. 1.4.1, 1.4.4	Hurghada, Luxor, Aswan, Borg El Arab, Alexandria, Almaza, Taba, Alamain, El-Arish, Shark El Owenat, Port Said, St. Cathrine Intl. Airports	Implementation of Certification of Aerodromes used for international operations	23/11/2006		F, H	Need to develop an Aerodrome Manual for each international aerodrome and insure it includes a safety management system prior to granting the aerodrome certificate	ECAA	Dec. 2007	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
14	Annex 14 Vol. 1.5.1, 1.5.2, 1.5.3 & 1.5.4	Cairo, Hurghada, Sharm El-Shiekh, Luxor, Aswan, Borg El Arab, Alexandria, Marsa Alam, ALamainTaba, El-Arish, Shark El Owenat, Port Said, St. Cathrine Intl. Airports	Implementation of Aerodrome Operations Safety Management	23/11/2006		F, H	Need to establish a safety programme in order to achieve an acceptable level of safety in Aerodrome Operations.	ECAA	Dec. 2008	U

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

Deficiencies in the AOP 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 14 Vol. IFASID Table AOP-1MID/3 Rec.1/3MID/3, Conc.1/6, Rec. 1/3ASIA/PAC 3 RAN, Rec.3/1	Mehrabad Int'l Airport	Precision approach lighting of RWY 29L has decreased to 600m due to highway interference	01/07/2001	Require is for ILS APP has increased to 1200m (State response: The length of precison APCH lighting will be completed up to dec 2006)	F S O	Lighting needs to be reinstalled on supports(Under progress)	CAO	End of 2007	U
2	Annex 14 Vol. IFASID Table AOP-1MID/3 Rec.1/3MID/3, Conc.1/6, Rec. 1/3ASIA/PAC 3 RAN, Rec.3/1	Mehrabad Int'l Airport	Taxiways markings inadequate	01/11/2004	Impose difficulty on aircraft to maneuver	H F	Markings to be improved	CAO	End of 2007	U
3	Annex 14 Vol. 1.4.1, 1.4.3, 1.4.4	Emam Khomaini, Mehrabad, Esfhan, Shahid Hashmi Nejad, Shiraz, Tabriz and Zahedan Intl. Airport,	Implementation of Certification of Aerodromes used for international operations	23/11/2006		F, H	Need to establish an appropriate regulatory framework. Need to establish criteria for the certification of aerodromes. Need to develop an Aerodrome Manual for each international aerodrome and insure it includes a safety management system prior to granting the aerodrome certificate	DGCA	2010	U

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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 14 Vol. 1.5.1, 1.5.2, 1.5.3 & 1.5.4	Emam Khomaini, Mehrabad, Esfhan, Shahid Hashmi Nejad, Shiraz, Tabriz and Zahedan Intl. Airports	Implementation of Aerodrome Operations Safety Management	23/11/2006		F, H	Need to establish a safety programme in order to achieve an acceptable level of safety in Aerodrome Operations	DGCA	2010	U

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

Deficiencies in the AOP 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 14 Vol. 1.4.1, 1.4.3, 1.4.4	Baghdad & Basrah Intl. Airport,	Implementation of Certification of Aerodromes used for international operations	23/11/2006		F, H	Need to establish an appropriate regulatory framework. Need to establish criteria for the certification of aerodromes. Need to develop an Aerodrome Manual for each international aerodrome and insure it includes a safety management system prior to granting the aerodrome certificate	ICAA	2010	U
2	Annex 14 Vol. 1.5.1, 1.5.2, 1.5.3 & 1.5.4	Baghdad & Basrah Intl. Airports	Implementation of Aerodrome Operations Safety Management Implementation of Certification of Aerodromes used for international operations	23/11/2006		F, H	Need to establish a safety programme in order to achieve an acceptable level of safety in Aerodrome Operations	ICAA	2010	U

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

Deficiencies in the AOP 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 14 Vol. IFASID Table AOP-1MID/3 Rec. 1/3	Ovda Int. Airport	No approach lights on RWY 02R/20L.	01/07/2000	Usually RWY 02L/20/20R in use (with non-standard PP. lights-SALS and PAPI) – available with VOR App.	F H	App. Lighting to be provided as soon as possible	IDF	Dec. 2007	U
2	Annex 14 Vol. IFASID Table AOP-1MID/3 Rec. 1/3	Ovda Int. Airport	Threshold markings/lighting do not conform to ICAO SARPs.	01/07/2000		H	To be rectified	EDF	Dec. 2007	A
3	Annex 14 Vol. IFASID Table AOP-1MID/3 Rec. 1/3	Ovda Int. Airport	Non-Standard taxiways lighting	01/01/2002		H	Lightings are to be rectifies	IDF	Dec. 2007	U
4	Annex 14 Vol. IFASID Table AOP-1MID/3 Rec. 1/3	Ovda Int. Airport	No lighted sign with RWY designators	01/01/2002		H	Sign to be provided	IDF	Dec. 2007	U

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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**
5	Annex 14 Vol. IFASID Table AOP-1MID/3 Rec. 1/3	Ovda Int. Airport	Limited parking space	01/01/2002	One wide-body plus 3 smaller aircraft Note: Recommended for operations with minimanot less than alternate minima	H S O	Reconsider Apron planning	IDF	Dec. 2007	A
6	Annex 14 Vol. IFASID Table AOP-1MID/3 Rec. 1/3	Elat Int. Airport	No approach lighting	01/01/2003	PAPI (RWY 03) and APAPI (RWY 21)	F		EDF	Dec. 2007	U
7	Annex 14 Vol. IFASID Table AOP-1MID/3 Rec. 1/3	Elat Int. Airport	Aprons – limited space that is too close to runway	01/01/2003		S O		EDF	Dec. 2007	U
8	Annex 14 Vol. IFASID Table AOP-1MID/3 Rec.1/3ASIA/P AC/3, Rec. 4/10	Tel Aviv/Ben Gurion Int. Airport	No taxiways to RWYs 26 and 21, and inbound from 08 and 03	01/01/2003	For RWYs 26 and 21, taxing is on active RWYS	S O		EDF	Dec. 2007	U
9	Annex 14 Vol. IFASID Table AOP-1MID/3 Rec. 1/3	Elat Int. Airport	No taxiway	01/01/2003		F		EDF	Dec. 2007	A
10	Annex 14 Vol. IFASID Table AOP-1MID/3 Rec.1/3ASIA/P AC/3, Rec. 4/10	Tel Aviv/Ben Gurion Int. Airport	No high speed turn off end of RWYs: 21/03 and RWY 26	01/01/2003		S O		EDF	Dec. 2007	A

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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
11	Annex 14 Vol. IFASID Table AOP-1MID/3 Rec. 1/3	Elat Int. Airport	Localizer (LOC) App. and DME plus PAPIS	01/01/2003	VOR/DME (LOT) available. Unstable LOC App due to ground movement interference (Notamed)Note:Not recommended for use by big jets (wide-body/4 engines)	H O		EDF	Dec. 2007	A
12	Annex 14 Vol. IFASID Table AOP-1MID/3 Rec. 1/3	Elat Int. Airport	Single runway used as taxiway, two turn-offs at south end (other turn-off is restricted), Runway width is 30 meters A/P defined as non instrument RWY-CVFRRWY has limited performance due to low PCN	01/01/2003	Loop available at end of RWY 03Limited to A/C up to 757	F S		EDF	Dec. 2007	A
13	Annex 14 Vol. IFASID Table AOP-1MID/3 Rec.1/3ASIA/P AC/3, Rec. 4/10	Tel Aviv/Ben Gurion Int. Airport	Using visuals to runway 30 for arrivals and for departures	01/02/2004		S H O	ATC insist on maintaining 4000ft until Past abeam runway threshold then cleared visual for runway. Performance requires stay inside 3.8 DME BGN for safety reasons	EDF	Dec. 2007	U
14	Annex 14 Vol. IFASID Table AOP-1MID/3 Rec.1/3ASIA/P AC/3, Rec. 4/10	Tel Aviv/Ben Gurion Int. Airport	Centre light RWY 26 too high from the asphalt may cause damage to tyres	01/09/2004		S O	Resurfacing RWY 26 will commence October 2004. Runway will be closed for 5 months	EDF	Dec. 2007	U

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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
15	Annex 14 Vol. IFASID Table AOP-1MID/3 Rec.1/3ASIA/P AC/3, Rec. 4/10	Tel Aviv/Ben Gurion Int. Airport	Parking position marking very poor, sometimes even confusing due to changes	01/09/2004		F	This will not improve until new apron is opened	EDF	Dec. 2007	A
16	Annex 14 Vol. IFASID Table AOP-1MID/3 Rec.1/3ASIA/P AC/3, Rec. 4/10	Tel Aviv/Ben Gurion Int. Airport	Runway 26 Poor surface condition	01/09/2005	Requires resurfacing immediately	S O		EDF	Dec. 2007	U
17	Annex 14 Vol. IFASID Table AOP-1MID/3 Rec.1/3ASIA/P AC/3, Rec. 4/10	Tel Aviv/Ben Gurion Int. Airport	Junction of taxiways "M", "K", "F" is a hot spot	01/09/2005	Out bound traffic on "M" may find traffic vacating Runway 12 on "F" turning to "K" as opposite direction.	S O		EDF	Dec. 2007	U
18	Annex 14 Vol. IFASID Table AOP-1	Tel Aviv/Ben Gurion Int. Airport	Bird strike problem exist at all times of the year.	01/09/2005		S O		EDF	Dec. 2007	A
19	Annex 14 Vol. IFASID Table AOP-1	Tel Aviv/Ben Gurion, Int. Airport	New terminal apron and taxiway	01/09/2005		S O	Pilots should exercise extreme caution taxing inbound and on the new apron.	EDF	Dec. 2007	A
20	Annex 14 Vol. IFASID Table AOP-1	Tel Aviv/Ben Gurion Int. Airport	Rapid population has increased around the rynways and taxiways	01/09/2005		S O		EDF	Dec. 2007	A

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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
21	Annex 14 Vol. IFASID Table AOP-1MID/3 Rec.1/3ASIA/P AC/3, Rec. 4/10	Tel Aviv/Ben Gurion Int. Airport	Lack of starting position causing pushback delays	01/09/2005	More starting positions required	S O		EDF	Dec. 2007	A
22	Annex 14 Vol. 1.4.1, 1.4.3	Tel Aviv/Ben Gurion, Tel Avive/SDE DOV, Eilat, Ovda, Haifa Intl. Airports	Implementation of Certification of Aerodromes used for international operations	23/11/2006		F, H, O	Need to establish an appropriate regulatory framework. Need to establish criteria for the certification of aerodromes. Need to develop an Aerodrome Manual for each international aerodrome and insure it includes a safety management system prior to granting the aerodrome certificate	EDF	2008	U
23	Annex 14 Vol.1.5.1, 1.5.2, 1.5.3 & 1.5.4	Tel Aviv/Ben Gurion, Tel Avive/SDE DOV, Eilat, Ovda, Haifa Intl. Airport,	Implementation of Aerodrome Operations Safety Management	23/11/2006		F, H, O	Need to establish a safety programme in order to achieve an acceptable level of safety in Aerodrome Operations	EDF	2010	U

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

Deficiencies in the AOP 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 14 Vol. 1.4.1, 1.4.4	Amman/Queen Alia, Amman/ Marka, Aqaba, Jerusalam Intl. Airport,	Implementation of Certification of Aerodromes used for international operations	23/11/2006		F, H	Need to develop an Aerodrome Manual for each international aerodrome and insure it includes a safety management system prior to granting the aerodrome certificate	CAA	Jan. 2008	U
2	Annex 14 Vol. 1.5.1, 1.5.2, 1.5.3 & 1.5.4	Amman/Queen Alia, Amman/ Marka, Aqaba, Jerusalam Intl. Airports	Implementation of Aerodrome Operations Safety Management	23/11/2006		F, H	Need to establish a safety programme in order to achieve an acceptable level of safety in Aerodrome Operations	CAA	Jan. 2008	U

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

Deficiencies in the AOP 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 14 Vol. 1.4.1, 1.4.3, 1.4.4	Kuwait Intl. Airport	Implementation of Certification of Aerodromes used for international operations	23/11/2006		H	Need to establish an appropriate regulatory framework. Need to establish criteria for the certification of aerodromes. Need to develop an Aerodrome Manual for the international aerodrome and insure it includes a safety management system prior to granting the aerodrome certificate	DGCA	Jan. 2008	U
2	Annex 14 Vol. 1.5.1, 1.5.2, 1.5.3 & 1.5.4	Kuwait Intl. Airport	Implementation of Aerodrome Operations Safety Management implementation of Certification of Aerodromes used for international operations Implementation of Aerodrome Operations Safety Management	23/11/2006		H	Need to establish a safety programme in order to achieve an acceptable level of safety in Aerodrome Operations	DGCA	Jan. 2008	U

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

Deficiencies in the AOP 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 14 Vol. 1.4.1, 1.4.4	Beirut Intl. Airport	Implementation of Certification of Aerodromes used for international operations	23/11/2006		F, H	Need to develop an Aerodrome Manual for each international aerodrome and insure it includes a safety management system prior to granting the aerodrome certificate	LCAA	2010	U
2	Annex 14 Vol. 1.5.1, 1.5.2, 1.5.3 & 1.5.4	Beirut Intl. Airport	Implementation of Aerodrome Operations Safety Management	23/11/2006		F, H	Need to establish a safety programme in order to achieve an acceptable level of safety in Aerodrome Operations	LCAA	2010	U

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

Deficiencies in the AOP 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 14 Vol. 1.4.1, 1.4.4	Muscat/Seeb, Salalah Intl. Airports	Implementation of Certification of Aerodromes used for international operations	23/11/2006		H, O	Need to develop an Aerodrome Manual for each international aerodrome and insure it includes a safety management system prior to granting the aerodrome certificate	DGCAM	2010	U
2	Annex 14 Vol. 1.5.1, 1.5.2, 1.5.3 & 1.5.4	Muscat/Seeb, Salalah Intl. Airports	Implementation of Aerodrome Operations Safety Management	23/11/2006		H, O	Need to establish a safety programme in order to achieve an acceptable level of safety in Aerodrome Operations	DGCAM	2010	U

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

Deficiencies in the AOP 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 14 Vol. 1.4.1, 1.4.3, 1.4.4	Doha Intl. Airport	Implementation of Certification of Aerodromes used for international operations	23/11/2006		H	Need to establish an appropriate regulatory framework. Need to establish criteria for the certification of aerodromes. Need to develop an Aerodrome Manual for each international aerodrome and insure it includes a safety management system prior to granting the aerodrome certificate	CAA	2010	U
2	Annex 14 Vol. 1.5.1, 1.5.2, 1.5.3 & 1.5.4	Doha Intl. Airport	Implementation of Aerodrome Operations Safety Management	23/11/2006		H	Need to establish a safety programme in order to achieve an acceptable level of safety in Aerodrome Operations	CAA	2010	U

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

Deficiencies in the AOP 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 14 Vol. 1.5.1, 1.5.2, 1.5.3 & 1.5.4	Riyadh/King khalid, Geddah/King Abdulaziz, Madinah/Prince Mohammad Bin Addulaziz Intl. Airports	Implementation of Aerodrome Operations Safety Management	23/11/2006		H	Need to establish a safety programme in order to achieve an acceptable level of safety in Aerodrome Operations	GACA	Jan. 2008	U

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

Deficiencies in the AOP 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 14 Vol. IFASID Table AOP-1MID/3 Rec. 1/3	Damascus int'l Airport	Difficulty parking B747-400 and B777 at Stands A10 and A11	01/09/2002	Syrian AIP Chart dated 15 May 2004 _ Ground surface Movement/Stands is not clear, while no explanatory table was attachedState (ref. Fax dated 2 Mar. 05) advised that Difficulty parking B747-400 and B777 at stands A10 & A11 was solved	H S		CAA	Dec. 2007	A
2	Annex 14 Vol. IFASID Table AOP-1MID/3 Rec. 1/3	Damascus int'l Airport	Apron lighting inadequate	01/09/2003		F H	Apron lighting is to be improved	CAA	Dec. 2007	U
3	Annex 14 Vol. IFASID Table AOP-1MID/3 Rec. 1/3	Damascus int'l Airport	Runway surface rough and damaged. Runway markings unsatisfactory	01/09/2003		F H	RWY Surface to be repaired and refurbished, Markings are to be improved	CAA	Dec. 2007	A
4	Annex 14 Vol. IFASID Table AOP-1MID/3 Rec. 1/3	Damascus int'l Airport	DAM/DVOR 116 MHZ Out of Service	01/06/2004		F	The VOR/DME to be replaced	CAA	Dec. 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
5	Annex 14 Vol. 1.4.1, 1.4.4	Damascus, Aleppo, Bassel Al-Assad/Latakia Intl. Airports	Implementation of Certification of Aerodromes used for international operations	23/11/2006		F, H	Need to develop an Aerodrome Manual for each international aerodrome and insure it includes a safety management system prior to granting the aerodrome certificate	CAA	2010	U
6	Annex 14 Vol. 1.5.1, 1.5.2, 1.5.3 & 1.5.4	Damascus, Aleppo, Bassel Al-Assad/Latakia Intl. Airports	Implementation of Aerodrome Operations Safety Management	23/11/2006		F, H	Need to establish a safety programme in order to achieve an acceptable level of safety in Aerodrome Operations	CAA	2010	U

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Deficiencies in the AOP 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 14 Vol. 1.4.1, 1.4.3, 1.4.4	Sana'a, Aden, Hodeibah, Taiz/Ganad Intl. Airports	Implementation of Certification of Aerodromes used for international operations	23/11/2006		F, H	Need to establish an appropriate regulatory framework. Need to establish criteria for the certification of aerodromes. Need to develop an Aerodrome Manual for each international aerodrome and insure it includes a safety management system prior to granting the aerodrome certificate	GCAA	2010	U
2	Annex 14 Vol. 1.5.1, 1.5.2, 1.5.3 & 1.5.4	Sana'a, Aden, Hodeibah, Taiz/Ganad Intl. Airports	Implementation of Aerodrome Operations Safety Management	23/11/2006		F, H	Need to establish a safety programme in order to achieve an acceptable level of safety in Aerodrome Operations	DGCA	2010	U

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

MIDANPIRG/10
Appendix 6B to the Report on Agenda Item 6

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	ICAO to follow up with State	F H O	Need for implementation of AIRAC requirements	Afghanistan	Dec, 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	Afghanistan	Dec, 2007	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	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	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	A
6	ANNEX 15: Para 4.1.1		Newly Restructured AIP tested	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	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 3.7.1		Implementation of WGS-84	Dec, 1997		F H O	Need to implement WGS-84	Afghanistan	Dec, 2007	U
8	ANNEX 15: Para 4.2.9 & 4.3.7		Lack of regular and effective updating of the AIP	Jan, 2003	ICAO to follow up with State	F H O	Need to update the AIP on a regular basis	Afghanistan	Dec, 2007	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	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	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	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	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

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

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, 2007	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	ICAO to follow up with State	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, 2007	A
4	ANNEX 15: Para. 3.2		Implementation of a Quality System	Jan, 2003	ICAO to follow up with State	F H	Need to introduce a properly organized quality system in conformity with ISO 9000 series of quality assurance standards.	Iran	Dec, 2007	U

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Deficiencies in the AIS/MAP Field

IRAQ

Item No	Identification		Deficiencies				Corrective Action			
	Requirement	Facilities/ Services	Description	Date first reported	Remarks/ Rationale for non-elimination		Description	Executing body	Date of completion	Priority for action
1	ANNEX 15: Para 6.		Lack of implementation of AIRAC System	May, 1995	ICAO to follow up with State	F H O	Need to fully comply with the AIRAC procedure	Iraq	Dec, 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	Iraq	Dec, 2007	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	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	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	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	U
7	ANNEX 15: Para 4.2.9 & 4.3.7		Lack of regular and effective updating of the AIP	Jan, 2003	ICAO to follow up with State	F H O	Need to update the AIP on a regular basis	Iraq	Dec, 2007	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
8	ANNEX 15: Para. 3.2		Implementation of a Quality System	Jan, 2003		F H O	Need to introduce a properly organized quality system in conformity with ISO 9000 series of quality assurance standards.	Iraq	Dec, 2007	U
9	ANNEX 4: Para. 11.2		Non-production of Instrument Approach Chart-ICAO	Jan, 2003		F H O	Need to produce Instrument Approach Chart-ICAO for all Int'l Aerodromes	Iraq	Dec, 2007	A
10	ANNEX 15: Para. 5.2.8.3		Non-production of the monthly printed plain language summary of NOTAM	Jan, 2003		H O	Need to produce the monthly printed plain language summary of NOTAM	Iraq	Dec, 2007	A
11	ANNEX 15: Para. 8.1		Non provision of pre-flight information service at international airports	Mar, 2004		F H O	Need to provide a pre-flight information service at all aerodromes used for international air operations.	Iraq	Dec, 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

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	ICAO to follow up with State	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	U
2	ANNEX 15: Para. 6		Lack of implementation of AIRAC System	Mar, 2004	ICAO to follow up with State	H O	Need to fully comply with the AIRAC procedure	Jordan	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	Jordan	Jun, 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

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	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	U

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

Deficiencies in the AIS/MAP Field

LEBANON

Item No	Identification		Deficiencies				Corrective Action			
	Requirement	Facilities/ Services	Description	Date first reported	Remarks/ Rationale for non-elimination		Description	Executing body	Date of completion	Priority for action
1	ANNEX 4 Para. 16.2		Non-productionof World Aeronautical Chart – ICAO1:1 000 000	May, 1995		F H S	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	ICAO to follow up with State to determine what action is needed to achieve implementation.	F H	Need to implement geoid undulation referenced to the WGS-84 ellipsoid.	Lebanon	Dec, 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	ICAO to follow up with State	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

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	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	ICAO to follow up with State to determine what action is needed to achieve implementation.	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-productionof World Aeronautical Chart – ICAO1:1 000 000	May, 1995		F H S	Need to produce the assigned sheets of the World Aeronautical Chart – ICAO 1:1 000 000	Saudi Arabia	Dec, 2007	B
2	ANNEX 4: Para. 7.2		Non-productionof the Enroute Chart-ICAO	May, 1995		F O	Need to produce the Enroute Chart-ICAO	Saudi Arabia	Jun, 2007	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	U
4	ANNEX 15: Para. 3.7.2.4		Implementation of geoid undulation referenced to the WGS-84 ellipsoid.	Jan, 2003	ICAO to follow up with State to determine what action is needed to achieve implementation.	H	Need to implement geoid undulation referenced to the WGS-84 ellipsoid.	Saudi Arabia	Mar, 2007	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	A

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

Deficiencies in the AIS/MAP Field

SYRIA

Item No	Identification		Deficiencies				Corrective Action			
	Requirement	Facilities/ Services	Description	Date first reported	Remarks/ Rationale for non-elimination		Description	Executing body	Date of completion	Priority for action
1	ANNEX 15: Para 6.		Lack of implementation of AIRAC System	May, 1995	ICAO to follow up with State	F H	Need to fully comply with the AIRAC procedure	Syria	Jun, 2007	U
2	ANNEX 4: Para. 16.2		Non-productionof World Aeronautical Chart – ICAO1:1 000 000	May, 1995		F H S	Need to produce the assigned sheets of the World Aeronautical Chart – ICAO 1:1 000 000	Syria	Dec, 2007	B
3	ANNEX 4 Para. 16.2		Non-productionof World Aeronautical Chart – ICAO1:1 000 000	May, 1995		F H S	Need to produce the assigned sheets of the World Aeronautical Chart – ICAO 1:1 000 000	Lebanon	Dec, 2007	B
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.	Syria	Jun, 2008	U
5	ANNEX 15: Para. 3.7.2.4		Implementation of geoid undulation referenced to the WGS-84 ellipsoid.	Jan, 2003	ICAO to follow up with States to determine what action is needed to achieve implementation.	F H	Need to implement geoid undulation referenced to the WGS-84 ellipsoid.	Syria	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 15 Para. 3.1.1.2, 3.1.5, 3.1.6 & 4.1		Lack of consistency between the different Sections of the AIP containing the same information.	Jul, 2005		H	Need to review the AIP for consistency	Syria	Dec, 2007	U
7	ANNEX 15: Para 4.2.9 & 4.3.7		Lack of regular and effective updating of the AIP	Jul, 2005	ICAO to follow up with State	F H O	Need to update the AIP on a regular basis	Syria	Dec, 2007	U
8	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
9	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	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	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

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	Jun, 2007	U
2	ANNEX 4: Para. 16.2		Non-productionof World Aeronautical Chart – ICAO1:1 000 000	May, 1995		F H S	Need to produce the assigned sheets of the World Aeronautical Chart – ICAO 1:1 000 000	Yemen	Dec, 2007	B
3	ANNEX 4: Para. 7.2		Non-productionof the Enroute Chart-ICAO	May, 1995		F H	Need to produce the Enroute Chart-ICAO	Yemen	Jun, 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-productionof Instrument Approach Chart-ICAO	Jan, 2003	Yemen has produced the Instrument Approach Chart-ICAO except for TAIZ Intl Airport	O	Need to produce Instrument Approach Chart-ICAO for all Int'l Aerodromes	Yemen	Jun, 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	Jun, 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

MIDANPIRG/10
Appendix 6C to the Report on Agenda Item 6

Deficiencies in the ATM 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	LIM/MID/RAN Concl. 3/7Cooperation between States in SAR		Lack of Search and Rescue Agreements between neighboring States	Nov, 1994	Lack of SAR agreements can be detrimental to safety of persons in distress where searches overlap national boundaries. Draft Model SAR agreements adopted at MIDANPIRG/5. No significant progress achieved- ICAO to assist	S	A. States to commence negotiations with neighbors to establish SAR agreements B. Implement operational SAR agreements C. Implement entry agreements for SAR aircraft of other States	Afghanistan	Dec.2008	A
2	MID ANP Table ATS-1Plan of ATS routes	Afghanistan Uzbekistan	Segment of ATS route A219 not implemented	Dec, 1997	ICAO to follow up with States to determine what action is needed to achieve implementationProbably to extend B466 till TERMEZ in the MID Plan and delete requirement for A219.	O	Segment Kandahar – Termez: Not implemented	Afghanistan Uzbekistan	Dec, 2007	B

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

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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
3	Annex 11 para. 2.26	Afghanistan ICAO	Implementation of ATS Safety Management	Nov, 2006		H	Need to establish a safety programme in order to achieve an acceptable level of safety in the provision of ATS	Afghanistan and ICAO	Dec.2008	A
4	Annex 11 Para. 2.28	Afghanistan ICAO	Development of contingency plans	Nov, 2006		H S	Need to develop and promulgate contingency plans for implementation in the event of disruption of ATS and related supporting services	Afghanistan ICAO	Dec.2008	A

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

Deficiencies in the ATM 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**
1	LIM/MID/RAN Concl. 3/7Cooperation between States in SAR	Bahrain with neighboring States	Lack of Search and Rescue Agreements between neighboring States	Nov, 1994	Lack of SAR agreements can be detrimental to safety of persons in distress where searches overlap national boundaries. Draft Model SAR agreements adopted at MIDANPIRG/5. No significant progress achieved-ICAO to assist	S	A. States to commence negotiations with neighbors to establish SAR agreements B. Implement operational SAR agreements C. Implement entry agreements for SAR aircraft of other States	Bahrain	Jun.2008	A
2	MID ANP Table ATS-1Plan of ATS routes	Bahrain Iran Qatar	Segment MIDSI-PIMAL of ATS route A453 not implemented	Dec, 1997	Initial direct alignment KISH – BAHRAIN was changed to pass via PIMAL. Still not yet implemented-Economic impact-Not affecting safety (Alternative Route R219)	S	States to follow-up	Bahrain Iran ICAO	Dec.2007	B

[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
3	MID ANP Table ATS-1 Plan of ATS routes	Bahrain Qatar Saudi Arabia	ATS route B419 not implemented	Dec, 1997	Not implemented Doha - King Fahd- Economic impact Subject to military restrictionsSaudi Arabia ready to implement	S	States to continue negotiations with one another and military	Bahrain Qatar Saudi Arabia	Jun.2007	B
4	Annex 11 Para. 2.28		Development of contingency plan	Nov, 2006	Under development	O	Need to develop and promulgate contingency plans for implementation in the event of disruption of ATS and related supporting services	Bahrain ICAO	Jun.2007	A

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

Deficiencies in the ATM Field

EGYPT

Item No	Identification		Deficiencies				Corrective Action			
	Requirement	Facilities/ Services	Description	Date first reported	Remarks/ Rationale for non-elimination		Description	Executing body	Date of completion	Priority for action
1	LIM/MID/RAN Concl. 3/7Cooperation between States in SAR	Most of MID States	Lack of Search and Rescue Agreements between neighboring States	Nov, 1994	Lack of SAR agreements can be detrimental to safety of persons in distress where searches overlap national boundaries. Draft Model SAR agreements adopted at MIDANPIRG/5. Egypt issued regulation and started development of SAR agreement with Cyprus.	S	A. States to commence negotiations with neighbors to establish SAR agreements B. Implement operational SAR agreements C. Implement entry agreements for SAR aircraft of other States	Egypt with neighboring States	Dec.2007	A
2	Annex 11 para. 2.26		Implementation of ATS Safety Management	Nov, 2006	Under development	H	Need to establish a safety programme in order to achieve an acceptable level of safety in the provision of ATS	Egypt	Jun.2008	A
3	Annex 11 Para. 2.28		Development of contingency plan	Nov, 2006		H	Need to develop and promulgate contingency plans for implementation in the event of disruption of ATS and related supporting services	Egypt ICAO	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
4	MID ANP Table ATS-1		ATS Route L/UL315 not implemented	Mar, 2007	The segments CAIRO-HURGHADA-GIBAL are not implemented (Alternative A727)	S		Egypt	Dec.2007	B

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

Deficiencies in the ATM 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	LIM/MID/RAN Concl. 3/7Cooperation between States in SAR	Most of MID States	Lack of Search and Rescue Agreements between neighboring States	Nov, 1994	Lack of SAR agreements can be detrimental to safety of persons in distress where searches overlap national boundaries. Draft Model SAR agreements adopted at MIDANPIRG/5. No significant progress achieved-ICAO to assist	S	A. States to commence negotiations with neighbors to establish SAR agreements B. Implement operational SAR agreements C. Implement entry agreements for SAR aircraft of other States	Iran with neighboring States	Dec.2007	A
2	Annex 11 Para. 2.28		Development of contingency plans	Nov, 2006		H O	Need to develop and promulgate contingency plans for implementation in the event of disruption of ATS and related supporting services	Iran ICAO	Jun.2008	A
3	Annex 11 para. 2.26		Implementation of ATS Safety Management	Nov, 2006		H	Need to establish a safety programme in order to achieve an acceptable level of safety in the provision of ATS	Iran	Dec.2008	A

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

Deficiencies in the ATM 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	LIM/MID/RAN Concl. 3/7Cooperation between States in SAR	Iraq with neighboring States	Lack of Search and Rescue Agreements between neighboring States	Nov, 1994	Lack of SAR agreements can be detrimental to safety of persons in distress where searches overlap national boundaries. Draft Model SAR agreements adopted at MIDANPIRG/5. No significant progress achieved-ICAO to assist	S	A. States to commence negotiations with neighbors to establish SAR agreements B. Implement operational SAR agreements C. Implement entry agreements for SAR aircraft of other States	Iraq with neighboring States	Dec.2007	A
2	MID ANP Table ATS-1 Plan of ATS Routes		ATS route G667 not implemented	Sep, 2006	Implementation of G667 segment between Abadan and Kuwait is under negotiation with military side and with Iraq	S		Iraq Iran Kuwait	Jun.2007	B
3	Annex 11 para. 2.26		Implementation of ATS Safety Management	Nov, 2006		H	Need to establish a safety programme in order to achieve an acceptable level of safety in the provision of ATS	Iraq and ICAO	Dec.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
4	Annex 11 Para. 2.28		Development of contingency plan	Nov, 2006		S	Need to develop and promulgate contingency plan for implementation in the event of disruption of ATS and related supporting services	Iraq ICAO	Jun.2008	A

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

Deficiencies in the ATM 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	LIM/MID/RAN Concl. 3/7Cooperation between States in SAR	Israel with neighboring States	Lack of Search and Rescue Agreements between neighboring States	Nov, 1994	Lack of SAR agreements can be detrimental to safety of persons in distress where searches overlap national boundaries. Draft Model SAR agreements adopted at MIDANPIRG/5. No significant progress achieved-ICAO to assist	S	A. States to commence negotiations with neighbors to establish SAR agreements B. Implement operational SAR agreements C. Implement entry agreements for SAR aircraft of other States	Israel with neighboring States	Dec.2007	A
2	MID ANP Table ATS-1Plan of ATS routes	Israel Cyprus	ATS route B406 not implemented	Dec, 1997	No sections implementedImplemented as B17/UB17 Larnaca-MERVA(FIR BDY)	S O	To be followed by both the ICAO EUR and MID Offices	Israel Cyprus ICAO to assist	Dec, 2007	B
3	Annex 11 Para. 2.28		Development of contingency plans	Nov, 2006		H S	Need to develop and promulgate contingency plans for implementation in the event of disruption of ATS and related supporting services	Israel ICAO	Dec.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
4	Annex 11 para. 2.26		Implementation of ATS Safety Management	Nov, 2006		H	Need to establish a safety programme in order to achieve an acceptable level of safety in the provision of ATS	Israel	Dec.2008	A

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

Deficiencies in the ATM 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	MID ANP Table ATS-1Plan of ATS routes	Jordan Syria	ATS route B412 not implemented	Dec, 1997	Most segments not implemented.Jordan ready to implement.- Only segment RBG - King Abdulaziz implemented	S	States to co-ordinate to finalize implementation-Realignment would be considered	Jordan Syria ICAO to assist	Dec, 2007	B
2	MID ANP Table ATS-1Plan of ATS routes	Jordan Syria	ATS route G662 not implemented	Dec, 1997	Not implemented Damascus to Guriat	S	States to continue coordination to achieve implementation	Jordan Syria	Dec, 2007	B
3	Annex 11 Para. 2.28		Development of contingency plan	Nov, 2006		H S	Need to develop and promulgate contingency plan for implementation in the event of disruption of ATS and related supporting services	Jordan ICAO	Jan.2008	A
4	Annex 11 para. 2.26		Implementation of ATS Safety Management	Nov, 2006	Work in progres	F H	Need to establish a safety programme in order to achieve an acceptable level of safety in the provision of ATS	Jordan	Jan.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**
5	MID ANP Table ATS-1		ATS Route UP559 not implemented	Mar, 2007	The segments TURAIF-TONTU-DAMASCUS-DAKWE-KHALDEH-KUKLA-LARNACA are not implemented	S		Jordan-Lebanon and Syria	Dec.2007	B

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

Deficiencies in the ATM 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	LIM/MID/RAN Concl. 3/7Cooperation between States in SAR	Kuwait with neighboring States	Lack of Search and Rescue Agreements between neighboring States	Nov, 1994	Lack of SAR agreements can be detrimental to safety of persons in distress where searches overlap national boundaries. Draft Model SAR agreements adopted at MIDANPIRG/5. No significant progress achieved-ICAO to assist	S	A. States to commence negotiations with neighbors to establish SAR agreements B. Implement operational SAR agreements C. Implement entry agreements for SAR aircraft of other States	Kuwait with neighboring States	Dec.2007	A
2	Annex 11 para. 2.26		Implementation of ATS Safety Management	Nov, 2006	Implementation of SMS is expected to start in April 2007	H	Need to establish a safety programme in order to achieve an acceptable level of safety in the provision of ATS	Kuwait	Nov.2008	A
3	Annex 11 Para. 2.28		Development of contingency plan	Nov, 2006	Continegency Plan was signed with Bahrain and work is progressing for the coordination with other neighboring States	H S	Need to develop and promulgate contingency plan for implementation in the event of disruption of ATS and related supporting services	Kuwait ICAO	Jul.2007	A

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

Deficiencies in the ATM 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	LIM/MID/RAN Concl. 3/7Cooperation between States in SAR	Lebanon with neighboring States	Lack of Search and Rescue Agreements between neighboring States	Nov, 1994	Lack of SAR agreements can be detrimental to safety of persons in distress where searches overlap national boundaries. Draft Model SAR agreements adopted at MIDANPIRG/5. No significant progress achieved-ICAO to assist	S	A. States to commence negotiations with neighbors to establish SAR agreements B. Implement operational SAR agreements C. Implement entry agreements for SAR aircraft of other States	Lebanon with neighboring States	Dec.2007	A
2	MID ANP Table ATS-1Plan of ATS routes	Lebanon Syria	ATS route G202 not implemented	Dec, 1997	Not implemented DAKWE - Damascus Economic impact-alternative routes available but longer-Not affecting safety	S	ICAO to follow-up	Lebanon Syria	Dec, 2007	B
3	Annex 11 Para. 2.28		Development of contingency plan	Nov, 2006		H O	Need to develop and promulgate contingency plan for implementation in the event of disruption of ATS and related supporting services	Lebanon ICAO	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
4	Annex 11 para. 2.26		Implementation of ATS Safety Management	Nov, 2006		H	Need to establish a safety programme in order to achieve an acceptable level of safety in the provision of ATS	Lebanon	Dec.2008	A
5	MID ANP Table ATS-1		ATS Route UP559 not implemented	Mar, 2007	The segments TURAIF-TONTU-DAMASCUS-DAKWE-KHALDEH-KUKLA-LARNACA are not implemented	S		Jordan-Lebanon and Syria	Dec.2007	B

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

Deficiencies in the ATM 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	LIM/MID/RAN Concl. 3/7Cooperation between States in SAR	Oman with neighboring States	Lack of Search and Rescue Agreements between neighboring States	Nov, 1994	Lack of SAR agreements can be detrimental to safety of persons in distress where searches overlap national boundaries. Draft Model SAR agreements adopted at MIDANPIRG/5.	S	A. States to commence negotiations with neighbors to establish SAR agreements B. Implement operational SAR agreements C. Implement entry agreements for SAR aircraft of other States	Oman with neighboring States	Jun.2008	A
2	Annex 11 Para. 2.28		Development of contingency plans	Nov, 2006	Under development	H O	Need to develop and promulgate contingency plans for implementation in the event of disruption of ATS and related supporting services	Oman ICAO	Jun.2007	A

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

Deficiencies in the ATM 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	LIM/MID/RAN Concl. 3/7Cooperation between States in SAR	Qatar and Bahrain with neighboring States	Lack of Search and Rescue Agreements between neighboring States	Nov, 1994	Lack of SAR agreements can be detrimental to safety of persons in distress where searches overlap national boundaries. Draft Model SAR agreements adopted at MIDANPIRG/5. No significant progress achieved- ICAO to assist	S	A. States to commence negotiations with neighbors to establish SAR agreements B. Implement operational SAR agreements C. Implement entry agreements for SAR aircraft of other States	Qatar and Bahrain	Jun.2008	A
2	MID ANP Table ATS-1 Plan of ATS routes	Qatar Saudi Arabia	ATS route A415 not implemented	Dec, 1997	Doha to King Khalid implemented at variance with the Plan . slightly longer-Military restrictions Economic impact- Not affecting safety	S	Saudi Arabia and Qatar to continue negotiations to open this route.	Saudi Arabia Qatar	Dec, 2007	B

(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
3	MID ANP Table ATS-1Plan of ATS routes	Bahrain Iran Qatar	ATS route A453 not implemented	Dec, 1997	Initial direct alignment KISH – BAHRAIN was changed to pass via PIMAL. Still not yet implemented- Economic impact- Not affecting safety	S	States to follow-up	Bahrain Iran Qatar	Dec, 2007	B
4	MID ANP Table ATS-1Plan of ATS routes	Bahrain Qatar Saudi Arabia	ATS route B419 not implemented	Dec, 1997	Not implemented Doha - King Fahd- Economic impact Subject to military restrictions Saudi Arabia ready to implement	S	States to continue negotiations with one another and military	Bahrain Qatar Saudi Arabia	Dec, 2007	B
5	Annex 11 para. 2.26		Implementation of ATS Safety Management	Nov, 2006		H	Need to establish a safety programme in order to achieve an acceptable level of safety in the provision of ATS	Qatar	Jun.2008	A
6	Annex 11 Para. 2.28		Development of contingency plan	Nov, 2006		S	Need to develop and promulgate contingency plans for implementation in the event of disruption of ATS and related supporting services	Qatar Bahrain ICAO	Jun.2008	A

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

Deficiencies in the ATM 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	LIM/MID/RAN Concl. 3/7Cooperation between States in SAR	Saudi Arabia with neighboring States	Lack of Search and Rescue Agreements between neighboring States	Nov, 1994	Lack of SAR agreements can be detrimental to safety of persons in distress where searches overlap national boundaries. Draft Model SAR agreements adopted at MIDANPIRG/5. No significant progress achieved- ICAO to assist	S	A. States to commence negotiations with neighbors to establish SAR agreements B. Implement operational SAR agreements C. Implement entry agreements for SAR aircraft of other States	Saudi Arabia with neighboring States	Jun.2008	A
2	MID ANP Table ATS-1Plan of ATS routes	Qatar Saudi Arabia	ATS route A415 not implemented	Dec, 1997	Doha to King Khalid implemented at variance with the Plan . slightly longer-Military restrictions Economic impact- Not affecting safety	S	Saudi Arabia and Qatar to continue negotiations to open this route.	Saudi Arabia Qatar	Dec, 2008	B
3	Annex 11 para. 2.26		Implementation of ATS Safety Management	Nov, 2006	QMS Department established	H	Need to establish a safety programme in order to achieve an acceptable level of safety in the provision of ATS	Saudi Arabia	Jun.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**
4	Annex 11 Para. 2.28		Development of contingency plan	Nov, 2006	A draft contingency plan not fully compliant with the agreed template has been developed.	H O	Need to develop and promulgate contingency plan for implementation in the event of disruption of ATS and related supporting services	Saudi Arabia ICAO	Dec.2007	A
5	MID ANP Table ATS-1		Segment METSA-Al SHIGAR of ATS Route B/UB 411 not implemented	Mar, 2007	Jordan already approved the segment within Amman FIR	S		Saudi Arabia	Dec.2007	B

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

Deficiencies in the ATM 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	LIM/MID/RAN Concl. 3/7Cooperation between States in SAR	Syria with neighboring States	Lack of Search and Rescue Agreements between neighboring States	Nov, 1994	Lack of SAR agreements can be detrimental to safety of persons in distress where searches overlap national boundaries. Draft Model SAR agreements adopted at MIDANPIRG/5. Agreement with Turkey and Cyprus in final stage of preparation.	S	A. States to commence negotiations with neighbors to establish SAR agreements B. Implement operational SAR agreements C. Implement entry agreements for SAR aircraft of other States	Syria with neighboring States	Jan.2008	A
2	MID ANP Table ATS-1Plan of ATS routes	Lebanon Syria	ATS route G202 not implemented	Dec, 1997	Not implemented DAKWE - Damascus Economic impact- alternative routes available but longer- Not affecting safety	S	ICAO to follow-up	Lebanon Syria	Dec, 2007	B

[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**
3	MID ANP Table ATS-1Plan of ATS routes	Lebanon Syria	ATS route B410 not implemented	Dec, 1997	UL620 proceeding to BALMA then, R655-ChekkaChekka-Damascus to be implemented-Non – technical nature-Economic impact-Aircraft using longer routes	S	To be discussed in EMAC*** meetings.	Syria ICAO to assist	Dec, 2007	B
4	Annex 11 Para. 2.28		Development of contingency plans	Nov, 2006	Draft available	H O	Need to develop and promulgate contingency plans for implementation in the event of disruption of ATS and related supporting services	Syria ICAO	Jun.2007	A
5	Annex 11 para. 2.26		Implementation of ATS Safety Management	Nov, 2006	Committee established	H	Need to establish a safety programme in order to achieve an acceptable level of safety in the provision of ATS	Syria	Jan.2008	A
6	MID ANP Table ATS-1		ATS Route UP559 not implemented	Mar, 2007	The segments TURAIF-TONTU-DAMASCUS-DAKWE-KHALDEH-KUKLA-LARNACA are not implemented	S		Jordan-Lebanon and Syria	Dec.2007	B

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

Deficiencies in the ATM 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	LIM/MID/RAN Concl. 3/7Cooperation between States in SAR	UAE with neighboring States	Lack of Search and Rescue Agreements between neighboring States	Nov, 1994	Lack of SAR agreements can be detrimental to safety of persons in distress where searches overlap national boundaries. Draft Model SAR agreements adopted at MIDANPIRG/5. The agreement with Bahrain and Oman to be updated and the one with iran has to be developed/coordinated.	S	A. States to commence negotiations with neighbors to establish SAR agreements B. Implement operational SAR agreements C. Implement entry agreements for SAR aircraft of other States	UAE with neighboring States	Dec.2007	A
2	Annex 11 Para. 2.28		Development of contingency plan	Nov, 2006	Budget approved for 2007. Work will start June 2007	O	Need to develop and promulgate contingency plans for implementation in the event of disruption of ATS and related supporting services	UAE ICAO	Jun.2008	A
3	Annex 11 Para. 3.3.4.1		Non-provision of required data to the MID RMA	Nov, 2006		O	Need to provide the MID RMA with required data in order to enable it to discharge its functions and responsibilities	UAE MID RMA ICAO	Jun.2007	A

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

Deficiencies in the ATM 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	LIM/MID/RAN Concl. 3/7Cooperation between States in SAR	Yemen with neighboring States	Lack of Search and Rescue Agreements between neighboring States	Nov, 1994	Lack of SAR agreements can be detrimental to safety of persons in distress where searches overlap national boundaries. Draft Model SAR agreements adopted at MIDANPIRG/5. No significant progress achieved ICAO to assist	S	A. States to commence negotiations with neighbors to establish SAR agreements B. Implement operational SAR agreements C. Implement entry agreements for SAR aircraft of other States	Yemen with neighboring States	Dec.2007	A
2	Annex 11 para. 2.26		Implementation of ATS Safety Management	Nov, 2006		H	Need to establish a safety programme in order to achieve an acceptable level of safety in the provision of ATS	Yemen	Dec.2008	A
3	Annex 11 Para. 2.28		Development of contingency plan	Nov, 2006		H O	Need to develop and promulgate contingency plan for implementation in the event of disruption of ATS and related supporting services	Yemen ICAO	Dec.2008	A

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

MIDANPIRG/10
Appendix 6D to the Report on Agenda Item 6

Deficiencies in the CNS 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	AFTN usage (LIM MID RAN Rec 6/2)	Kabul AFTN Center	Circuit Loading Statistics	May, 1995	Monthly statistics should be sent to MID Office	S	Refer to ICAO fax ref. F.ME 165 reminding States to send data to Regional Office	Afghanistan	Dec, 2007	B
2	AFTN Rationalized Plan (LIM MID RAN Rec 6/6, 6/9 and MIDANPIRG/4 Conclusion 4/19	Afghanistan-Iran-Kabul-Tehran AFTN Circuit	The circuit is not yet implemented	Oct, 1998	VSAT network to be implemented	S	Follow-up the matter with IATA concerning Afghanistan	Afghanistan Iran	Dec, 2007	B
3	AFTN Rationalized Plan (LIM MID RAN Rec 6/6, 6/9 and MIDANPIRG/4 Conclusion 4/19	Afghanistan-Bahrain-Kabul-Bahrain AFTN Circuit	The circuit is not yet implemented	Oct, 1998	Bahrain is ready to implement the circuit	S	Follow-up the matter with IATA concerning Afghanistan	Afghanistan Bahrain	Dec, 2007	B

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

Deficiencies in the CNS 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
1	AFTN Rationalized Plan (LIM MID RAN Rec 6/6, 6/9 and MIDANPIRG/4 Conclusion 4/19)	Afghanistan-Bahrain-Kabul-Bahrain AFTN Circuit	The circuit is not yet implemented	Oct, 1998	Bahrain is ready to implement the circuit	O	Follow-up the matter with IATA concerning Afghanistan	Afghanistan Bahrain	Dec, 2007	B
2	AFTN Rationalized Plan (LIM MID RAN Rec 6/6, 6/9 and MIDANPIRG/4 Conclusion 4/19)	Bahrain – Singapore-Bahrain – Singapore AFTN Circuit	Operating satisfactorily on 200 bauds	Oct, 1999	Bahrain – Singapore Bahrain – Singapore AFTN Circuit	O	Planned to be up-graded to medium speed circuit (9.6 K)	Bahrain Singapore	Jun, 2007	B

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

Deficiencies in the CNS Field

EGYPT

Item No	Identification		Deficiencies				Corrective Action			
	Requirement	**Facilities/ Services**	**Description**	**Date first reported**	**Remarks/ Rationale for non-elimination**		**Description**	**Executing body**	**Date of completion**	**Priority for action**
1	AFTN Main Circuits (LIM MID RAN Rec 10/5)	Egypt – Kenya-Cairo – Nairobi AFTN Circuit	The circuit is implemented on 50 bauds	Oct, 1999	Egypt is ready to up-grade the circuit to 9.6 K	O	Egypt and Kenya agreed to upgrade the circuit to 1200 bps	Egypt – Kenya	Dec, 2007	A
2	AFTN Main Circuits (LIM MID RAN Rec 10/5)	Egypt – Tunisia-Cairo – Tunis AFTN Circuit	The circuit is implemented on 100 bauds	Oct, 1999	Egypt is ready to up-grade the circuit to 9.6 K	O	Planned to be up-graded to 1200 bauds. Upon Tunis readiness	Egypt - Tunisia	Dec, 2007	A
3	VHF Coverage Required in the South West part of the FIR	Egypt	Coverage by HF	Sep, 2003	Egypt to Report	S	Egypt to provide VHF coverage	Egypt	Dec, 2007	B

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

Deficiencies in the CNS 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	AFTN Rationalized Plan (LIM MID RAN Rec 6/6, 6/9 and MIDANPIRG/4 Conclusion 4/19)	Afghanistan-Iran-Kabul-Tehran AFTN Circuit	The circuit is not yet implemented	Oct, 1998	VSAT network to be implemented	S		Afghanistan Iran	Dec, 2007	B
2	AFTN Main Circuits (LIM MID RAN Rec10/5)	Iran – Kuwait-Kuwait – Tehran AFTN Circuit	The circuit is implemented on 100 bauds	Oct, 1999		O	Planned to be upgraded to 9.6K.	Iran Kuwait	Dec, 2007	A
3	Radio Frequencies	Kerman Shah	119.300 MHz	Jul, 2002	Interference with Qatar	O	Co-ordination is undergoing with Iran. No complain from Qatar	Qatar Iran	Dec, 2007	U
4	Radio Frequencies	Abadan Airport Ahwaz	121.900 MHz	Jul, 2002	Interference with Basra (Iraq)	O	Co-ordination with concerned States	Iran Iraq	Dec, 2007	U
5	Radio Frequencies	Tehran ACC	123.900 MHz	Aug, 2002	Interference with India	O	Co-ordination is undergoing between ICAO Cairo and ICAO Bangkok	Bangkok Off. Cairo Office Iran India	Dec, 2007	U

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

Deficiencies in the CNS 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	AFTN usage (LIM MID RAN Rec 6/2)	Baghdad AFTN Center	Circuit Loading Statistics	May, 1995	Monthly statistics should be sent to MID Office	S	Refers to ICAO fax ref. F.ME 165 reminding States to send data to ICAO Office	Iraq	Dec, 2007	B

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

Deficiencies in the CNS 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	AFTN Rationalized Plan (LIM MID RAN Rec 6/6, 6/9 and MIDANPIRG/4 Conclusion 4/19)	Jordan-Lebanon-Amman-Beirut AFTN Circuit	The circuit is not yet implemented	Oct, 1998	Lebanon is ready to implement the circuit	S	Jordan will co-ordinate with Lebanon for up-grading	Lebanon – Jordan	Dec, 2007	A

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

Deficiencies in the CNS 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	AFTN usage (LIM MID RAN Rec 6/2)	Kuwait AFTN Center	Circuit Loading Statistics	May, 1995	Monthly statistics should be sent to MID Office	O	Refer to ICAO fax ref. F.ME 165 reminding States to send data to Regional Office	Kuwait	Jun, 2007	B
2	AFTN Main Circuits (LIM MID RAN Rec10/5)	Lebanon-Kuwait-Beirut – Kuwait AFTN Circuit	The circuit is implemented on 100 bauds	Oct, 1999	The circuit is operating satisfactorily on 100 bauds.	O	Kuwait is ready to upgrade to higher speed according to the readiness of Lebanon	Kuwait Beirut	Dec, 2007	A
3	AFTN Main Circuits (LIM MID RAN Rec10/5)	Iran-Kuwait-Kuwait – Tehran AFTN Circuit	The circuit is implemented on 100 bauds	Oct, 1999	The circuit is operating satisfactorily on 100 bauds	O	Planned to be upgraded to 9.6K	Kuwait Iran	Dec, 2007	A

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

Deficiencies in the CNS 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	AFTN Rationalized Plan (LIM MID RAN Rec 6/6, 6/9 and MIDANPIRG/4 Conclusion 4/19)	Jordan-Lebanon Amman-Beirut AFTN Circuit	The circuit is not yet implemented	Oct, 1998	Lebanon is ready to implement the circuit	S	Another alternative should be proposed in the MID AFTN Plan	Jordan Lebanon	Dec, 2007	A
2	AFTN Main Circuits (LIM MID RAN Rec10/5)	Lebanon – Saudi Arabia Beirut – Jeddah AFTN Circuit	The circuit is implemented on 100 bauds	Oct, 1999	Lebanon is ready to implement the circuit to either 200 Bauds or 9.6 K	O	Planned to be up-graded to 300 bauds	Lebanon Saudi Arabia	Jun, 2007	A
3	AFTN Main Circuits (LIM MID RAN Rec10/5	Lebanon – Kuwait Beirut – Kuwait AFTN Circuit	The circuit is implemented on 100 bauds	Oct, 1999	The circuit is operating satisfactorily on 100 bauds	O	Planned to be up-graded to 300 bauds	Kuwait Lebanon	Jun, 2007	A

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

Deficiencies in the CNS 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	AFTN usage (LIM MID RAN Rec 6/2)	Muscat AFTN Center	Circuit Loading Statistics	May, 1995	Data should be sent to ICAO Office	O	Software not available yet	Oman	Jun, 2007	B

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

Deficiencies in the CNS 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	AFTN usage (LIM MID RAN Rec 6/2)	Doha AFTN Center	Circuit Loading Statistics	May, 1995	Refer to ICAO fax ref. F.ME 165 reminding States to send data to Regional Office	H	Data should be sent to ICAO Office	Qatar	Jun, 2007	B
2	Radio Frequencies	Doha	119.300 MHz	Feb, 2003		O	Coordination with concerned States	Qatar Iran	Jun, 2007	U

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

Deficiencies in the CNS 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	AFTN usage (LIM MID RAN Rec 6/2)	Jeddah AFTN Center	Circuit Loading Statistics	May, 1995	Refer to ICAO fax ref. F.ME 165 reminding States to send data to Regional Office.	O	Data should be sent to ICAO Office	Circuit Loading Statistics information is part of a software modification required in the new switching system	Dec, 2007	B
2	ATS Speech Circuit Plan (LIM MID RAN Conclusion 6/11)	Saudi Arabia – Yemen	The ATS Speech Circuit connecting to Sanna'a centre uses speed dial	Oct, 1998	Sometimes, Communications facilities do not permit communications to be established within 15 seconds	O	Planned to operate with VSAT network	Saudi Arabia Yemen	Dec, 2007	U
3	ATS Speech Circuit Plan (LIM MID RAN Conclusion 6/11)	Saudi Arabia – Sudan	The ATS Speech Circuit connecting the following adjacent centres to Jeddah use speed dial: Asmara Khartoum	Oct, 1999	Jeddah – Khartoum on speed dial	F	Planned to operate with VSAT network.	Saudi Arabia Sudan	Dec, 2007	U
4	AFTN Main Circuits (LIM RAN Rec 10/5)	Lebanon – Saudi Arabia Beirut – Jeddah AFTN Circuit	The circuit is implemented on 100 bauds	Oct, 1999	Circuit to be improved	O	Planned to be up-graded to 9.6K	Lebanon – Saudi Arabia	Dec, 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
5	AFTN Main Circuits (LIM RAN Rec 10/5)	Saudi Arabia – Ethiopia Jeddah – Addis Ababa	The circuit is implemented on 50 bauds	Oct, 1999	The circuit is not working satisfactorily. Saudi Arabia is ready to up-grade the circuit to higher speed	F	Planned to operate with VSAT network	Ethiopia Saudi Arabia	Dec, 2007	A

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

Deficiencies in the CNS 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	AFTN usage (LIM MID RAN Rec 6/2)	Damascus AFTN Center	Circuit Loading Statistics	May, 1995	Monthly statistics should be sent to ICAO Office	H	Planned to implement new AFTN system	Syria	Jun, 2007	B

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

Deficiencies in the CNS 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	Radio Frequencies	UAE ACC	124.850 MHz	Jan, 2002	Atmospheric	O	Report was sent to Nat. Telecom Admin	Follow-up by ICAO and State	Dec, 2007	U
2	Radio Frequencies	UAE ACC	128.250 MHz	Jan, 2002	Atmospheric/ Speech	O	Report was sent to Nat. Telecom Admin	Follow-up by ICAO and State	Dec, 2007	U
3	Radio Frequencies	UAE ACC	133.550 MHz	Feb, 2002	Unknown Interference	O	Report was sent to Nat. Telecom. Admin	Follow-up by ICAO and State	Dec, 2007	U
4	Radio Navigation Aids	Dubai ILS	109.500 MHz	Mar, 2002	Unknown Interference	O	Nat. Telecom. Admin	Follow-up by ICAO and State	Jun, 2007	A
5	Radio Navigation Aids	Dubai ILS	110.900 MHz	Mar, 2002	Unknown Interference	O	Nat. Telecom. Admin.	Follow-up by ICAO and State	Jun, 2007	U
6	Radio Navigation Aids	Dubai ILS	110.100 MHz	Mar, 2002	Unknown Interference	O	Nat. Telecom. Admin	Follow-up by ICAO and State	Jun, 2007	U
7	Radio Frequencies	UAE ACC	119.300 MHz	Mar, 2002	Doha	O	Report was sent to Nat. Telecom Admin	Follow-up by ICAO and State	Dec, 2007	U
8	Radio Frequencies	UAE ACC	129.500 MHz	Mar, 2002	Unknown Interference	O	Report was sent to Nat. Telecom Admin	Follow-up by ICAO and State	Dec, 2007	U
9	Radio Frequencies	AL Ain	129.150 MHz	Jun, 2002	Kish Air Dispatch	O	Nat. Telecom. Admin	Follow-up by ICAO and State	Dec, 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
10	Radio Frequencies	UAE ACC	121.500 MHz	Jul, 2002	Unknown Interference	O	Report was sent to Nat. Telecom. Admin	Follow-up by ICAO and State	Dec, 2007	U

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

Deficiencies in the CNS 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	ATS Speech Circuit Plan (LIM MID RAN Conclusion 6/11)	Yemen – Ethiopia- Eritrea – India – Djibouti – Saudi Arabia – Somalia – Oman	All ATS Speech Circuits connecting Sana'a with the following adjacent centres provided by Yemen use speed dial: Addis-Ababa Asmara Mumbai Djibouti Jeddah Mogadishu Muscat	Oct, 1998	Communications should be established within 15 seconds	O	Yemen will be urged to implement Direct Speech Circuits with adjacent centres VSAT network will operate for some centers	Concerned States and ICAO	Dec 05 for Oman and Saudi Arabia, Dec 06 for the others	U

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

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

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

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

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

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

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

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

Definition:

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

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

ANALYSIS OF MID AIR NAVIGATION DEFICIENCIES

Distribution of Air Navigation Deficiencies/MID States

State	AOP Def.					AIS Def.					ATM Def.					CNS Def.				
		*F	H	S	O		*F	H	S	O		*F	H	S	O		*F	H	S	O
Afghanistan	4	4	4	2	2	12	11	12	1	11	4		2	2	1	3			3	1
Bahrain	2		2			-					4			3	1	1				1
Egypt	13	11	7		1	-					4		2	2		3			1	2
Iran	4	4	3	1	1	4	4	3	1	1	4		2	2	1	1				1
Iraq	2	2	2			11	10	11	10	1	4		1	3		1		1		
Israel	23	7	9	13	15	6		5	1	4	4		2	3	1	-				
Jordan	2	2	2			3	2	3		1	5	1	2	4		1		1		
Kuwait	2		2			2	1	2	1	1	3		2	2		2				2
Lebanon	2	2	2			3	3	3	1		5		2	3	1	3			1	2
Oman	2		2		2	5	3	5		2	2		1	1	1	1				1
Qatar	2		2			4		4		3	6		1	5		1		1		
Saudi Arabia	1		1			5	3	4	1	2	5		2	3	1	5	2			3
Syria	6	5	5	1		9	9	9	2	1	6		2	4	1	1		1		
UAE	-					1				1	3			1	2	2				2
Yemen	2	2	2			7	5	6	1	2	3		2	1	1	1				1
		39	45	17	21		51	67	19	30		1	23	39	11		2	2	7	16
	67					72					62					26				
Total	227																			
	29%					32%					27%					11%				

*Note 1:
Rational for non-elimination:
"F"= Financial   "H"= Human Resources   "S"= State (Military/Political)   "O"= Other unknown causes

Rational for non elimination of Deficiencies

Deficiencies. /Field	Financial Reasons	Human resources Reasons	State Reasons	Other unknown Reason
AOP	39	45	17	21
AIS	51	67	19	30
ATM	1	23	39	11
CNS	2	2	7	16
	93	137	82	78
	390			
**General	24%	35%	21%	20%

**Note 2:
"Human Resources" and "Other unknown causes" are considered as non effective implementation of the 8 critical elements for State's sustainable safety oversight capabilities.

Summary:

a)   **Distribution of MID Air Navigation deficiencies between the different fields is as follow:**
- AIS/MAP: 32%,
- AOP: 29%,
- ATM/SAR: 27%
- CNS: 11%

b)   **Root causes of non elimination of Air Navigation deficiencies in the MID Region:**
- Financial reasons: 24%
- State (Military/Political) reasons: 21%
- Human resources reasons: 35%   are considered non effective implementation of the 8 critical elements for State's sustainable safety oversight capabilities

- Other unknown reasons: 20%

c)   **55% of non eliminated deficiencies are considered due to lack of sustainable safety oversight systems in majority of MID States.**

CRITICAL ELEMENTS OF STATE'S

SAFETY OVERSIGHT SYSTEM

(Ref. Doc 9734-The Establishment and Management of a State's Safety Oversight System Part A

Chapter 3: Critical Elements of a Safety Oversight System)

GENERAL CONSIDERATIONS

1   ICAO Contracting States, in their effort to establish and implement an effective safety oversight system, need to consider the critical elements for safety oversight (CE). Critical elements are essentially the safety defence tools of a safety oversight system and are required for the effective implementation of safety-related policy and associated procedures. States are expected to implement safety oversight critical elements in a way that assumes the shared responsibility of the State and the aviation community. Critical elements of a safety oversight system encompass the whole spectrum of civil aviation activities, including areas such as aerodromes, air traffic control, communications, personnel licensing, flight operations, airworthiness of aircraft, accident/incident investigation, and transport of dangerous goods by air. The effective implementation of the CE is an indication of a State's capability for safety oversight.

2   ICAO has identified and defined the following critical elements of a State's safety oversight system:

CE-1.   Primary aviation legislation. The provision of a comprehensive and effective aviation law consistent with the environment and complexity of the State's aviation activity and compliant with the requirements contained in the Convention on International Civil Aviation.

CE-2.   Specific operating regulations. The provision of adequate regulations to address, at a minimum, national requirements emanating from the primary aviation legislation and providing for standardized operational procedures, equipment and infrastructures (including safety management and training systems), in conformance with the Standards and Recommended Practices (SARPs) contained in the Annexes to the Convention on International Civil Aviation.

Note.— The term "regulations" is used in a generic sense to include but is not limited to instructions, rules, edicts, directives, sets of laws, requirements, policies, and orders.

CE-3.   State civil aviation system and safety oversight functions. The establishment of a Civil Aviation Authority (CAA) and/or other relevant authorities or government agencies, headed by a Chief Executive Officer, supported by the appropriate and adequate technical and non-technical staff and provided with adequate financial resources. The State authority must have stated safety regulatory functions, objectives and safety policies.

Note.— The term "State civil aviation system" is used in a generic sense to include all authorities with aviation safety oversight responsibility which may be established by the State as separate entities, such as: CAA, Airport Authorities, Air Traffic Service Authorities, Accident Investigation Authority, and Meteorological Authority.

CE-4. ***Technical personnel qualification and training.*** The establishment of minimum knowledge and experience requirements for the technical personnel performing safety oversight functions and the provision of appropriate training to maintain and enhance their competence at the desired level. The training should include initial and recurrent (periodic) training.

CE-5. ***Technical guidance, tools and the provision of safety-critical information.*** The provision of technical guidance (including processes and procedures), tools (including facilities and equipment) and safety-critical information, as applicable, to the technical personnel to enable them to perform their safety oversight functions in accordance with established requirements and in a standardized manner. In addition, this includes the provision of technical guidance by the oversight authority to the aviation industry on the implementation of applicable regulations and instructions.

CE-6. ***Licensing, certification, authorization and approval obligations***. The implemen-tation of processes and procedures to ensure that personnel and organizations performing an aviation activity meet the established requirements before they are allowed to exercise the privileges of a licence, certificate, authorization and/or approval to conduct the relevant aviation activity.

CE-7. ***Surveillance obligations***. The implementation of processes, such as inspections and audits, to proactively ensure that aviation licence, certificate, authorization and/or approval holders continue to meet the established requirements and function at the level of competency and safety required by the State to undertake an aviation-related activity for which they have been licensed, certified, authorized and/or approved to perform. This includes the surveillance of designated personnel who perform safety oversight functions on behalf of the CAA.

CE-8. ***Resolution of safety concerns***. The implementation of processes and procedures to resolve identified deficiencies impacting aviation safety, which may have been residing in the aviation system and have been detected by the regulatory authority or other appropriate bodies.

Note.— This would include the ability to analyse safety deficiencies, forward recommendations, support the resolution of identified deficiencies, as well as take enforcement action when appropriate.

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AGENDA ITEM 7:   FUTURE WORK PROGRAMME

REPORT ON AGENDA ITEM 7:   FUTURE WORK PROGRAMME

ICAO MID Office Tentative Schedule of Meetings, Seminars and Workshops from January to December 2007

7.1   The meeting was presented with the tentative schedule of meetings, seminars and workshops from January to December 2007 as at **Appendix 7A** to the Report on Agenda Item 7. The meeting was also informed that this schedule should be used for planning purposes only. Meetings, seminars and workshops are confirmed only when an invitation letter is sent by the ICAO MID Regional Office. The schedule is updated as appropriate and posted on the MID Regional Office website (http://www.icao.int/mid).

7.2   ICAO MID Regional Office meetings are normally convened at Cairo, the location of the Regional Office. However, States are encouraged to host meeting activities in accordance with MIDANPIRG Procedural Handbook, Part II, Working Arrangements, paragraph 4.2.

MIDANPIRG/11 Date, Duration & Venue

7.3   The meeting, in accordance with MIDANPIRG Procedural Handbook, Part III, Rules of Procedures for the Conduct of Meetings of MIDANPIRG, paragraph 3.1, agreed that MIDANPIRG/11 meeting, be tentatively scheduled for sometime between October 2008 and February 2009 (inclusive), after taking into consideration the MID Regional Office work programme and coordination between the Secretariat and the Chairperson of the MIDANPIRG. The duration would be initially five (05) working days unless otherwise advised.

7.4   The MIDANPIRG/11 venue would be Cairo. However, the MID Region States are encouraged to host the MIDANPIRG meetings as done by Egypt for the MIDANPIRG meetings 1, 2, 4, 7, 8 and 9, Bahrain MIDANPIRG/3 meeting (23-26 June 1996), Jordan MIDANPIRG/5 meeting (23-27 December 1998), and Qatar MIDANPIRG/10 meeting (15-19 April 2007).

Follow-up Action Plan

7.5   In accordance with the ICAO Business plan and the requirements for performance monitoring, the meeting developed a follow-up action plan as at **Appendix 7B** to the Report on Agenda Item 7.

MIDANPIRG/10
Appendix 7A to the Report on Agenda Item 7

ICAO MID OFFICE

TENTATIVE SCHEDULE OF MEETINGS, SEMINARS AND WORKSHOPS

"January – December 2007"

Revision 01- dated 15/04/2007

DATE	MEETING/SEMINAR/WORKSHOP	SITE	REMARKS
February			
~~26 – 28~~	~~CNS/ATM/IC SG/3~~	~~Cairo~~	*Convened.*
March			
~~01 – 02~~	~~ANS WG/2~~	~~Cairo~~	*Convened.*
~~21 – 22~~	~~MID RMA Board/4~~	~~Cairo~~	*Convened.*
April			
~~15 – 19~~	~~MIDANPIRG/10~~	~~Doha~~	~~Hosted by Qatar~~. *Convened.*
May			
21 - 25	"Implementation of SMS in States" Training Course	Cairo	Organized by HQ. Hosted by Egypt.
29 - 30	SSR Study Group Meeting	Cairo	Postponed
June			
11 - 13	GNSS TF/6	Cairo	
July			
02 - 04	e-TOD WG/1	Amman	
September			
03 - 05	Language Proficiency Seminar	Cairo	(SIP).
17 - 19	CNS SG/1	Cairo	
October			
23 - 25	AOP SG/6	Cairo	
28 - 30	Traffic Forecasting Workshop	Bahrain	Hosted by Bahrain.
November			
04-05	MID RMA Board/5	Jeddah	Hosted by Saudi Arabia
06 - 07	Communication Infrastructure Seminar	TBD	
12 - 14	PBN Seminar	Cairo	(SIP).

DATE	*MEETING/SEMINAR/WORKSHOP*	*SITE*	*REMARKS*
15 - 16	RVSM/PBN TF/1	Cairo	Back to back with the PBN Seminar.
December			
10 - 13	ATM/SAR/AIS SG/9	TBD	

Notes:

1. *Above meetings are subject to confirmation by ICAO MID Regional Office invitation letters.*

2. *States interested in hosting any of the above are requested to coordinate with the ICAO MID Regional Office, at least three (03) months in advance of the mentioned dates.*

3. *SG = Sub-Group, TBD = To Be Determined, TF = Task Force, WG = Working Group.*

4. *The above table will be subject to update whenever required.*

MIDANPIRG/10
Appendix 7B to the Report on Agenda Item 7

MIDANPIRG/10
FOLLOW-UP TO MIDANPIRG/10 CONCLUSION /DECISIONS - 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
Dec 10/1 D	MIDANPIRG Steering Group (MSG)	That, a) the MIDANPIRG Steering Group (MSG) is established with Terms of Reference as at **Appendix 4A** to the Report on Agenda Item 4; and b) the MSG supersedes and replaces MIDANPIRG Member States (MMS).	Conduct MSG meetings Follow up work programme in accordance with the approved TORs	ICAO	- MSG Meeting reports	Dec. 2008
Dec 10/2 D	Revised MIDANPIRG Organizational Structure	That, with a view to increase MIDANPIRG efficiency, MIDANPIRG Organizational Structure is updated as **Appendix 4B** to the Report on Agenda Item 4.	Update the Procedural Hand Book and conduct the meetings of MIDANPIRG subsidiary bodies in accordance with the revised Structure	ICAO	- Updated Procedural Handbook - Meetings reports	Apr. 2007 Dec. 2008
Conc 10/3 D	Presentation of Working Papers (WPs) to MIDANPIRG	That, to the extent possible: a) only those subjects which are mature enough (discussed within the appropriate MIDANPIRG subsidiary body) be presented to MIDANPIRG; and b) States and International Organizations refrain from presenting WPs of technical nature directly to MIDANPIRG.	Follow up with States and International Organizations	ICAO States International Organizations	- Subjects of technical nature are presented to the appropriate MIDANPIRG subsidiary bodies	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
Dec 10/4 D	Paperless Meetings	That, with the objective to reduce printing and distribution costs of the MID Regional Office, to the extent possible: 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 b) meeting reports and Amendment Proposals to the Air Navigation Plan of the MID Region be posted on the MID Regional Office website.	Conduct paperless meetings	ICAO	- State Letter - Electronic WPs/IPs, meeting reports and ANP/FASID Amendment Proposals	Jun. 2007 Sep. 2007
Conc 10/5 D	Secondment of National Experts to the MID Regional Office	That, States are encouraged to make available seconded personnel to the MID Regional Office for the purpose of helping in the performance of MIDANPIRG activities/Work Programme.	Follow up with States	States	- Seconded personnel	TBD
Dec 10/6 D	Adoption of MIDANPIRG Procedural Handbook, Third Edition – April 2007	That, The MIDANPIRG Procedural Handbook, Third Edition dated April 2007 is adopted.	Finalize the Procedural Handbook	ICAO	- Third Edition of the Procedural Handbook	Apr. 2007

CONC/DEC NO. --- STRATEGIC OBJECTIVE	TITLE OF CONCLUSION/ DECISION	TEXT OF CONCLUSION/DECISION	FOLLOW-UP ACTION	TO BE INITIATED BY	DELIVERABLE	TARGET DATE
Conc 10/7 D	MID Basic ANP and FASID (Doc 9708)	That, with a view to have the final version of the MID BASIC ANP and FASID (Doc 9708) published prior to 31 December 2007: 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 b) ICAO allocate sufficient resources and higher priority for the publication of Doc 9708 in English and Arabic versions, incorporating all approved Amendments.	Process Amendments Proposals to the MID Basic ANP and FASID Finalize and publish the approved version of Doc 9708	ICAO	- Amendment Proposal issued - Amendment Proposal approved and incorporated in the final version of Doc 9708	Jun. 2007 Dec. 2007
Conc 10/8 D	EGNOS Studies in the MID Region	That, European Space Agency (ESA) and GNSS Supervisory Authority (GSA) define the EGNOS architecture and feasibility of using additional Ranging Integrity Monitoring Stations (RIMS) for achieving APV and to support the regional cost benefits analysis in the MID Region.	Follow-up with ESA and GSA Cost benefit analysis (CBA)	ICAO States	- ESA and GSA inputs - CBA Reports	May 2008 Sept 2008
Conc 10/9 D	Revised Strategy for the Implementation of GNSS in the MID Region	That, the Revised Strategy for the Implementation of GNSS in the MID Region is to be amended as shown at **Appendix 5.1A** to the Report on Agenda Items 5.1.	Implementation of the Strategy.	GNSS TF CNS/ATM/ IC SG	- GNSS TF/6 Report - CNS/ATM/IC SG/4 Report	Jul. 2007 Sept 2008

Conc/Dec No. --- Strategic Objective	Title of Conclusion/ Decision	Text of Conclusion/Decision	Follow-up Action	To be initiated by	Deliverable	Target Date
Conc 10/10 D	Coordination of GNSS Activities	That, a) all GNSS activities are to be coordinated in order to be inline with the MID Region GNSS Strategy; b) MID States: i) share experience gained during demos, test bed trials and implementation; ii) provide input to the GNSS Task Force; iii) are encouraged to participate in the GNSS Research and Development in a coordinated manner; and iv) designate GNSS focal points and send their contact details to the ICAO MID Regional Office prior to 31 May 2007.	Follow up the R&D Participate in GNSS TF and CNS/ATM/IC SG meetings Designate Focal Points	ICAO States GNSS TF	- State Letter - Updated R&D results posted on the MID Forum - Updated List of GNSS focal points - GNSS TF/6 Report - CNS/ATM/IC SG/4 Report	Jun. 2007 TBD Jun. 2007 Jul. 2007 Sept 2008
Dec 10/11 D	Revised Terms of Reference and Work Programme for the GNSS Task Force	That, the revised Terms of Reference and Work Programme of the GNSS Task Force is adopted as at **Appendix 5.1B** to the Report on Agenda Item 5.1.	Follow up of the Work Programme	GNSS TF CNS/ATM/IC SG	- GNSS TF/6 Report - CNS/ATM/IC SG/4 Report	Jul. 2007 Sept 2008
Conc 10/12	Participation in the GNSS TF meetings	That, a) MID States are urged to participate more actively in the work of the GNSS TF meeting; and b) ICAO MID Regional Office is to send invitation to organization that can support GNSS TF Work Programme	Participate in GNSS TF	States ICAO	- Sufficient number of experts - Invitation letter	Jun. 2007 May 2007

CONC/DEC NO. --- STRATEGIC OBJECTIVE	TITLE OF CONCLUSION/ DECISION	TEXT OF CONCLUSION/DECISION	FOLLOW-UP ACTION	TO BE INITIATED BY	DELIVERABLE	TARGET DATE
Conc 10/13 A, C, D, E	MID Region Strategy for the Implementation of the Global Plan Initiatives (GPIs)	That, the MID Region Strategy for the implementation of the Global Plan Initiatives (GPIs) is adopted as at **Appendix 5.1C** to the Report on Agenda Item 5.1.	Implementation of Strategy	ICAO; States; MIDANPIRG Subsidiary bodies	- Feedback from States National Plans Status of implementation of GPIs	Sept 2008
Conc 10/14 A, C, D, E	Implementation of Work Programme in support of Strategic Performance Objectives	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: a) improvement of the MID ATS route structure (FUA, dynamic and flexible ATS route management, improved Civil/Military coordination, etc); b) enhancement of MID States' TMA management; c) MID RMA operations continuity; d) support of the introduction and implementation of SMS in the MID States; e) development of MID States' contingency plans; f) improvement of the quality and efficiency of aeronautical information services provided by MID States; g) provision of eTOD by MID States;	Follow up progress on each project	ICAO States MIDANPIRG Subsidiary bodies	- Feed back on each project	Sept 2008

CONC/DEC NO. --- STRATEGIC OBJECTIVE	TITLE OF CONCLUSION/ DECISION	TEXT OF CONCLUSION/DECISION	FOLLOW-UP ACTION	TO BE INITIATED BY	DELIVERABLE	TARGET DATE
		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.				

CONC/DEC NO. --- STRATEGIC OBJECTIVE	TITLE OF CONCLUSION/ DECISION	TEXT OF CONCLUSION/DECISION	FOLLOW-UP ACTION	TO BE INITIATED BY	DELIVERABLE	TARGET DATE
Conc 10/15 A/D/E	MID Region Strategy for the Implementation of ADS-B	That, a) MID States, in collaboration with the airspace users, are encouraged to develop and implement ADS-B trials programme, when cost-benefit models warrant it; and b) the Strategy at **Appendix 5.1D** to the Report on Agenda Item 5.1 is endorsed as the MID Region Strategy for the implementation of ADS-B.	Implementation of Strategy Follow-up of ADS-B trials activity	Users Service providers; ICAO CNS SG/2 CNS/ATM/IC SG	- Feedback from States on ADS-B trials - Report of the CNS/ATM/IC SG/4 meeting - Report CNS SG/2	Sept 2008 Sept 2008 Nov. 2008
Conc 10/16 A/D/E	FANS 1/A Activities in the MID Region	That, MID States, in coordination with users, are encouraged to implement FANS 1/A (ADS-C/CPDLC) as an interim solution, until a fully ATN compliant ADS/CPDLC system is made available.	Follow-up trials, demonstrations and implementation activities	States Users Data link service providers	- FANS 1/A Trials and Feed Back from States on FANS 1/A activities	Sept 2008
Conc 10/17 D	Survey Relative to the Improper Handling of FPLs and Associated ATS Messages	That, a) the methodology for the identification of causes of improper handling of FPLs and associated ATS messages at **Appendix 5.1E** to the Report on Agenda Item 5.1 is endorsed; and b) MID States are to carry out a survey relative to the improper handling of FPLs and associated ATS messages based on this methodology for a period of at least one month	Carryout survey and analyze results	ICAO States CNS/SG/1 CNS/ATM/IC ATM/SAR/AIS	- State Letter - Survey Replied - Analysis of Result	Jun. 2007 Sept. 2007 Dec. 2007

CONC/DEC NO. --- STRATEGIC OBJECTIVE	TITLE OF CONCLUSION/ DECISION	TEXT OF CONCLUSION/DECISION	FOLLOW-UP ACTION	TO BE INITIATED BY	DELIVERABLE	TARGET DATE
Conc 10/18 D	Establishment of an Integrated Initial FPL Processing System (IFPS) in the MID Region	That, a) MID States designate their IFPS focal points and send their contact details to the ICAO MID Regional Office prior to 31 May 2007; b) the IFPS focal points participate in the finalization of the feasibility study for the implementation of an IFPS in the MID Region, to be finalized by Bahrain; and c) coordination be carried out with EUROCONTROL with a view to benefit from their experience and expertise in the implementation of an IFPS, including the development of a regulatory framework.	Designate focal points Follow up the progress on the finalization of the Study Coordination with EUROCONTROL	States ICAO Bahrain CNS SG/1 CNS/ATM/ICSG	- State Letter - Updated list of focal points - Regulatory framework definition - Study finalized	Jun. 2007 Sept 2007 Sept 2008 TBD
Conc 10/19 A & D	Implementation of Certification of Aerodromes	That, MID States that have not yet certified their international aerodromes, are urged to do so and: a) establish an appropriate regulatory framework and a criteria for the certification of aerodromes; b) develop an Aerodrome Manual for each international aerodrome insuring that it includes a safety management system prior to granting the aerodrome certificate; and c) certify all its International Aerodromes insuring that they continue meeting certification obligations.	Implement the Conclusion Follow-up with concerned States	States AOP SG	- States certify all their Aerodromes open for International Air Transport - Input from States AOP SG Reports	TBD Oct. 2007

CONC/DEC NO. --- STRATEGIC OBJECTIVE	TITLE OF CONCLUSION/ DECISION	TEXT OF CONCLUSION/DECISION	FOLLOW-UP ACTION	TO BE INITIATED BY	DELIVERABLE	TARGET DATE
Conc 10/20 A & D	Status of Implementation of Certification of Aerodromes	That, MID States not fully implementing certification of each of their international aerodromes are required to: a) provide the rationale for non implementation; b) advise if ICAO assistance is needed; and c) provide information on the expected date for fully certifying each of their international aerodrome.	Follow-up with concerned States	States ICAO MID Regional Office AOP SG/6	- State letter - Feed back from States	Aug. 2007 Oct. 2007
Conc 10/21 A & D	Promulgation of Information on Certification of Aerodromes in the State AIP	That, ICAO considers amendment of Annex 15 with a view to specify a section/table within the Aerodrome Part of the AIP for the promulgation of the information related to certification of aerodromes.	Process Amendment Proposal to Annex 15	ICAO HQ	- Annex 15 amended	TBD

CONC/DEC NO. --- STRATEGIC OBJECTIVE	TITLE OF CONCLUSION/ DECISION	TEXT OF CONCLUSION/DECISION	FOLLOW-UP ACTION	TO BE INITIATED BY	DELIVERABLE	TARGET DATE
Conc 10/22 A & D	Establishment of "Pavement Surface Maintenance Programme" and "Correction Programme for the Removal of Rubber Build-Up on Runways" in the Mid Region	That, MID States establish and implement an effective "Pavement Surface Maintenance Programme" and a "Correction Programme for the Removal of Rubber Build-Up on Runways" on a continuous basis.	Follow-up with concerned States	States AOP SG	- States establish and implement "Pavement Surface Maintenance Programme" and a "Correction Programme for the Removal of Rubber Build-Up on Runways" – Feed back from States	Dec. 2008
Conc 10/23 A & D	Assistance of MID States in Eliminating Deficiencies in Aerodrome Operational Services	That, ICAO considers organizing a workshop/seminar on one of the following subjects: Aerodrome Rescue and Fire Fighting, Aerodrome Emergency Plan, Removal of Disabled Aircraft, Apron Management and Surface Movement Guidance and Control System (SMGCS).	Conduct a Seminar, subject is to be selected by AOP SG/6	ICAO States	- Seminar is conducted Feed back from States	3rd Q. 2008

CONC/DEC NO. --- STRATEGIC OBJECTIVE	TITLE OF CONCLUSION/ DECISION	TEXT OF CONCLUSION/DECISION	FOLLOW-UP ACTION	TO BE INITIATED BY	DELIVERABLE	TARGET DATE
Dec 10/24 D	MID ATS Route Network	That, a) the Secretariat initiates action, in accordance with established procedures, for the amendment of the MID Basic ANP Table ATS 1 to reflect the changes at **Appendix 5.3A** to the Report on Agenda Item 5.3; and b) the list of Future ATS Route requirements at **Appendix 5.3B** to the Report on Agenda Item 5.3, be used within the framework of the ATM/SAR/AIS Sub-Group for future improvements of the MID ATS route network.	Update the MID Basic ANP Radical review of the MID ATS route network	ICAO MID Office	- MID Basic ANP Amendment Proposal - Revised/ enhanced MID ATS route network	June 2007 Dec. 2007
Conc 10/25 A, C, D	Civil/Military Coordination	That, with a view to ensure effective/optimum civil/military co-ordination and joint use of airspace with a maximum degree of safety, regularity and efficiency of international civil air traffic, States that have not yet done so, are urged to: a) implement Assembly Resolution A35-14 Appendix P and the provision of Annexes 2, 11 and 15 as well as LIM MID (COM/MET/RAC) RAN Meeting 1996, Recommendations 2/9, 2/10 and 2/13; b) give due consideration to the urgent establishment of civil/military coordination bodies for airspace management and air traffic control;	Implement the Conclusion Conduct Seminar	States ICAO	- State Letter - Civil/ Military coordination Seminar - Input from States	Jul. 2007 Oct. 2008 TBD

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 Letters of Agreement (LOAs) to be signed between ATS authorities and Military authorities in order to establish coordination procedures for the exchange of information; and
		
		d) ensure that the Military authorities are:
		
		  i. fully involved in the airspace planning and management process;
		
		  ii. aware of the new developments in civil aviation; and
		
		  iii involved in national, regional and international aviation meetings, workshops, seminars and training sessions, as appropriate.				

Conc 10/26 A, C, D	Coordination of Flights Operating Over High Seas	That, taking into consideration that the Convention on International Civil Aviation shall be applicable only to civil aircraft: a) all parties involved are urged to ensure that proper coordination between the ATS authorities and foreign military units operating over the high seas be carried out to the extent practicable; b) State aircraft operating in airspace over high seas, should: i) adhere, to the extent practicable, to ICAO provisions; or	Implement the Conclusion Conduct Seminar	States ICAO IATA	- State Letter - Civil/ Military coordination Seminar - Input from States	Jul. 2007 Oct. 2008 TBD

CONC/DEC NO. --- STRATEGIC OBJECTIVE	TITLE OF CONCLUSION/ DECISION	TEXT OF CONCLUSION/DECISION	FOLLOW-UP ACTION	TO BE INITIATED BY	DELIVERABLE	TARGET DATE
		ii) operate with "Due Regard" for the safety of navigation of civil aircraft where there are operational situations that do not lend themselves to ICAO flight procedures. c) States report any incident relating to uncoordinated flights operating over high seas, in a timely manner (within 15 days) and in accordance with the suggested mechanism illustrated in the flow chart at **Appendix 5.3C** to the Report on Agenda Item 5.3.				
Conc 10/27 A, D	Uncoordinated Flights Over the Red Sea Area	That, a) the procedures at **Appendix 5.3D** to the Report on Agenda Item 5.3 be followed by all civil uncoordinated flights and, to the extent practicable, by military aircraft operating over the Red Sea area; b) States, that have not yet done so, publish an AIP Supplement, as soon as possible, for the promulgation of these procedures; c) IATA continue its effort in ensuring that concerned operators are fully conversant with these procedures;	Implement the Conclusion Conduct Seminar	States ICAO IATA	- State Letter - Civil/ Military coordination Seminar - Input from States	Jul. 2007 Oct. 2008 TBD

CONC/DEC NO. --- STRATEGIC OBJECTIVE	TITLE OF CONCLUSION/ DECISION	TEXT OF CONCLUSION/DECISION	FOLLOW-UP ACTION	TO BE INITIATED BY	DELIVERABLE	TARGET DATE
		d) all parties involved, through their proper channels, take appropriate action to ensure that the airspace users be informed of and comply with the agreed procedures; and e) States: i) report without delay all incidents relating to civil uncoordinated flights over the Red Sea Area; and ii) report any incident relating to State aircraft operating over the Red Sea Area, in a timely manner (within 15 days) and in accordance with the suggested mechanism illustrated in the flow chart at **Appendix 5.3C** to the Report on Agenda Item 5.3.				
Conc 10/28 A	Initial set up and Administrative Management of the MID RMA	That, a) Bahrain pays for the initial set up of the MID RMA without waiting for MID States contributions and the cost is recovered through the agreed funding mechanism, in coordination with the ICAO Technical Cooperation Bureau; and b) Bahrain is responsible for the administrative management of the MID RMA.	Follow up with Bahrain and the MID RMA	MID RMA Board and ICAO	- MID RMA Board meeting reports	Ongoing

CONC/DEC NO. --- STRATEGIC OBJECTIVE	TITLE OF CONCLUSION/ DECISION	TEXT OF CONCLUSION/DECISION	FOLLOW-UP ACTION	TO BE INITIATED BY	DELIVERABLE	TARGET DATE
Dec 10/29 A	Establishment of the MID RMA Board	That, a) a MID RMA Board is established with Terms of Reference (TOR) as at **Appendix 5.3J** to the Report on Agenda Item 5.3; and b) the MID RMA Board is to be composed of a focal point nominated by each Member State.	Follow up the MID RMA Board activities and work programme	ICAO States	- MID RMA Board meeting reports	Ongoing
Conc 10/30 A	Membership of the MID RMA	That, a) Bahrain, Egypt, Iran, Jordan, Kuwait, Lebanon, Oman, Saudi Arabia, Syria and Yemen committed themselves to participate in the MID RMA project; and b) taking into consideration the tremendous efforts deployed by UAE in the preparation for the successful and safe implementation of RVSM in the MID Region, UAE is: i. invited to join the MID RMA Project; and ii. is to be exempted from the payment of contributions for the first ten (10) years of operation of the MID RMA.	Follow up with UAE to join the MID RMA	MID RMA Board and ICAO	- UAE joins the MID RMA	TBD

CONC/DEC NO. --- STRATEGIC OBJECTIVE	TITLE OF CONCLUSION/ DECISION	TEXT OF CONCLUSION/DECISION	FOLLOW-UP ACTION	TO BE INITIATED BY	DELIVERABLE	TARGET DATE
Conc 10/31 A	EUROCONTROL Support to the MID RMA	That, a) the EUROCONTROL support for the set up and operation of the MID RMA is appreciated; and b) the good cooperation between the MID RMA and EUROCONTROL is to be continued.	Continue the good cooperation with EUROCONTROL	MID RMA and EUROCONTROL	- Good cooperation continued	Ongoing
Conc 10/32 A	MID RMA Project	That, a) the Memorandum of Agreement (MOA) at **Appendix 5.3G** to the Report on Agenda Item 5.3 constitute the legal document related to the establishment, funding and management of the MID RMA; and b) the Custodian Agreement between ICAO, the MID RMA Board and Bahrain at **Appendix 5.3H** to the Report on Agenda Item 5.3, signed by the ICAO Secretary General, the Under Secretary for Civil Aviation Affairs of Bahrain and the MID RMA Board Chairman on behalf of the MID RMA participating States, represents the legal document which describes the support functions provided by ICAO in the MID RMA project.	Follow up the implementation of the clauses of the MOA and Custodian Agreement	MID RMA Board and ICAO	- MID RMA Board meeting reports	Ongoing

CONC/DEC NO. --- STRATEGIC OBJECTIVE	TITLE OF CONCLUSION/ DECISION	TEXT OF CONCLUSION/DECISION	FOLLOW-UP ACTION	TO BE INITIATED BY	DELIVERABLE	TARGET DATE
Conc 10/33 A	Funding Mechanism of the MID RMA	That, a) the activities of the MID RMA be ensured through contributions from all MID RMA Member States, which could be recovered in accordance with ICAO Policies on charges for Airports and Air Navigation Services (Doc 9082), in coordination with IATA; b) Bahrain, Egypt, Iran, Oman and Saudi Arabia pay 15% each of the yearly operating budget of the MID RMA; c) Jordan, Kuwait, Lebanon, Syria and Yemen pay 5% each of the yearly operating budget of the MID RMA; d) the budget estimate for the MID RMA operation for each year be prepared/approved by the MID RMA Board before 30 April; e) the MID RMA participating States pay their contributions on a yearly basis not later than 1 November of each year based on the invoices issued by ICAO; f) the MID RMA Board Chairman, in compliance with the Custodian Agreement and based on the agreed funding mechanism and the estimation of the yearly operating budget of the MID RMA, be	Follow up the implementation of the Funding mechanism	MID RMA Board and ICAO	- Funding mechanism implemented	Ongoing

CONC/DEC NO. --- STRATEGIC OBJECTIVE	TITLE OF CONCLUSION/ DECISION	TEXT OF CONCLUSION/DECISION	FOLLOW-UP ACTION	TO BE INITIATED BY	DELIVERABLE	TARGET DATE
		delegated the authority to certify on behalf of the MID RMA Participating States the requests for advance payment to the MID RMA on 1 December of each year; g) the bills related to the MID RMA expenses be certified by the MID RMA Board chairman and reviewed by the MID RMA Board at each of its meetings; h) in case the contributions for one year exceed the yearly cost for the operation and management of the MID RMA, the difference be deducted from the contributions of the next year(s); and i) the MID RMA funding mechanism be revised by the MID RMA Board when necessary.				
Conc 10/34 A	MID RMA Project Action Plan/Timelines	That, a) the MID RMA Project Action Plan/Timelines is updated by the MID RMA Board as at **Appendix 5.3K** to the Report on Agenda Item 5.3; and b) concerned parties take necessary measures to expedite the implementation of the required actions on a timely manner.	Follow up the implementation of the Action Plan	MID RMA Participating States MID RMA Board ICAO	- Action Plan implemented in a timely manner	Ongoing

CONC/DEC NO. --- STRATEGIC OBJECTIVE	TITLE OF CONCLUSION/ DECISION	TEXT OF CONCLUSION/DECISION	FOLLOW-UP ACTION	TO BE INITIATED BY	DELIVERABLE	TARGET DATE
Conc 10/35 A	Requirements for Provision of Data to the MID RMA	That, considering the on-going requirement for RVSM safety assessment in the MID Region: a) States not providing the required data to the MID RMA, in accordance with the requirements of safety monitoring agencies, be included in the MIDANPIRG List of air navigation deficiencies; b) the MID RMA ensure that the requests for provision of data are extended to MID States' RVSM Programme Managers and their Alternates in order to carry out the necessary internal coordination and speed up the process of collection of data; and c) States ensure that good communication and cooperation between the RVSM Programme Managers and the MID RMA Board Members is established and observed	Follow up the implementation of the Conclusion	MID RMA States ICAO	- Data provided to the MID RMA as required	Ongoing
Conc 10/36 A, C, D, E	Special Baghdad FIR Coordination Meeting	That, with a view to address coordination issues between Iraq and its adjacent States, a Special Baghdad FIR Coordination Meeting be organized under the aegis of ICAO with the attendance of Bahrain, Iraq, Iran, Jordan, Kuwait, Saudi Arabia, Syria, Turkey, IATA, IFALPA, FAA, the Combined Forces Air Component Commander (CFACC) and the MID RMA.	Conduct the meeting	ICAO Iraq and adjacent States	- Report of the meeting	2nd Q 2008

CONC/DEC NO. --- STRATEGIC OBJECTIVE	TITLE OF CONCLUSION/ DECISION	TEXT OF CONCLUSION/DECISION	FOLLOW-UP ACTION	TO BE INITIATED BY	DELIVERABLE	TARGET DATE
Conc 10/37 A, C, D	Flexible Handling of Traffic Intending to use the RVSM Airspace	That, in accordance with the provisions of the ATC Manual for a Reduced Vertical Separation Minimum (RVSM) in the MID Region, and with a view to enhance the safety and efficiency of air navigation in the MID Region: a) States are urged to refrain from taking actions unilaterally to systematically penalize the flights intending to use the RVSM airspace when: i) there's a doubt about the aircraft's RVSM approval status (missing of letter "W" from the FPL); or ii) the FPL was not received; and b) States are invited to show more flexibility in dealing with this issue.	Follow-up with concerned States	States IATA	- Reports from IATA - Input from States	Dec.2007
Conc 10/38 A	MID RVSM Operations Safety Assessment	That, the safety assessment of RVSM operations in the MID Region be based on the following safety objectives: a) Safety Objective 1: that the vertical-collision risk in MID RVSM airspace due solely to technical height-keeping performance meets the ICAO target level of safety (TLS) of 2.5 x 10 ⁻9 fatal accidents per flight hour;	Follow up the implementation of the 4 safety objectives	MID RMA EUROCONTROL MIDANPIRG	- SMR 2007-2008	Sep. 2008

CONC/DEC NO. --- STRATEGIC OBJECTIVE	TITLE OF CONCLUSION/ DECISION	TEXT OF CONCLUSION/DECISION	FOLLOW-UP ACTION	TO BE INITIATED BY	DELIVERABLE	TARGET DATE
		b) Safety Objective 2: that the overall vertical-collision risk – i.e. the overall risk of mid-air collision in the vertical dimension in MID RVSM airspace meets the ICAO overall TLS of 5×10^{-9} fatal accidents per flight hour; c) Safety Objective 3: address any safety-related issues raised in the SMR by recommending improved procedures and practices; and d) Safety Objective 4: propose safety level improvements to ensure that any identified serious or risk-bearing situations do not increase and, where possible, that they decrease. This should set the basis for a continuous assurance that the operation of RVSM will not adversely affect the risk of en-route mid-air collision over the years.				
Conc 10/39 A	Status of MID RVSM Safety Objectives	That, the RVSM operations within the airspace of the MID RMA Member States: a) met safety objectives #1, #3 and #4; and b) had not been possible to assess against safety objective #2.	Finalize the SMR 2006	MID RMA States ICAO	- SMR 2006 finalized and sent to States	June 2007
Conc 10/40 A	Sustained RVSM Safety Assessment Activity in the MID Region	That, considering the on-going requirement for RVSM safety assessment in the MID Region: a) the MID RMA is responsible for the development of the RVSM Safety Monitoring Reports (SMR);	Follow up the implementation of the Conclusion	MID RMA States ICAO	- Data provided to the MID RMA as required	Ongoing

CONC/DEC NO. --- STRATEGIC OBJECTIVE	TITLE OF CONCLUSION/ DECISION	TEXT OF CONCLUSION/DECISION	FOLLOW-UP ACTION	TO BE INITIATED BY	DELIVERABLE	TARGET DATE
		b) the MID RMA determine the exact type and format of data necessary for performing collision risk calculations and inform States accordingly; c) States provide the required data in a timely manner. The data will include, but not necessarily be limited to: i) approval of operators and aircraft for RVSM operations (monthly); ii) altitude deviations of 300 ft or more (monthly); iii) ATC/ATC coordination failures (monthly); and iv) traffic data (as requested by the MID RMA); d) the MID RMA coordinate with Bahrain, Oman, Saudi Arabia, Syria and Yemen for the recording and analysis of radar data, as and when required.				
Conc 10/41 A	MID RVSM Safety Monitoring Report for 2007-2008	That, a) the MID RVSM Safety Monitoring Report (SMR) for 2007-2008 be ready before 1 September 2008; and b) the FPL/traffic data for the month of November 2007 be used for the development of the SMR 2007-2008.	Provide requested data to the MID RMA Develop the SMR 2007-2008	MID RMA States	- Data provided as requested - SMR 2007-2008 developed	Ongoing Sep 2008

CONC/DEC NO. --- STRATEGIC OBJECTIVE	TITLE OF CONCLUSION/ DECISION	TEXT OF CONCLUSION/DECISION	FOLLOW-UP ACTION	TO BE INITIATED BY	DELIVERABLE	TARGET DATE
Dec 10/42 A, C, D	Establishment of the RVSM/PBN Task Force	That, the RVSM and RNP/RNAV Task Forces are merged to become the RVSM/PBN Task Force with the Terms of Reference as at Appendix 5.3L to the Report on Agenda Item 5.3.	Conduct the RVSM/PBN TF/1 meeting	ICAO	- Report of RVSM/PBN TF/1	Dec. 2007
Dec 10/43 A, C, D	MID Region PBN Strategy	That, the RVSM /PBN Task Force: a) follow up the developments related to Performance Based Navigation (PBN); and b) develop a MID Region strategy to implement the PBN concept.	Conduct a PBN Seminar and the RVSM/PBN TF/1 meeting	ICAO RVSM/PBN TF	- Seminar - Report of the meeting - MID Region PBN Strategy	Nov. 2007 Dec. 2007 Dec. 2007
Dec 10/44 A	Establishment of a MID Region SSR Code Study Group	That, the MID Region SSR Code Study Group is established with the Terms of Reference as at **Appendix 5.3M** to the Report on Agenda Item 5.3.	Conduct the meeting(s)	ICAO	- Report of the meeting(s) - Guidance material	Dec. 2007
Conc 10/45 A, E	Development and Promulgation of Contingency Plans	That, a) States are urged to develop and promulgate contingency plans in accordance with Annex 11 and Annex 15 provisions; b) ICAO MID Office carry out a survey on the status of development and promulgation of contingency plans in the Region; c) States use the template at **Appendix 5.3N** to the Report on Agenda Item 5.3 for the development and promulgation of contingency plans; and	Carry out the survey and analyze the results	ICAO States	- State Letter - Survey replies - Analysis of results	Jun. 2007 Aug. 2007 Dec. 2007

CONC/DEC NO. --- STRATEGIC OBJECTIVE	TITLE OF CONCLUSION/ DECISION	TEXT OF CONCLUSION/DECISION	FOLLOW-UP ACTION	TO BE INITIATED BY	DELIVERABLE	TARGET DATE
		d) the relevant subsidiary bodies of MIDANPIRG revise their Terms of Reference (TOR) to include the development of regional guidance material leading to a MID Regional Contingency Plan for ATM including supporting CNS elements.				
Conc 10/46 A	ICAO Language Proficiency	That, with a view to expedite the process of implementation of the ICAO Language Proficiency requirements, States are urged to: a) ensure that all stakeholders (pilots, controllers, language teachers, regulators, etc.) are familiar with the ICAO language proficiency requirements; b) adopt/incorporate the ICAO language proficiency requirements (Amendment 164 to Annex 1) into national legislation; c) establish a plan to coordinate administrative and training matters (testing, number of personnel to be trained, training centres, duration of training, etc.); d) develop/select test(s) to meet ICAO language proficiency requirements; e) assess current language proficiency level of controllers and pilots, according to the ICAO rating scale; f) develop language training packages designed to reduce the gap between current language proficiency level and ICAO Level 4;	Follow-up with States Conduct a Seminar	ICAO States	- State Letter - Seminar - Input from States	Jun. 2007 Sep. 2007 Mar. 2008

CONC/DEC NO. --- STRATEGIC OBJECTIVE	TITLE OF CONCLUSION/ DECISION	TEXT OF CONCLUSION/DECISION	FOLLOW-UP ACTION	TO BE INITIATED BY	DELIVERABLE	TARGET DATE
		g) develop language training package to maintain language proficiency and a schedule of language refresher training; h) review recruitment and selection procedures and consider a minimum of at least ICAO level 3 in language proficiency before entry to professional training programmes; and i) present reports to ICAO on progress achieved in preparing for implementation of ICAO language proficiency requirements, on regular basis.				

CONC/DEC NO. --- STRATEGIC OBJECTIVE	TITLE OF CONCLUSION/ DECISION	TEXT OF CONCLUSION/DECISION	FOLLOW-UP ACTION	TO BE INITIATED BY	DELIVERABLE	TARGET DATE
Conc 10/47 A	Use of the English Language and Standard ICAO Phraseology	That, a) States are urged to ensure that their air traffic controllers and pilots use the standard ICAO phraseology in aeronautical communication; and b) with a view to improve situational awareness and prevent the occurrence of ATS incidents and accidents, States are invited to implement measures that require or encourage air traffic controllers and pilots to: i. use as much as possible the English language in aeronautical communication; and ii. use only the English language in aeronautical communication, in all situations where at least one of the pilots in the environment (sector) does not speak the national language.	Follow-up with States Conduct a Seminar	ICAO States	- State Letter - Seminar - Input from States	Jun. 2007 Sep. 2007 Mar. 2008
Conc 10/48 A	Search and Rescue (SAR) Agreements	That, with a view to strengthen search and rescue cooperation and coordination: a) States are urged to sign SAR agreements with their neighbouring States; and b) the model of SAR agreement available in the International Aeronautical and Maritime Search and Rescue Manual (IAMSAR Manual) as at **Appendix 5.3O** to the Report on Agenda Item 5.3, be used to guide States in the development of their own SAR agreements.	- Urge States to sign SAR agreements - Conduct Seminar	ICAO States	- State Letter - Seminar - SAR agreements signed	Jun. 2007 Oct. 2008 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
Conc 10/49 A	406 MHZ Beacon Registration Database (IBRD)	That, MID States are: a) urged to require ELT owners and users of 121.5/243 Mhz ELTs to upgrade to 406 Mhz ELT as soon as possible and in any case before 1 February 2009; b) urged to require ELT owners to register their 406 Mhz ELTs in the IBRD database; and c) invited to designate an IBRD focal point and request Cospas-Sarsat to allocate the designated person a user identification and password in order to access the IBRD database and take advantage of the service available.	Follow up with States	ICAO States	- State Letter - Input from States on registration of 406 MHz ELTs in the IBRD database	Sep. 2007 Dec. 2008
Conc 10/50 A, D	Use of email to Enhance Communication between the AIS Community in the MID Region	That, with a view to enhance the communication between the AIS Community in the MID Region: 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.	Comply with the Conclusion	ICAO HQ States AIS/MAP TF	- Appropriate provisions in Annex 15 - Feed back from States and users	TBD TBD
Conc 10/51 A, D	Advance Posting of the AIRAC Information on the Web	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.	Comply with the Conclusion	States AIS/MAP TF	- Feed back from States and users	Feb. 2008

CONC/DEC NO. --- STRATEGIC OBJECTIVE	TITLE OF CONCLUSION/ DECISION	TEXT OF CONCLUSION/DECISION	FOLLOW-UP ACTION	TO BE INITIATED BY	DELIVERABLE	TARGET DATE
Conc 10/52 A, D	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.	Comply with the Conclusion	States ICAO HQ	- States publish their eAIP. - ICAO issue appropriate provisions in Annex 15 related to eAIP	Feb. 2008 TBD
Conc 10/53 D	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.	Follow up with ICAO HQ	ICAO HQ	- Appropriate provisions in Annex 1	TBD
Conc 10/54 A, D	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.	Follow up with concerned States	ICAO States AIS/MAP TF	- State Letter - Feed back from States	Jul. 2007 Feb. 2008

Conc/Dec No. --- Strategic Objective	Title of Conclusion/ Decision	Text of Conclusion/Decision	Follow-up Action	To be initiated by	Deliverable	Target Date
Dec 10/55 A, D	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.	Follow-up the activities of the Action Group	ICAO	- Feedback from the Action Group reported to the AIS/MAP TF	Feb. 2008
Conc 10/56 A	Roadmap for the Implementation of eTOD Requirements	That, MID States: a) develop their plans related to the implementation of eTOD requirements; and 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.	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
Conc 10/57 A	Collaborative Approach for the Implementation of eTOD	That, in order to expedite the implementation of eTOD requirements, MID States: a) develop a high level policy for the management of a national eTOD programme; 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	Comply with the conclusion	States	- National eTOD Programme defined and managed.	Jul. 2007

CONC/DEC NO. --- STRATEGIC OBJECTIVE	TITLE OF CONCLUSION/ DECISION	TEXT OF CONCLUSION/DECISION	FOLLOW-UP ACTION	TO BE INITIATED BY	DELIVERABLE	TARGET DATE
		c) secure the necessary resources for the eTOD programme.				
Dec 10/58 A	Establishment of an eTOD Working Group	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.	Creation of the eTOD WG Follow up the work programme	ICAO States	- Report of meeting - Guidance material	Jul. 2007 Feb. 2008
Conc 10/59 A	Follow up on the Outcome of the MID eTOD Seminar	That, 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 b) necessary follow-up action is to be taken by States and ICAO with a view to implement them.	Follow up on the recommendations of the MID eTOD Seminar	eTOD WG AIS/MAP TF States ICAO	- Reports of meetings - Follow-up actions taken, as appropriate	Jul. 2007 Feb. 2008
Conc 10/60 A, D	Follow-up on the Outcome of the Global AIS Congress	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.	Follow up developments in ICAO HQ	ICAO HQ	- Amendment of Annex 4 and Annex 15, as appropriate	TBD
Conc 10/61 A, D	AIS/MAP Timelines for the MID Region	That, the AIS/MAP Timelines for the MID Region be updated as at **Appendix 5.4G** to the Report on Agenda Item 5.4.	Follow up the timelines	AIS/MAP TF	- Updated Timelines - Feed back from States	Feb. 2008 Feb. 2008

CONC/DEC NO. --- STRATEGIC OBJECTIVE	TITLE OF CONCLUSION/ DECISION	TEXT OF CONCLUSION/DECISION	FOLLOW-UP ACTION	TO BE INITIATED BY	DELIVERABLE	TARGET DATE
Dec 10/62 A, D	Revised Terms of Reference and Work Programme of the AIS/MAP Task Force	That, the Terms of Reference and Work Programme of the AIS/MAP Task Force be updated as at **Appendix 5.4H** to the Report on Agenda Item 5.4.	Follow up the work programme	AIS/MAP TF	- Report of AIS/MAP TF/4	Mar. 2008
Conc 10/63	Organization of Communication Infrastructure Seminar	That, MID States: a) support ICAO MID Regional Office in organizing Communication Infrastructure Seminar/Workshop during year 2007 by hosting this event; and b) participate in the Seminar/Workshop by sending their appropriate experts.	Seminar Agenda Hosting State defined Participate in event	ICAO ICAO/States States	- Final Agenda - Participants list - Seminar recommenda-tion	Aug. 2007 Sept. 2007 Nov. 2007
Conc 10/64	Implementation of IPS Based ATN	That, MID States: a) consider the developments towards an IPS based ATN internet and to take these into account when considering developing plans for upgrading the aeronautical communications infrastructure; and b) update the ICAO MID Regional Office with their ATN and AMHS Plans.	Follow up development at ACP States Plans prepared States AMHS addressing	ICAO States	- IPS based ATN documentation - States updated Plans - Updated AMHS register	Sept 2007 Sept 2007 Sept 2007
Conc 10/65	Terms of Reference of the Ad-Hoc Action Group	That, the Terms of Reference and Work Programme of the Ad-Hoc Action Group is adopted as, at **Appendix 5.5A** to the Report on Agenda Item 5.5.	Follow-up work programme	States Ad-Hoc Action Group	- Updated list of experts - Group Report	Jun. 2007 Sept 2007

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Conc 10/66	Support ICAO Position for WRC 07	That, MID States: a) support ICAO position during the ITU WRC 07; and b) Civil Aviation Authorities, aviation experts participate with their national delegations to the ITU, WRC 07.	States delegate expert Support to experts	States ICAO HQ	- Sufficient CA experts - Coordination during WRC	Oct. 2007
Conc 10/67	Future Support for ICAO Position with Regard to WRC	That, a) the Ad-Hoc Action Group for the support of Aeronautical Frequency Bands; is to follow-up the developments related to ICAO position regarding future ITU in order to highlight it to the MID States; and b) MID States Civil Aviation Authorities, experts participate with their appropriate ministerial delegations in the drafting of the national radio plans in the support of ICAO position.	Follow up developments	Ad-hoc Action Group CNS SG/2	- Ad-Hoc Action Group reports	Nov. 2008
Conc 10/68	MID VSAT Project Finalization	That, in order to expedite the implementation of the MID VSAT Project, concerned MID States commit themselves to the project, by signing the Memorandum of Understanding (MOU) leading to form a structure for managing the MID VSAT Project.	MOU ready	ICAO HQ States CNS SG/2	- Draft MOU - CNS SG/2 Report	Sept 2007 Nov. 2008

CONC/DEC NO. --- STRATEGIC OBJECTIVE	TITLE OF CONCLUSION/ DECISION	TEXT OF CONCLUSION/DECISION	FOLLOW-UP ACTION	TO BE INITIATED BY	DELIVERABLE	TARGET DATE
Dec 10/69 D	Dissolving the CNS/MET Sub-Group and establishment of a CNS Sub-Group and a MET Sub-Group	That, a) the CNS/MET Sub-Group is dissolved; and b) a separate CNS Sub-Group and a separate MET Sub-Group are established.	Conduct CNS SG/1 and MET SG/1 meetings and follow up work programmes	ICAO States	- CNS SG/1 Report - MET SG/1 Report	Sept 2007 July 2008
Dec 10/70 D	Dissolution of the AFS/ATN Task Force	That, the AFS/ATN Task Force is dissolved and its work programme is to be incorporated in to that of CNS Sub-Group.	TF dissolved Work programme carry out	CNS SG/1	- CNS SG/1 Report	Sept. 2007
Conc 10/71 D	International SADIS Seminar	That, the SADIS Provider State be invited to consider arranging, in coordination with ICAO, an international SADIS seminar in the MID Region to support the transition to the SADIS Second Generation (2G) service	Coordination with SADIS Provider State	ICAO HQ	- SADIS Seminar	TBD
Conc 10/72 A	MID Region Volcanic Ash Test	That, a) the MID Regional Office issue a State letter to review the MET and ATS procedures to raise the awareness of the volcanic ash problem; b) the Volcanic Ash Advisory Centre (VAAC) Toulouse is invited to carry out a test once a year on the issuance of volcanic ash SIGMETs; and c) the MET Sub-Group monitor the results of the test and take the appropriate action.	Implement the conclusion	ICAO VAAC Toulouse MET SG	- State letter - Test on issuance of volcanic ash carried out	Jun. 2008

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Conc 10/73 D	Future of the FASID Tables MET 2A and MET 2B	That, a) in view of the similarity of the requirements contained in FASID Table MET 2A and Annex 1 to the SUG, and in the interest of ensuring the currency of the requirements for OPMET exchange at all times, the content of the MID FASID Table MET 2A be limited to the appropriate URL-address of the SADISOPSG website: (i.e. www.icao.int/anb/sadisopsg); and b) the FASID Table MET 2B be deleted from the MID FASID. Note. ─ It is important to retain the provisions related to SIGMET in the BORPC and MET provisions of the ANP.	Process amendment proposal to the MID FASID	ICAO	- Amendment proposal	Jun. 2007
Conc 10/74 D	Future of the FASID Table MET 1A	That, the content of the MID FASID Table MET 1A: a) be simplified by deleting Column 6 ("area of coverage of charts") and Column 7 ("AFTN routing areas of destination"); and b) be available only through the global database "Forecasts (TAF and TREND) to be issued at international aerodromes" to which a URL address is provided under the heading of the FASID Table MET 1A.	Process amendment proposal to the MID FASID	ICAO	- Amendment proposal	Jun. 2007

CONC/DEC NO. --- STRATEGIC OBJECTIVE	TITLE OF CONCLUSION/ DECISION	TEXT OF CONCLUSION/DECISION	FOLLOW-UP ACTION	TO BE INITIATED BY	DELIVERABLE	TARGET DATE
Conc 10/75 D	Updated Traffic Forecasting Requirements in the MID Region	That, a) Membership of the Traffic Forecasting Sub-Group shall include all members of MIDANPIRG and that meetings of the Sub-Group shall be open to all MID States;	Implement the conclusion	ICAO, States & IATA		On-going
		b) the Secretariat coordinate with other international and regional organizations, including IATA, with a view to establishing a MID database to support regional traffic forecasting activities;	The Sub-Group to meet and establish the database	TF SG & Secretariat	- Meeting of the Sub-Group (Data format agreed)	TBD
		c) MID States continue their support to the Traffic Forecasting Sub-Group by ensuring that their respective nominees to the membership of the Sub-Group include, as much as possible, forecasting experts, air traffic management experts and, when required, financial analysts to carry out business case and cost/benefit analysis;	Secretariat to coordinate with States	States & ICAO	- Reminder State Letter	May 2007
		d) MID States continue to avail required FIR and other data to the Traffic Forecasting Sub-Group in the format agreed by the Sub-Group to facilitate the development of forecasts and other air navigation planning and implementation parameters; and	Updated information to be provided by States	States & Secretariat	- State Letter	May 2007
		e) the Secretariat continue organizing workshops, seminars and other training programmes with a view to upgrading regional traffic forecasting capabilities.	Secretariat to coordinate with States	ICAO & States	- TF Workshop to be hosted by Bahrain	Oct. 2007

CONC/DEC NO. --- STRATEGIC OBJECTIVE	TITLE OF CONCLUSION/ DECISION	TEXT OF CONCLUSION/DECISION	FOLLOW-UP ACTION	TO BE INITIATED BY	DELIVERABLE	TARGET DATE
Conc. 10/76 D	Enhancement of MID Region's Air Navigation Deficiency Database	That, ICAO MID Regional Office provide searching feature for the MID Air Navigation Deficiency database on the website.	Implement the conclusion	ICAO MID Office	- Searching feature for MID AN Def. Database is provided	TBD
Conc. 10/77 A	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	Follow-up implementation of the conclusion	States ICAO Users IFFAS	- Concerned States eliminate their air navigation deficiencies	Nov. 2008

CONC/DEC NO. --- STRATEGIC OBJECTIVE	TITLE OF CONCLUSION/ DECISION	TEXT OF CONCLUSION/DECISION	FOLLOW-UP ACTION	TO BE INITIATED BY	DELIVERABLE	TARGET DATE
		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).				
Conc 10/78 A	Enhancement of MID States' Capabilities for Safety Oversight	That, in order to improve aviation safety in the MID Region; MID States are urged to enhance their individual safety oversight capabilities and ensure the establishment and management of a sustainable safety oversight system.	Follow up establishment and management of sustainable safety oversight systems	States ANS SG/1 ICAO	- Report of ANS SG/1 - States' capability for safety oversight enhanced	Nov. 2008 Nov. 2009
Conc 10/79 A	Regional Cooperation for Safety Oversight	That, MID States: a) cooperate bilaterally and/or jointly as a group of States to make the appropriate arrangements in order to strengthen their safety oversight capabilities; and b) that have not yet done so, are encouraged to become a member of a COSCAP Programme.	Follow up with ICAO and States	States	- Report of ANS SG/1 - States' capability for safety oversight enhanced through bilateral and regional cooperation	Nov. 2008 Nov. 2009

CONC/DEC No. --- STRATEGIC OBJECTIVE	TITLE OF CONCLUSION/ DECISION	TEXT OF CONCLUSION/DECISION	FOLLOW-UP ACTION	TO BE INITIATED BY	DELIVERABLE	TARGET DATE
Conc 10/80 A	Reporting Mechanism and Sharing of Safety-related Information	That, MID States: a) update their legislation to support a "just culture" reporting environment as part of their safety programme; b) develop and implement non-punitive reporting mechanisms as part of their safety programme for the identification of hazards and assessment of risks in order to implement appropriate mitigating measures; c) designate focal points to whom operators can send incident reports for investigation and resolution and from whom they could request information for clarification purpose; and d) share information on ATS incidents and accidents.	Urge States to comply with the Conclusion	ICAO States	- State Letter - Update list of focal points - Reports from States	Sept 2007 Nov. 2007 TBD
Conc 10/81 A	Survey on ATS Safety Management	That, a) MID States that have not yet done so, are urged to establish a safety programme in order to achieve an acceptable level of safety in the provision of ATS; b) in order to obtain information from MID States regarding the status of implementation of SMS within their Air Traffic Services and/or the difficulties they face to implement the required system, ICAO MID Regional Office carry out a survey on the implementation of SMS; and	-Carry out the survey and analyze the results -Conduct SMS Training Course	ICAO States	- Training Course - State Letter - Survey replies - Analysis of results	May 2007 Jul. 2007 Nov. 2007 Dec. 2007

CONC/DEC NO. --- STRATEGIC OBJECTIVE	TITLE OF CONCLUSION/ DECISION	TEXT OF CONCLUSION/DECISION	FOLLOW-UP ACTION	TO BE INITIATED BY	DELIVERABLE	TARGET DATE
		c) MID States take advantage of the SMS guidance material available and training courses offered by ICAO.				
Conc 10/82 A	Implementation of Safety Management at Aerodrome Operations	That, MID States are urged to: a) establish a Safety Programme in order to achieve an acceptable level of safety in aerodrome operations; and b) ensure that a certified aerodrome operator implements a Safety Management System acceptable to the State as part of its Safety Programme.	Follow-up with concerned States	States	- States implement SMS at their Aerodromes open for International Air Transport	TBD
Conc 10/83 A	Requirements for the Implementation of SMS in Various Air Navigation Fields	That, taking into consideration that the implementation of Safety Management System (SMS) is a fundamental tenet for the improvement of overall aviation safety; ICAO consider development of new provisions in its appropriate Annexes requiring the implementation of SMS in various air navigation fields.	Follow up with ICAO HQ	ICAO HQ	- New ICAO SMS provisions developed, as appropriate	TBD

CONC/DEC NO. --- STRATEGIC OBJECTIVE	TITLE OF CONCLUSION/ DECISION	TEXT OF CONCLUSION/DECISION	FOLLOW-UP ACTION	TO BE INITIATED BY	DELIVERABLE	TARGET DATE
Dec 10/84 A, D	Change of Air Navigation Safety Working Group to Air Navigation Safety Sub-Group	That, a) the Air Navigation Safety Working Group (ANS WG) is changed to Air Navigation Safety Sub-Group (ANS SG); and b) the Terms of Reference and Work Programme of the ANS Sub-Group are updated accordingly.	Update of MIDANPIRG Procedures Handbook & TOR	ICAO	- Changing Group name and approval of TOR	Apr. 2007

AGENDA ITEM 8:   ANY OTHER BUSINESS

REPORT ON AGENDA ITEM 8:   ANY OTHER BUSINESS

Unmanned Arial Vehicles (UAV)

8.1   The Meeting was informed of the ongoing work of ICAO related to Unmanned Arial Vehicles. The Meeting noted that two informal meetings of interested States and international organizations were held on this subject. It was noted that the informal meetings proposed to the Air Navigation Commission to establish an ICAO study group to assist the Secretariat in developing a framework for regulatory development, guiding the SARPs development process within ICAO, and to support a safe, secure and efficient integration of unmanned aircraft systems (UAS) into non-segregated airspace

Avian Influenza

8.2   The meeting was informed that recent finding of a virulent strain of Aviation Influenza (H5N1) in a number of countries throughout the World and in some MID Region States is a cause for concern. Avian Influenza currently poses a substantial risk to the global population because it is likely that at some unpredictable point in the future a strain of influenza will emerge that transmits easily between humans.

8.3   The attention of the meeting was drawn to the availability of actions taken and guidelines designed by ICAO to comply with the recommendations of the World Health Organization (WHO) in response to the Avian Influenza pandemic available on the following website:

http://www.icao.int/icao/en/med/AvInfluenza_guidelines for States
http://www.who.int/csr/resources/publications/inlue

Closing of the Meeting

8.4   The meeting ended expressing its gratitude and appreciation to Qatar Civil Aviation Authority for hosting the Tenth Meeting of MIDANPIRG, for excellent arrangements made towards successful conduct of the meeting, especially the warm hospitality extended to all delegates throughout their stay in Doha. Special thanks were conveyed to Mr. Abdul Aziz M. Al-Noaimi, Chairman of Qatar Civil Aviation Authority for his support to MIDANPIRG/10 meeting and the ICAOMID Regional Office.

- END -