

MIDANPIRG/7
Report on Agenda Item 5

REPORT ON AGENDA ITEM 5: MIDDLE EAST AIR NAVIGATION PLAN ISSUES**5.1 AOP*****AOP/SG/1&2 meetings***

5.1.1 The meeting noted that AOP Sub-Group did not meet before MIDANPIRG/6 (10-14 September 2000) due to non-availability of Regional Officer AGA in the MID Regional Office; and that the first AOP Sub-Group meeting was held in Cairo, 13-16 November 2000, and the second meeting was held in Cairo, 30 July-2 August 2001, A consolidated summary of the two reports was presented to the meeting.

AOP/SG Terms of Reference and Work Programme

5.1.2 The meeting noted that AOP Sub-Group reviewed its Terms Of Reference and Work Programme as given in **Appendix 5A** attached to the report on Agenda Item 5 and consequently developed the following Decision:

DECISION 7/3: REVISED TERMS OF REFERENCE AND WORK PROGRAMME FOR THE AOP SUB-GROUP

That, the MIDANPIRG/7 approves the revised Terms Of Reference and Work Programme of AOP Sub-Group as presented in **Appendix 5A** attached to the report on Agenda Item 5.

Draft Basic ANP and FASID Documents**5.1.3**

more information from some MID States; further updates were carried out by MID Regional Office, refer to MID Basic ANP and FASD Part III - Aerodrome Operations (AOP) and Part IV FASID Table CNS 3.

Deficiencies

5.1.4 The meeting was informed that AOP SG meetings have revised list of deficiencies in AOP field in the MID Region.

5.1.5 Reference report on Agenda Item 7.3 for more information on reported deficiencies in AOP field in the MID Region.

Aerodrome Data Base**5.1.6**

with the objective of sharing knowledge, expertise and experience on airport operation, maintenance and development as well as to compare with the regional Air Navigation Plan and ICAO SARPS with a view to identify deficiencies, and to be updated and maintained by MID Regional Office.

MIDANPIRG/7
Report on Agenda Item 5

5.1.7

Publications (AIPs) which already cover existing aerodromes, and the need for additional resources to develop such data base; the meeting was of the view to reconsider this requirement at a future date.

Aerodrome certification

5.1.8 The meeting was informed that Amendment 4 to Annex 14 Volume I *Aerodrome Design and Operations* is applicable since 1 Nov. 2001, that envisages inclusion of a new section on the requirement for aerodrome to be certified. Further the meeting was also informed that ICAO Doc 9774 - first edition 2001 on *Certification of Aerodromes* is available, providing guidance on: Aerodrome certification regulatory system, aerodrome certification model regulations, aerodrome certification model procedures, regulatory authority, and details of aerodrome safety oversight system (policy and means).

5.1.9 It was highlighted that responsibility of ensuring safety, regularity and efficiency of aircraft operations at aerodromes under States respective jurisdictions rests with each individual States. The meeting was invited to consider establishing the necessary legislation and regulatory procedures needed for the certification of aerodromes and safety oversight system in accordance with ICAO SARPs, Annex 14 - Vol. I, and related guiding Manuals; the following dates were also highlighted:

a) **As of 1 November 2001**

- States **should** certify aerodromes open for public use in accordance with specifications contained in Annex 14 as well as other relevant ICAO specifications through an appropriate regulatory framework which **shall** include the establishing of criteria for the aerodrome certification
- A certified aerodrome **should** have in operation a safety management system.
- As part of the certification process, States **should ensure** that an aerodrome manual which will include all pertinent information on the aerodrome site, facilities, services, equipment operating procedures, organization and management including a safety management system, **is submitted by the applicant for approval/acceptance prior to granting the aerodrome certificate.**

b) **As of 27 November 2003**

- States **shall certify** aerodromes used for international operations in accordance with Annex 14 SARPs and other relevant ICAO Manuals through an appropriate regulatory framework.

MIDANPIRG/7
Report on Agenda Item 5

c) **As of 1 January 2004**

- **ICAO will commence** safety audits of states to assess the effective implementation of the provisions contained in Annex 14 and associated guidance material (refer to report on Agenda Item 3)

d) **As of 24 November 2005**

- A certified aerodrome **shall have** in operation a safety management system.

5.1.10 In response to several inquiries regarding certification of aerodromes, the meeting requested ICAO to plan for seminar/workshop on that subject. Regional Office tentatively scheduled a Workshop 17-

5.1.11 Noting the information, the meeting formulated the following Conclusion:

CONCLUSION 7/4: AERODROME CERTIFICATION

That,

- i) MID Region States are urged to establish the necessary legislations and regulatory procedures needed for the certification of aerodromes with a view to ensure aerodrome operational safety, regularity and efficiency.
- ii) A seminar/workshop on
conducted in the MID Region by ICAO as soon as possible.

Latest development in AOP Field

5.1.12 The meeting was presented with an overview of New Large Aircraft type and the introduction of Code F requirements of Annex 14 Vol. I, July 1999 and that some airlines registered in the States of the MID Region had intended their options for this new larger aircraft type, necessitate upgrading of facilities at some of the aerodromes concerned. Co-ordination with other adjacent Regions is to be maintained.

5.1.13 The meeting noted the information presented for possible improvements to capacity management of airports, the meeting was advised to consider and maintain safety requirements as per relevant ICAO SARPS when implementing possible improvements to capacity management. The meeting was of the view that in order to maintain aerodrome operational safety and regulatory, the impact of airports capacity improvement measures on safety requirements should be monitored.

Aviation Security aspects to be considered of priority A at aerodromes

5.1.14 The meeting was informed that, ICAO 33rd Assembly meeting adopted Resolution A 33-1- Appendices D and F referring to Technical Security measures as an effective means of preventing acts of unlawful interference with civil aviation, and on assistance to States in the implementation of these technical measures.

MIDANPIRG/7
Report on Agenda Item 5

5.1.15 Aviation security requirements, specifically in the areas of aerodrome planning, design and operations such as airport boundary fencing, perimeter roads, security lighting, controlled access to air side facilities; as well as ATC facilities, cargo facilities, fuel & power su

Safety aspects

5.1.16 The meeting noted that with regard to safety aspects related to MID Region aerodromes with priority to the following are to be considered and monitored on priority.

- Aerodrome emergency planning
- Rescue and fire fighting services
- Obstacle limitation at and around aerodromes
- Implementation of guidelines and procedures for Surface Movement Guidance and Control Systems (SMGCS) at main international airports.

Human Resources

5.1.17 The meeting noted that ICAO Universal Safety Oversight Audit Program (IUSOAP) might soon be expanded. Aerodrome safety and efficiency depends on mainly two areas, namely, the adequacy and efficacy of the services, facilities and procedures, and the operational capability of the aerodrome operators. The second factor depends heavily on the necessary human resources development, which includes training, dissemination and exchange of information, and development of expertise.

5.1.18 The meeting was advised that MID Regional Office could assist States of organizing workshops and seminars. The meeting considered the various areas where such seminars/workshops would be useful for the region to enhance aerodrome operational safety and

workshop and/or seminar in the near future. Other topics such as, Aerodrome Emergency Planning, Surface Movement Guidance and Control Systems, Planning and commissioning of new aerodromes, could be considered at a later stage.

Laser emitters and flight operations safety

5.1.19 The meeting noted with concern the threat of laser emitters used for entertainment and commercial promotion around airports by distracting or blinding pilots affecting flight safety.

5.1.20 Based on IFALPA request, ICAO has developed a proposal for amendment to Chapter 5 of Annex 14 - Volume I (*Aerodrome Design and Operations*), and Chapter 2 of Annex 11 (*Air Traffic Services*), in order to protect flight operation zones against the hazardous effect of laser emitters. The amendment will be supported by a manual containing detailed information about physics of lasers and biohazards, and laser beam sensitive flight zones to be determined by local aerodrome operations. The manual is scheduled for distribution in 2002.

5.2 ATM/SAR/AIS

5.2.1 Under this agenda item the meeting was apprised of the progress achieved within the framework of the different Task Forces and Sub-Groups established by MIDANPIRG for ensuring the evolutionary implementation of different elements of the MID CNS/ATM Plan with a view to enhance safety and airspace capacity in the MID Region.

MIDANPIRG/7
Report on Agenda Item 5

5.2.2 The meeting noted that the ATM/SAR/AIS SG/5 meeting which was held in Cairo from 30 October to 2 November 2001, addressed the following subjects:

- 1) ATS route network in the MID Region,
- 2) Implementation of RNP/RNAV,
- 3) Implementation of RVSM,
- 4) Regional ATS incident analysis,
- 5) Implementation of GNSS,
- 6) Implementation of ACAS II.
- 7) Search and Rescue in the MID Region
- 8) ICAO requirements in the AIS/MAP fields, and
- 9) Deficiencies in the ATM/SAR and AIS/MAP fields.

Review of the ATS route network in the MID Region

5.2.3 MIDANPIRG/7 noted that the ATM/SAR/AIS SG/5 carried out a thorough review of the ATS route network in the MID Region and identified ATS routes to be created, deleted or re-aligned. Furthermore the Group also considered the ATS route requirements, identified within the framework of the EMARSSH (*Revised ATS Route Structure: Asia to Middle East/Europe, South of the Himalayas*) meetings, transgressing the MID Region and agreed that the Secretariat will initiate action for the inclusion of these routes in the MID Basic ANP Document.

5.2.4 The meeting also noted the editorial amendments carried out to the MID ANP Document regarding the identification of Lower and Upper Airspace ATS routes. Refer to MID Basic ANP Part V Air Traffic Management (ATM). Additional ATS routes to be created, including EMARSSH routes affecting the MID Plan, are indicated at **Appendix 5B** to the report on Agenda Item 5.

5.2.5 The meeting noted with appreciation the initiatives taken by Jordan, Lebanon and Syria for the convening of a meeting with a view to consider ways and means of enhancing airspace capacity within their respective FIRs. To this effect the meeting noted that a new ATS route between KHALDEH (KAD) - CHEKKA (CAK) LEBOR DAMASCUS (DAM) - BUSRA HAZEM - QUEEN ALIA (QAA) was agreed upon and is available to international traffic with effect from 1 November 2001.

5.2.6 The Meeting was also informed of the creation of the following ATS route within

- LABNI (165620 N 0410921 E)
- RIYAN (N14 40.3 E049 23.5) (HARGEISA)
- SAYUN (N15 57.7 E048 47.2) HAIMA

5.2.7 MIDANPIRG also noted that some ATS routes which were urgently required by the users would also be included in the MID Basic ANP document. However, it was pointed out that some of these requirements could not be met at this stage as they transgress through restricted/prohibited airspaces and non-implementation status will be indicated by appropriate notes in the Plan.

MIDANPIRG/7
Report on Agenda Item 5

Implementation of RNP/RNAV in the MID Region

5.2.8 The meeting noted the successful implementation of selected priority routes for the introduction of RNP 5 in the MID Region (*Phase 1*) and the development of a Phase 2 implementation strategy by the RNP/RNAV TF/5 meeting, which was held in Cairo from 10-13 June 2001. It was noted that a system of RNP/RNAV area would gradually be introduced where feasible, instead of the existing RNP/RNAV route system. This methodology will enable a more flexible utilization of the airspace. With a view to achieve maximum benefits from the phase 2 implementation strategy, the need for close co-ordination and cooperation with the military authorities was emphasized. The meeting also highlighted the need for interregional co-ordination for the harmonization of the implementation process.

5.2.9 The meeting accordingly endorsed the conclusions emanating from the RNP/RNAV Task Force regarding the need for interregional co-ordination with the EUR and ASIA/PAC Regions with a view to address interface issues. Based on the foregoing the following Conclusions were formulated:

CONCLUSION 7/5: 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) the MID Region will establish RNAV/RNP areas instead of RNP/RNAV routes with a view to make maximum flexible use of the 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 in lieu of the present bi-directional routing network with a view to introduce parallel/flexible routes in an RNP 5 environment and thus paving the way for the safe introduction of RVSM in November 2003;
- d) the use of GNSS as a primary/supplemental means of navigation will be introduced as soon as possible, in an evolutionary manner, in accordance with the MID Region GNSS implementation strategy;
- e) the military authorities be fully involved in the planning process; and
- f) the tentative date for the implementation of the RNAV/RNP areas be 28 November 2002 (*one year prior to the implementation of RVSM*).

CONCLUSION 7/6: INTERREGIONAL COOPERATION

That the MID Region States organize regular interface meetings with the AFI, EUR and ASIA/PAC Regions with a view to harmonize procedures and implementation time-frames for the implementation of the different elements of the MID CNS/ATM Plan.

MIDANPIRG/7
Report on Agenda Item 5

5.2.10 MIDANPIRG noted that the Region has agreed to endorse existing provisions regarding airworthiness and operational approval procedures for RNP 5 and RNP 10 operations developed by Eurocontrol and the FAA and the following conclusion was formulated:

CONCLUSION 7/7: AIRWORTHINESS AND OPERATIONAL APPROVAL FOR RNP 5 AND RNP 10 OPERATIONS IN THE MID REGION

That with a view to facilitate and harmonize the airworthiness and operational approvals procedures for RNP 5 and RNP 10 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 RNP 5 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.

5.2.11 The meeting also noted that the use of GNSS as a supplemental means of navigation will facilitate the operational approval of aircraft intending to operate in within RNP 5/RNP 10 areas in the MID Regions. The meeting accordingly framed the following conclusion:

CONCLUSION 7/8: IMPLEMENTATION OF GNSS IN THE MID REGION

That recognizing that the use of GNSS will significantly facilitate RNP operational approvals in the MID Region:

- a) States use JAA Guidance Material on Airworthiness and Operational Criteria for use of navigation systems in European airspace designated for basic RNAV (RNP 5) operations;
- b) States use the FAA Order 8400.12 for the granting of RNP 10 operational approvals; and
- c) States issue an AIC on the use of GNSS as a supplemental means of navigation on the AIRAC date of **18 April 2002** and ensure that provisions regarding the use of GNSS be included in their national legislation.

Implementation of RVSM in the MID Region

5.2.12 Under this agenda item, the meeting was apprised of the progress achieved within the framework of the RVSM Task Force, which was established by MIDANPIRG/6 meeting under Conclusion 6/9 with the view to plan for the safe implementation of RVSM in the MID Region with effect from 27 November 2003 (*tentative date*).

MIDANPIRG/7
Report on Agenda Item 5

5.2.13 MIDANPIRG noted the review of the conclusions and decisions emanating from the RVSM Task Force meetings which was carried out by the ATM/SAR/AIS Sub-Group with a view to ensure the timely implementation of the different tasks which have been agreed upon. It was noted that the region has instituted procedures for ensuring that all parameters are taken into account for ensuring that the safety objectives are met. The following issues were addressed:

- the establishment of a regional safety and monitoring agency;
- Safety analysis for RVSM operations;
- the establishment of procedures for:
 - o reporting large height deviations;
 - o reporting communications failures;
 - o the RVSM monitoring requirements;
- demarcation of the MID RVSM implementation area;
- the need for the participation of the military authorities in the planning and implementation process;
- establishment of non-exclusion zones with a view to accommodate non-RVSM capable aircraft within RVSM airspace;
- nomination by States of an RVSM programme manager for monitoring the planning and implementation process;
- training requirements;
- tentative date for the implementation of RVSM;
- guidance material for airworthiness and operational approvals; and
- funding

5.2.14 Based on the foregoing, the following Conclusions/Decisions were formulated:

CONCLUSION 7/9: ESTABLISHMENT OF A REGIONAL SAFETY AND MONITORING AGENCY

That,

- a) the task of monitoring safety in conjunction with implementation of RVSM in the Middle East Regions be assigned to a Central Monitoring Agency;
- b) the monitoring agency, referred to as the Middle East Central Monitoring Agency (MECMA), will be established and staffed by GCAA) based at the Head Office in Abu Dhabi; and
- c) the Terms of Reference of the MECMA is at **Appendix 5C** to the report on Agenda Item 5

CONCLUSION 7/10: SAFETY ANALYSIS

That, the safety analysis required for RVSM implementation in the Middle East Region be carried out by MECMA under the auspices of the UAE General Civil Aviation Authority initially based on information from, or in cooperation with one or more suitably qualified regional organizations.

MIDANPIRG/7
Report on Agenda Item 5

CONCLUSION 7/11: REPORTING OF DATA FOR CARRYING OUT SAFETY ASSESSMENT

That:

- a) all States institute procedures for reporting of data, incidents and conditions necessary for performing the collision risk calculations prerequisite for RVSM implementation to MECMA. The data will include, but not necessarily be limited to:
 - i) height deviations of 300 ft or more and use the altitude deviation form developed within the frame work of the RVSM Task Force for the reporting of the data to MECMA ;
 - ii) total number of IFR movements for each month to MECMA;
 - iii) the average time per movement spent in the level band FL290 - FL410 and report the value to MECMA along with the basis of the calculation;
 - iv) ATC/ATC coordination failures;
 - v) Turbulence; and
 - vi) Traffic data.
- b) MECMA shall ensure that further processing and evaluation of this data within its Terms of Reference and identify or develop methodologies for assessing risk associated with traffic and conditions prevailing within the MID Region.

CONCLUSION 7/12: MONITORING REQUIREMENTS

That,

- a) Operators having met the monitoring requirements indicated at **Appendix 5D** to the report on Agenda Item 5 for a given fleet/type of aircraft, will be accepted as having satisfied the RVSM monitoring requirements for the Middle East Region. For Middle East operators, documentation for monitoring shall be provided to MECMA; and
- b) MECMA will update the table in the light of data and experience gained in other Regions.

CONCLUSION 7/13: CIVIL/MILITARY COORDINATION

That, in order to ensure the safe and coordinated implementation of RVSM in the MID Region, States should ensure that the Military Authorities are fully involved in the planning and implementation process and give due regard to LIM MID (COM/MET/RAC) RAN Meeting 1996, Recommendations 2/9 to 2/14.

MIDANPIRG/7
Report on Agenda Item 5

CONCLUSION 7/14: CREATION OF NON EXCLUSION AREAS WITHIN RVSM AIRSPACE

That, with a view to facilitate the integration of earlier generation aircraft not approved for RVSM operations, intending to operate on domestic networks within RVSM airspace, non exclusion areas be created in order to accommodate these operations.

CONCLUSION 7/15: NOMINATION OF AN RVSM PROGRAMME MANAGER

That, States/service providers nominate an RVSM Programme Manager who will be responsible for ensuring that the proper mechanism be put in place for the safe implementation of RVSM and will also act as the focal point contact person.

CONCLUSION 7/16: IMPLEMENTATION OF RVSM IN THE MID REGION

That,

- a) RVSM will be implemented in the MID Region between FL 290 and FL 410 inclusive on 27 November 2003
- b) States in the MID Region ensure that all requirements be met with a view to safely implement RVSM on the AIRAC date of 27 November 2003.
- c) Implementation of RVSM in the MID Region be harmonized and coordinated with the implementation timeframes adopted within the ASIA/PAC Region for States South of the Himalayas.

Note: States which do not fulfil their requirements regarding the implementation milestones for the implementation of RVSM within their respective FIRs, will be initially excluded from the MID RVSM area.

CONCLUSION 7/17: TRAINING OF ALL PERSONNEL INVOLVED WITH THE IMPLEMENTATION OF RVSM IN THE MID REGION

That,

- a) ICAO explores the possibility of assisting States of the MID Region through a Special Implementation Project (SIP) for training of personnel involved with the implementation of RVSM in the MID Region;
- b) Seminars/Workshops be organized in the Region for training of air traffic services personnel in the RVSM field;
- c) States be invited to approach training institutions for the development of a training module in the RVSM field representative of the MID Region.

MIDANPIRG/7
Report on Agenda Item 5

- d) States having difficulties in implementing RVSM implementation programme, may either individually or ingroup explore the possibility of seeking outside expertise

CONCLUSION 7/18: GUIDANCE MATERIAL FOR AIRWORTHINESS AND OPERATIONAL APPROVAL

That, States in the MID Region adopt 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.

CONCLUSION 7/19: RVSM LEGISLATION

That, the MID Region States are invited to examine their legislations and regulations to identify any changes required for RVSM to confirm its compliance as indicated in ICAO ANNEX 6 Part 1 Chapter 7 Para. 7.2.3.

DECISION 7/20: PARTICIPATION OF REPRESENTATIVES OF STATES INVOLVED IN RVSM APPROVAL PROCESS

That, representatives of States involved in the RVSM approval process of aircraft and operators, be invited to attend the future meetings of the Middle East RVSM Task Force.

CONCLUSION 7/21: FUNDING OF THE RVSM IMPLEMENTATION PROGRAMME

That, regulatory bodies, operators, service providers, and other stakeholders be granted budgetary allocations during fiscal year 2002 and 2003 for acquisitions and other activities necessary for ensuring that all the requirements be met in a timely manner in order to safely implement RVSM in the MID Region on 27 November 2003.

Regional ATS Incident analysis

5.2.15 MIDANPIRG/7 meeting recalled that the ATS Incident Analysis Task Force was established by Decision 5/26 of MIDANPIRG/5 pursuant to Recommendation 2/31 (Reporting and Analysis of ATS Incidents) and Conclusion 2/32 (Regional ATS Incident Analysis) of the LIM MID (COM/MET/RAC) RAN meeting held in 1996.

5.2.16 It was pointed out that the objective of the Task Force was:

- i) to develop procedures for the analysis of ATS incidents at a regional level with a view to using this information in the identification of deficiencies in the MID Region;
- ii) for use by States of the region in taking corrective action to rectify deficiencies in the State, the on-going development of their ATS systems, and for educational purposes; and
- iii) for use by the Regional Office and MIDANPIRG as a means of identifying air navigation deficiencies in the region.

MIDANPIRG/7
Report on Agenda Item 5

5.2.17 The meeting agreed that the Regional ATS Incident Analysis Task Force should meet on a regular basis in line with the objectives set forth by MIDANPIRG/6 meeting conclusion 6/11 with a view to evaluate ATS incidents which have been reported in the MID Region. It was also agreed that a non punitive voluntary incident reporting system be established and arrangement be made to afford protection to the sources of information as this system is fundamental to voluntary reporting.

5.2.18 It was agreed that IATA should play a leading role in the Task Force and assist in the collection of statistical data through Pilot reports using the ICAO Model air traffic incident report form and the classifications of ATS incidents in ADREP 2000. The meeting suggested that both IFALPA and IFATCA participate in the Task Force as observers. Based on the foregoing the meeting framed the following Decision.

DECISION 7/22: REGIONAL ATS INCIDENT ANALYSIS TASK FORCE

That:

- a) IATA plays the focal role and provides the necessary data on ATS incident reports in the MID Region with a view to assist the ATS Incident Analysis Task Force in carrying out its task;
- b) IFALPA and IFATCA be invited to participate in the Task Force meeting as observers; and
- c) A non-punitive voluntary incident reporting system be established for the MID Region with provisions for protecting the sources of the information.

Implementation of GNSS in the MID Region

5.2.19 The meeting noted that the GNSS Task Force meeting, which was held in Cairo from 9 to 11 January 2002, took into account the concerns of the RNP/RNAV Task Force meeting regarding the use of GNSS for en-route purposes and agreed that it would be used as a supplemental means of navigation with effect from 18 April 2002. The Report on the GNSS Task Force meeting is covered under Agenda Item 6.2.

Implementation of ACAS II in the MID Region

5.2.20 The meeting noted that pursuant to MIDANPIRG/6 Conclusion 6/, ACAS II carriage and operation is mandatory in the MID Region for aircraft having a maximum take-off mass in excess 15,000 kg or approved passenger seating configuration of more than 30 passengers from 1 July 2001. It was pointed out that some operators could not meet the requirements of ACAS II specifications and had requested exemptions. The meeting agreed that States from the MID Region may consider granting exceptional exemptions till 2003. It was however emphasized that exemptions to the carriage of ACAS II in the Region will be granted on a case by case basis with supporting documentations indicating that positive action is being taken to upgrade or install ACAS II Version 7.

MIDANPIRG/7
Report on Agenda Item 5

Other ATM Matters**ATS route proposed by IATA**

5.2.21 The meeting noted the requirement for a parallel route proposed by IATA with a view to relieve traffic congestion on trunk routes between the Gulf area and the Eastern Mediterranean in an RNAV/ RNP 5 environment. The need for further consultations with Syria and Cyprus was emphasized for the harmonization of this proposal with the EUR region. The meeting agreed in principle to the creation of a parallel route structure from Kariatain to significant point PIMAL (N26 26.5 E051 22.1) passing through the Damascus, Amman, Jeddah and Bahrain FIRs respectively. It was agreed that the final alignment/adjustments would be discussed at the RNP/RNAV Task Force meeting and implementation would be carried out only after the conclusive results of the safety assessments to be carried out by MECMA with a view to ensure that the target level of safety is met.

Note: Bahrain, Jordan, Lebanon and Saudi Arabia have already endorsed the proposal for the creation of the segments of the parallel route structure within their respective FIRs.

Extension of the route network proposed by Oman.

5.2.22 The meeting also reviewed the proposal by Oman for a complete revision of the route network from the Gulf of Oman into the MID Region. It was noted that this proposal was quite different from the proposed EMARSSH route network agreed during the EMARSSH TF/5 meeting in New Delhi, India, 26-30 November 2001.

- Saudi Arabia and Iran agreed to the extension of the proposed parallel RNP/RNAV routes from the adjoining FIRs of Bahrain and Emirates respectively.
- The final adjustments to the proposal will be carried out at the next RNP/RNAV task Force meeting (April, 2002).
- A proposal for a revised route network will be submitted to the Secretariat in due course for inclusion of these requirements in the MID Air Navigation Plan.

Search and Rescue in the MID Region

5.2.23 The meeting noted the basic principles, operational requirements and planning criteria related to search and rescue services, which have been developed for the MID Region and which are considered as the minimum necessary for effective planning of SAR facilities and services as indicated in the SAR Part of the MID Basic Air Navigation Plan (Basic ANP). A detailed description/list of facilities and/or services to be provided to fulfil these requirements as indicated in the SAR Part of the Facilities and Services Implementation Document (FASID).

MIDANPIRG/7
Report on Agenda Item 5

5.2.24 It was pointed out that to date, although no major deficiencies have been reported in the SAR fields, a detailed evaluation on the status of implementation of recommendations/conclusions emanating from the LIM/MID RAN Meeting 1996 and other relevant recommendations in the SAR fields has not been carried out. To this effect, the meeting reviewed the requirements in the SAR fields, and was of the view that the status of implementation of all current recommendations should be clearly indicated. It was agreed that the Secretariat will, in consultation with States concerned, update the table at **Appendix 5E** to the report on Agenda Item 5 based on the foregoing the meeting framed the following Decision:

DECISION 7/23: STATUS OF IMPLEMENTATION OF ICAO REQUIREMENTS IN THE SEARCH AND RESCUE FIELDS

That the Secretariat, in consultation with States concerned, updates the list at **Appendix 5E** to the report on Agenda Item 5 highlighting the status of implementation of the different conclusions/recommendations in the search and rescue fields indicated in the MID Air Navigation Plan.

5.2.25 The meeting noted with appreciation the offer by Saudi Arabia to provide SAR notification to all States within the coverage area of the MCC/LUT station in Jeddah. The meeting accordingly framed the following Conclusion:

CONCLUSION 7/24: IMPLEMENTATION OF COSPAS/SARSAT IN MCC/LUT STATION IN SAUDI ARABIA

That, States within the coverage area of the COSPAS/SARSAT MCC/LUT station in Saudi Arabia take advantage of the possibilities offered by the station for the support of search and rescue using satellite aided tracking technology in alerting and locating distress sites through bilateral coordination.

5.2.26 The meeting noted the presentation by Jordan regarding search and rescue exercises being carried out on a regular basis in accordance with the requirements of the MID Plan. It was however pointed out that the scope of the exercises should extend beyond the territorial boundaries of one State and the need for joint exercises with neighbouring States was emphasized. The meeting also noted the request by Jordan for further cooperation and co-ordination with adjacent States with a view to make maximum use of all available resources in the case of an incident/accident. To this effect, the need for the elaboration and signing of appropriate letter of agreements in the SAR fields with adjacent States was highlighted.

Review of ICAO requirements in the AIS/MAP fields

5.2.27 Under this Agenda Item, the meeting was provided with the outcome of the Fifth meeting of the ATM/SAR/AIS Sub-Group. It was noted that the requirements in the Aeronautical Information Services (AIS) and Aeronautical Charts (MAP) fields for the MID Region have been included in Part VIII of the *draft* Basic Air Navigation Plan (ANP) and the Facilities and Services Implementation Document (FASID) for the Middle East Region. It was pointed out that most States of the Region have implemented the provisions of the Plan. However, the major challenge is in the automation of AIS and the eventual development of an integrated MID Region AIS automation system, as well as the implementation of a quality assurance system.

MIDANPIRG/7
Report on Agenda Item 5

5.2.28 Taking into account time constraints and the specialized nature of the subject a proposal for the setting up of an AIS automation Work Group to lay down the necessary framework for the development of an integrated MID Region AIS automation was made by the Secretariat of the ATM/SAR/AIS SG/5. However, indications were that it was premature to establish such a working group and the subject could still be addressed within the framework of the ATM/SAR/AIS Sub-Group.

5.2.29 It was also indicated that most States in the Region had already set up their AIS automation plans and no problems were encountered. Although some States were in favour of the creation of this work group, no consensus was reached and this idea was dropped for the time being. It was however pointed out that with a view to harmonize and rationalize AIS automation implementation plans in the region, some States may still require guidance and assistance in the field. It was agreed that ICAO Middle East Office will closely monitor the progress of implementation of rationalized AIS automation plans in the region and will submit a report to the next ATM/SAR/AIS Sub-Group meeting for consideration.

5.2.30 The meeting also noted that Iran has developed and implemented a system for the automation of NOTAM processing (NOTAM reception, verification, correction and repetition). The second phase of this project aims to develop the following functions:

- access to meteorological database;
- input of flight plans;
- production of Pre-flight information Bulletins.

5.2.31 The meeting reviewed the status of implementation of WGS-84 and noticed that some MID States have not yet reported in accordance with MIDANPIRG/6 Conclusion 6/1- (*Uniform Format for the Reporting of WGS-84 implementation*). *The meeting stressed again* the requirements for the use of this uniform format, attached as **Appendix 5F** to the report on Agenda Item 5, and therefore formulated the following Conclusion:

CONCLUSION 7/25: REPORT OF WGS-84 IMPLEMENTATION

That, in accordance with MIDANPIRG/6 Conclusion 6/1, the MID Region States that have not yet provided the reporting of WGS-84 implementation using the uniform format developed by ICAO, are urged to do so and to send the completed table to the ICAO Middle East Regional Office as soon as possible.

5.2.32 Details related to the status of WGS-84 implementation in the MID Region are attached as **Appendix 5G** to the report Agenda Item 5.

5.2.33 With regard to the status of implementation of required ICAO charts, the meeting noted that a large part of the work has already been completed, however some MID States are not fully compliant with ICAO Annex 4 Standards and Recommended Practices especially regarding the production of the World Aeronautical Chart-ICAO 1:1 000 000.

Deficiencies in the ATM/SAR and AIS/MAP fields

5.2.34 The meeting reviewed and updated the list of deficiencies in the ATM/SAR and AIS/MAP fields which are indicated at **Appendices 7C** and **7D** to the report on Agenda Item 7.

MIDANPIRG/7
Report on Agenda Item 5

5.3 COM/MET

5.3.1 Under this Item, the meeting was provided with the outcomes of the fourth meeting of the MIDANPIRG COM/MET Sub-Group.

Review of AFS/ATN TF/7 Report***Routing Directory***

5.3.2 The meeting was informed that the ICAO MID Office is still continuing the survey concerning the Circuit Loading Statistics in order to provide the next CNS/MET SG/5 meeting with the complete situation of all centers and existing network in the Middle East Region.

5.3.3 The meeting noted that the COM/MET SG/4 meeting reviewed the 19th Edition of MID Routing Directory that was published in July 2001. The revised Edition of MID Routing Directory is attached as **Appendix 5H** to report on Agenda Item 5.

5.3.4 The COM/MET SG/4 meeting noted that the coordinating body that is already in charge of collecting, exchanging and coordinating relevant information between EUR and MID regions, was assigned a study on the development of the table on CIDIN Routing Directory.

5.3.5 The meeting was presented with a new format of AFTN/CIDIN Routing Directory that is being used by the EUR Region. This format contains more detailed information necessary that could be used for the coordination between centers in the Region.

5.3.6 In view of the foregoing, the meeting agreed to the following Conclusion:

CONCLUSION 7/26: MID AFTN/CIDIN ROUTING DIRECTORY

That,

- a) In updating and publishing an AFTN/CIDIN Routing Directory the MID Region uses the new format adopted in EUR Region and included in **Appendix 5I** to the report on Agenda Item 5
- b) The coordinating body to be tasked to complete the development of tables on CIDIN Routing Directory.

ATN Seminar in the MID Region

5.3.7 As for the evolutionary introduction of the ATN in the Region, the meeting noted that emphasis would be put on the identification of needs/benefits and places where such benefits can be accrued using ATN applications (AMHS and AIDC).

5.3.8 The meeting agreed that a Seminar oriented on ATN applications be organized and tasked the ICAO MID Office to make necessary arrangements in inviting experts who will animate this Seminar.

5.3.9 Accordingly, the meeting reached the following Conclusion:

MIDANPIRG/7
Report on Agenda Item 5

CONCLUSION 7/27: ORGANIZATION OF ATN SEMINAR IN THE MID REGION

That, a Seminar be organized in the framework of implementation of ATN in the MID Region in order to help in developing a clear understanding of the initial implementation aspects of ATN.

PTT Support and Cooperation for Aeronautical Telecommunications Circuits

5.3.10 Noting that the outages of PTT terrestrial links may affect all aeronautical sectors, the meeting decided to reformulate the title of AFS/ATN Conclusion 7/2 and agreed to the following Conclusion:

CONCLUSION 7/28: PTT SUPPORT AND COOPERATION FOR AERONAUTICAL TELECOMMUNICATIONS CIRCUITS

That, States are urged to:

- i) Ensure that their National Telecommunication Administrations are aware of the importance of aeronautical circuits (both voice and data) for the safety of air traffic
- ii) Improve the co-operation and co-ordination with their National Telecommunication Administrations in order to rectify faults on the circuits without delay thus preventing prolonged outages.

Future Work of the ATN Study Group

5.3.11 The meeting noted that the tasks of the ATN Study Group including the technical decision on the use of OLDI in the Region that were already reviewed by the CNS/ATMIC/SG1 meeting are dealt under Agenda Item 6 to this report.

5.3.12 Emphasizing on the need to speed up the ATN transition, the meeting requested the AFS/ATN TF to direct its efforts towards the ATN implementation in accordance with the transition guidelines developed by the AFS/ATN TF/6 meeting.

Review of ANP/FASID TF/2 Report

5.3.13 The meeting agreed with the amendments made by the COM/MET SG/4 when reviewing the CNS part of the ANP/FASID TF/2 report. These amendments related to tables CNS 1A, CNS 1B, CNS 1C, CNS 4 and Appendix B to table CNS 2, refer to MID Basic FASID - Part IV Communications, Navigation, Surveillance (CNS) Table.

ICAO Position with regard to WRC-2003

5.3.14 The meeting was presented with a summary indicating the IATA draft positions aimed for the establishment of a common global aviation position for the ITU WRC-2003 Conference.

5.3.15 The meeting noted with satisfaction that the ICAO and IATA positions with regard to WRC-2003 are in harmony with each other on many aspects of protection of aeronautical radio spectrum. It was recalled that the ICAO Position with regard to WRC-2003 was attached to States Letter E.3/5-01/79 dated 10 August 2001.

MIDANPIRG/7
Report on Agenda Item 5

5.3.16 The meeting noted that ICAO has to participate in the forthcoming ITU Plenipotentiary Conference planned in the last quarter of year 2002. In view of this, the meeting suggested that ICAO Regional Office should also participate in the work of the group that would be preparing, under the aegis of the League of Arab States, a regional position for the plenipotentiary conference.

5.3.17 Since the protection of aeronautical spectrum is of paramount importance for airline industry and Civil Aviation Authorities, the meeting was of the view that the issue.

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

CONCLUSION 7/29: ICAO POSITION WITH REGARD TO WRC-2003

That, the Middle East States are urged, as a matter of a priority to explain the ICAO concerns to their respective Ministerial Authorities, the League of Arab States and the Arab Civil Aviation Authorities, in order to support the ICAO and IATA concerns with regard to protection of aeronautical frequency at WRC-2003.

Middle East VSAT network

5.3.19 Further to the report of the MIDANPIRG/6 meeting, the meeting was presented with a preliminary cost effectiveness study for the implementation of a VSAT network in the MID Region.

5.3.20 The meeting noted that the Middle East VSAT network for ground-ground data/voice communications is a flexible system, the communication requirements of which are in conformity with the MID Air Navigation Plan and FASID. This study is provided in **Appendix 5J** to the report on Agenda Item 5

5.3.21 The meeting agreed on the proposed preliminary study, however it should be refined with additional technical and financial set of information in order to validate the concept of the MID VSAT, as described in the preliminary study.

5.3.22 The meeting was informed that a Middle East Special Implementation Project (SIP) would be conducted for this project. Thus, the second phase of the MID SIP will focus on the study of the technical feasibility and economic viability of the Middle East Regional satellite-based ground-ground network to transport data and voice.

5.3.23 Based on the above information, the meeting agreed to the following Conclusion:

CONCLUSION 7/30: PRELIMINARY STUDY OF THE MIDDLE EAST VSAT NETWORK (MID VSAT)

That,

- i) the concept of the Middle East VSAT Network should be validated on the basis of a comprehensible study, comprising of technical feasibility and economic viability through MID SIP.
- ii) the MID States should provide the ICAO Middle East Regional Office with all technical and financial information allowing this study to be undertaken through a SIP

MIDANPIRG/7
Report on Agenda Item 5

Any other business

5.3.24 Noting that the Work Program of the COM/MET Sub-Group covers all CNS matters in the MID Region, the meeting agreed to change the name of COM/MET Sub-Group and therefore reached the following Decision:

DECISION 7/ 31: DISSOLUTION OF THE COM/MET SUB GROUP AND CREATION OF THE CNS/MET SUB GROUP

That, the COM/MET Sub Group be dissolved and renamed as the CNS/MET Sub-Group with no change to the terms of reference as in MIDANPIRG Handbook.

WAFS

5.3.25 The meeting noted that transition to the final phase of WAFS should be completed by November 2004 (date of applicability for Amendment 73 to Annex 3). One of the objectives for the final phase of WAFS, would be the eventual cessation of T4 chart broadcasts on the SADIS Satellite distribution system in order to enable a significant reduction in transmitted data volumes. As the current plan was that the T4 element of the broadcast should be terminated in 2004, there was considered to be an urgent need to ensure that all SADIS recipient States would be capable to satisfactorily decode GRIB and BUFR messages on an operational basis prior to cessation of the T4 broadcast.

5.3.26 The meeting agreed that an initial assessment of the training requirements should be performed by the United Kingdom (SADIS Provider State) through a questionnaire to be sent to the States by the ICAO MID Regional Office. Special training, if needed in the MID Region, should be organized by the UK in coordination with ICAO and WMO.

CONCLUSION 7/32: INTRODUCTION OF THE GRIB AND BUFR CODE FORMS IN THE SADIS BROADCASTS

That,

- a) the SADIS Provider State, in coordination with ICAO and WMO, perform an initial assessment of the need for special training by the MID Region States in the use of the GRIB code form,
- b) if necessary, arrange training for States in the MID Region; and
- c) similar provisions be made for assessing and carrying out training in the use of the BUFR code form at a later date.

SADIS Operations

5.3.27 The meeting was pleased to note that all the States in the MID Region except for four had installed very small aperture terminal (VSAT) to receive WAFS data and charts and OPMET messages via SADIS.

MIDANPIRG/7
Report on Agenda Item 5

5.3.28 The meeting noted also that the COM/MET SG/4 had reviewed the SADIS strategic assessment tables, representing the estimated requirements for OPMET information in alphanumeric format From the MID Region for the period 2001 2005 to be forwarded to the SADISOPSG.

5.3.29 The SADISOPSG/6 (Paris 28 May 1 June 2001) had reviewed and adopted the OPMET update procedures as implemented in the EUR Region. Since these procedures had proved to be efficient, it was suggested by the SADISOPSG that similar procedures should be considered by the PIRGs concerned in the other ICAO Regions served by SADIS. In this regard the COM/MET SG had made an initial review of the EUR OPMET update procedures and agreed that similar procedures would be beneficial for the MID Region, but needed to be further reviewed before a decision could be taken concerning the implementation in the MID Region. The meeting shared this view and agreed to the following Conclusion:

CONCLUSION 7/33: IMPLEMENTATION OF OPMET UPDATE PROCEDURES IN THE MID REGION

That, procedures similar to the EUR OPMET update procedures be further reviewed by the ICAO MID Office, in coordination with the States concerned, for consideration by the CNS/MET SG/5 meeting in view of their implementation in the MID Region.

Composition of the SADIS Operations Group (SADISOPSG)

5.3.30 During SADISOPSG/6 the composition of the SADISOPSG had been discussed in view of the introduction of the mandatory cost recovery of the SADIS service as of 1 January 2001. In particular it was felt that it would not be appropriate for States not participating in the cost recovery and hence not receiving the SADIS broadcast to be members of the SADISOPSG.

5.3.31 Currently Egypt and Saudi Arabia were the nominated members to represent the SADIS user States in the MID Region. In view of the introduction of the mandatory cost recovery of the SADIS service, the meeting agreed to the following Conclusion concerning the principles for the regional representation in the SADISOPSG.

CONCLUSION 7/34: COMPOSITION OF THE SADIS OPERATIONS GROUP (SADISOPSG)

That,

- a) members of the SADISOPSG only be from States which are users of the service and hence participate in the mandatory cost recovery scheme; and
- b) in accordance with this principle, the MID members in the SADISOPSG will be from Egypt and Saudi Arabia.

5.4 ANP/FASID

Working Draft for the Final MID Basic Air Navigation Plan, Facilities and Services Implementation Documents

5.4.1 The meeting noted that the MID Basic ANP and FASID reflecting the future plans of the States in the MID Region, which was developed by ANP/FASID Task Force, along with amendment proposal was circulated to Provider States and Users to obtain regional agreement for replacement of the existing Air Navigation plan format (Doc 9708).

MIDANPIRG/7
Report on Agenda Item 5

5.4.2 Subsequently, the meeting noted that the MID Regional Office had incorporated all changes and modifications to MID ANP and FASID, which have been suggested by Provider States and Users and was submitted to ICAOHQ for completion, approval and publication as a matter of priority, in accordance with established procedures.

5.4.3 The meeting received the updated draft, that was prepared by ICAOHQ, during the MIDANPIRG/7 meeting. Each of the Provider States and user organizations were handed over a copy of the draft documents on a CD-ROM in PDF Format with a request that all material in the draft MID Basic ANP and FASID should be checked by the MIDANPIRG Provider States and Users for correctness and applicability within the region and tables populated with data as necessary. The Group was informed that, in addition the draft documents had been placed as a working document in PDF Format on MID Office Website (www.icao.int/mid).

5.4.4 The meeting noted that, when separating the document into two volumes (MID Basic ANP and FASID), the existing edition of MID ANP (Doc 9708) was used. In addition, the CAR/SAM Basic ANP and FASID, which besides the planning material for conventional systems contain the material concerning CNS/ATM systems, was used as a template in preparing the draft MID documents.

5.4.5 The MIDANPIRG/7, as a result of discussion, urged States and Users to review and provide their comments to ICAO MID Regional Office by 31 March 2002. Accordingly the meeting agreed to the following Conclusion:

CONCLUSION 7/35: REVIEW OF DRAFT MID BASIC ANP AND FASID

That, States and Users review the draft MID Basic ANP and FASID, as prepared by ICAO HQ, and submit comments/input to ICAO MID Regional Office by 31 March 2002.
