



**INTERNATIONAL CIVIL AVIATION ORGANIZATION**

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

**REPORT OF THE SIXTH MEETING OF  
ATM/SAR/AIS SUB-GROUP**

**Cairo, 28 31 January 2003**

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

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

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

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ATM/SAR/AIS SG/6  
History of the Meeting

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

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

1.1 The Sixth Meeting of the MIDANPIRG ATM/SAR/AIS Sub-Group (ATM/SAR/AIS SG/6) was held at the meeting room of the ICAO Middle East Regional Office, Cairo, from 28 31 January 2003.

### **2. OPENING**

2.1 The meeting was officially opened by Mr. A. Zerhouni, ICAO Regional Director, Middle East Regional Office, Cairo who welcomed the delegates to Cairo and wished them a successful and fruitful meeting. He pointed out that the ATM/SAR/AIS Sub-Group has a very important role to play within the framework of the MIDANPIRG planning mechanism and, in particular, in the implementation of the global CNS/ATM implementation plan. He informed the meeting that the President of ICAO has, on behalf of the Council, approved the new ATS route network for the MID Region and the Basic ANP would be amended accordingly to reflect the new requirements. He also expressed his satisfaction and appreciation to the UAE for supporting the activities of the Middle East Central Monitoring Agency (MECMA) and the significant progress which has been achieved through that mechanism. Mr. Zehrouni also urged the Sub-Group to give an impetus to the establishment of safety management systems in the region, which will become mandatory with effect from November this year.

2.2 Mr. Hamad M. Alaofi, Manager of ATS Planning, Presidency of Civil Aviation, Saudi Arabia, the chairman of the Sub-Group and Mr. M. Khonji, Deputy Regional Director, ICAO Middle East Office, also addressed the meeting and wished the participants a fruitful meeting.

### **3. ATTENDANCE**

3.1 The meeting was attended by a total of Forty-four participants from eleven States (Bahrain, Cyprus, Egypt, Iran, Jordan, Kuwait, Lebanon, Oman, Pakistan, Sudan and Saudi Arabia) and one Organization (IATA). The list of participants is at **Appendix A**.

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

4.1 The meeting was chaired by Mr. Hamad M. Alaofi, Manager of ATS Planning, Presidency of Civil Aviation, Saudi Arabia. Mr. D. Ramdoyal, Regional Officer for Air Traffic Management and Search and Rescue (RO/ATM/SAR) from the ICAO Middle East Cairo Office, was Secretary of the meeting, assisted by Mr. M Smaoui, Regional Officer Aeronautical Information and Charts (RO/AIS/MAP) and supported by M.R. Khonji, the Deputy Regional Director.

### **5. LANGUAGE**

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

### **6. AGENDA**

6.1 The following Agenda was adopted:

- |                  |  |
|------------------|--|
| Agenda Item 1:   | Follow-up of Decisions and Conclusions of MIDANPIRG/7 addressing the ATM/SAR and AIS/MAP fields. |
| Agenda Item 2.1: | Review of requirements of the MID ATS route network  |
| 2.2:             | Review of report of the RNP/RNAV Task Force/6  |
| 2.3:             | Review of report of the RVSM Task Force/4,5 and 6  |

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- 2.4: Review of report of the Second Regional ATS Incident Analysis Task Force (AIA-TF/2)
- Agenda Item 3: Review of the implementation status of ICAO requirements in the AIS/MAP field and other related issues
- WGS-84 - AIRAC System Aeronautical Charts
  - AIS Automation - Quality System
  - Follow-up of latest developments in the AIS/MAP field.
- Agenda Item 4: Review and update of MID Basic ANP and FASID documents
- Agenda Item 5: Review of air navigation deficiencies in the ATM/SAR and AIS/MAP fields.
- Agenda Item 6: Implementation of search and rescue services in the MID Region
- Agenda Item 7: Any other business

## 7. CONCLUSIONS AND DECISIONS DEFINITION

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

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

## 8. LIST OF DRAFT CONCLUSIONS AND DRAFT DECISIONS

- DRAFT CONCLUSION 6/1: IMPLEMENTATION OF THE NEW ATS ROUTE NETWORK
- DRAFT CONCLUSION 6/2: IMPLEMENTATION OF THE ROUTE NETWORK WITHIN CAIRO FIR
- DRAFT DECISION 6/3: AMENDMENT TO THE MID ATS ROUTE NETWORK
- DRAFT DECISION 6/4: ALLOCATION OF FIVE-LETTER NAME-CODES
- DRAFT CONCLUSION 6/5: ESTABLISHMENT OF CLOSELY SPACED PARALLEL RNP ROUTE SYSTEM
- DRAFT CONCLUSION 6/6: IMPLEMENTATION OF THE ATS SAFETY MANAGEMENT PROGRAMMES IN THE MID REGION
- DRAFT CONCLUSION 6/7: SEPARATION MINIMA TO BE APPLICABLE IN AN RNP 5 ENVIRONMENT
- DRAFT CONCLUSION 6/8: ENDORSEMENT OF GUIDANCE MATERIALS DEVELOPED WITHIN THE FRAMEWORK OF THE RVSM TASK FORCE

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DRAFT DECISION 6/9 :	TERMS OF REFERENCE AND WORK PROGRAMME OF THE ATS INCIDENT ANALYSIS TASK FORCE
DRAFT CONCLUSION 6/10:	METHODOLOGY FOR THE REPORTING AND ANALYSIS OF ATS INCIDENTS
DRAFT CONCLUSION 6/11:	ESTABLISHMENT OF A DATABASE AND THE REPORTING OF INFORMATION RELATING TO ATS INCIDENTS IN THE REGION
DRAFT CONCLUSION 6/12:	ESTABLISHMENT OF AN AWARENESS PROGRAMME FOR PROMPTING REPORT ON ATS INCIDENTS
DRAFT CONCLUSION 6/13:	ATC PROFICIENCY
DRAFT CONCLUSION 6/14:	COMMUNICATIONS/COORDINATION PROBLEMS
DRAFT CONCLUSION 6/15:	ESTABLISHMENT OF SAFETY MANAGEMENT SYSTEMS
DRAFT CONCLUSION 6/16:	INTEGRATED AERONAUTICAL INFORMATION PACKAGE
DRAFT CONCLUSION 6/17:	AIRAC SYSTEM
DRAFT CONCLUSION 6/18.:	NOTIFICATION OF DIFFERENCES
DRAFT CONCLUSION 6/19:	IMPLEMENTATION OF ICAO AERONAUTICAL CHARTS
DRAFT CONCLUSION 6/20:	RESPONSIBILITY FOR THE PRODUCTION OF THE WORLD AERONAUTICAL CHART ICAO 1:1 000 000 (WAC)
DRAFT CONCLUSION 6/21:	USE OF ND N FASID TABLE AIS-5 AND AIS-6
DRAFT CONCLUSION 6/22:	WGS-84 IMPLEMENTATION IN THE MID REGION
DRAFT DECISION 6/23:	AIS/MAP TASK FORCE
DRAFT CONCLUSION 6/24:	PROPER STATUS OF AIS
DRAFT CONCLUSION 6/25:	SURVEY ON AUTOMATION OF AERONAUTICAL INFORMATION SERVICES
DRAFT CONCLUSION 6/26:	INTRA AND INTER-REGIONAL CO-OPERATION IN AIS AUTOMATION
DRAFT CONCLUSION 6/27:	QUALITY SYSTEM
DRAFT CONCLUSION 6/28:	AIS QUALITY ASSURANCE AND AIS/MAP AUTOMATION PLANS
DRAFT CONCLUSION 6/29:	AIS/MAP SEMINAR/WORKSHOP IN THE MID REGION
DRAFT CONCLUSION 6/30:	ELIMINATION OF DEFICIENCIES
DRAFT CONCLUSION 6/31:	THE DEVELOPMENT AND PROMULGATION OF CONTINGENCY PLANS

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**PART II REPORT ON AGENDA ITEMS****REPORT ON AGENDA ITEM 1: FOLLOW-UP OF MIDANPIRG/7 CONCLUSIONS/DECISIONS IN THE ATM/SAR/AIS FIELDS**

1.1 Under this agenda item, the meeting was apprised of the outcome of conclusions and decisions emanating from MIDANPIRG/7 Meeting (Cairo, 21-25 January 2002). It was noted that MIDANPIRG/7 formulated 18 Conclusions and 3 Decisions relating to the ATM/SAR/AIS fields. It was recalled that ATM/SAR/AIS Sub-Group is accordingly charged to follow-up on the implementation process and inform MIDANPIRG on progress achieved and problems being encountered. The status of implementation/follow-up action is at **Appendix 1A** to the report on Agenda Item 1.

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ATM/SAR/AIS SG/6  
Appendix 1A to the Report on Agenda Item 1

STATUS OF IMPLEMENTATION OF CONCLUSIONS/DECISIONS EMANATING FROM MIDANPIRG/7 MEETING			
CONCLUSION/DECISION		IMPLEMENTATION STATUS	REMARKS
C7/5	RNAV/RNP Implementation strategy for the MID Region	On-going	Need to follow-up on the participation/involvement of the military authorities
C7/6	Interregional coordination	On-going	Meeting with Asia Region organized in October 2003 Meeting with EUR Region being coordinated-August 2003 ( <i>tentative date</i> )
C7/7	Airworthiness and operational approval for RNP5 and RNP 10 operations in the MID Region	Action taken	
C7/8	Implementation of GNSS in the MID Region	On-going activity	
C7/9	Establishment of a regional safety and monitoring agency	Action taken -Middle east Central Monitoring Agency (MECMA) established	Been requested to consider extending the activities of MECMA to cover the activities of ATS safety management (to follow-up)
C7/10	Safety analysis	On-going activity	
C7/11	Reporting of data for carrying out safety assessment	On-going activity	
C7/12	Monitoring requirements	Action taken	
C7/13	Civil/Military coordination	On-going activity	Need to follow-up
C7/14	Creation of non exclusion areas within RVSM airspace	On-going activity	Need to follow-up on procedures being implemented in adjacent regions
C7/15	Nomination of an RVSM Programme Manager	Action taken	
C7/16	Implementation of RVSM in the MID Region	An-going activity	Being followed up within the framework of the RVSM Task Force and MECMA
C7/17	Training of all personnel involved with the implementation of RVSM	On-going	Two seminars organized A SIP has been proposed to HQ for consideration States need to follow-up
C7/18	Guidance material for airworthiness and Operational approvals	Action taken	Draft Manual developed within the framework of the RVSM Task Force
C7/19	RVSM legislation	No feed back received	Need to follow-up
D7/20	Participation of representatives from States in the RVSM approval process	Action taken	
C7/21	funding of the RVSM implementation programme	Action taken	
D7/22	Regional ATS Incident analysis Task Force	Action taken	2 <sup>nd</sup> Meeting organized (26-26January 2003)
D7/23	Status of implementation of ICAO requirements in the SAR field	On-going activity	Need to follow-up
C7/24	Implementation of COSPAS/SARSAT MSS/LUT station in Saudi Arabia	On-going activity	So far, no indication on whether States have taken advantage of the offer by Saudi Arabia to use of the possibilities offered
C7/25	Report of WGS-84 implementation	On-going activity	Most States have complied

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**REPORT ON AGENDA ITEM 2.1: REVIEW OF THE REQUIREMENTS OF THE MID ATS ROUTE NETWORK**

2.1.1 Under this agenda item, the Sub-Group was apprised of the approval by the President of the ICAO Council, on 22 January 2003, of the revised MID ATS route network which was developed within the framework of the ATM/SAR/AIS Sub-Group, the RNP/RNAV Task Force meetings, the RVSM Task Force and EMARSSH meetings (*Amendment proposal MID 02/01 refers*). It was noted that the revised route network would be included in the Basic ANP document (**See Appendix 2.1A** to the report on Agenda Item 2.1). The meeting also agreed that editorial amendments to the proposal regarding update of notes would be forwarded to the Secretariat.

2.1.2 The meeting also noted that most of the routes have already been implemented on 28 November 2002 so as to coincide with the implementation date EMARSSH routes in adjacent regions. The Sub-Group agreed that non-implemented routes/route segments would be indicated as deficiencies. Based on the foregoing, the meeting formulated the following conclusion;

**DRAFT CONCLUSION 6/1: IMPLEMENTATION OF THE NEW ATS ROUTE NETWORK**

That:

- a) States implement, as soon as possible, the MID ATS route network indicated at **Appendix 2.1A** to the report on Agenda Item 2.1; and
- b) Non-implementation of routes/route segments would be indicated as a deficiency

2.1.3 The Sub-Group was also informed by IATA of the new traffic orientation scheme, which has been implemented within Cairo FIR since 26 December 2002. Concerns were raised on the severe economic penalties to airlines with the implementation of the current route network.

2.1.4 It was clarified that in the planning process, safety cannot be sacrificed at the expense of economy and the traffic orientation scheme had to be introduced as a result of significant increase of traffic within Cairo FIR and also took into account the conditions necessary for the safe implementation of RVSM on 27 November 2003.

2.1.5 IATA and Egypt would informally review their requirements and consider any improvement to the new routing scheme being proposed, with a view to address the concerns of the users. Based on the foregoing the Sub-Group formulated the following draft conclusion:

**DRAFT CONCLUSION 6/2: IMPLEMENTATION OF THE ROUTE NETWORK WITHIN CAIRO FIR**

That Egypt reconsiders the request by IATA for the implementation of the proposed routes/route segments within Cairo FIR, as indicated at **Appendix 2.1B** to the report on Agenda Item 2.1, and will keep the users apprised of implementation problems being encountered.

2.1.6 The meeting also noted the request by States and users for the creation of some additional ATS route within the MID Region. It furthermore identified routes to be realigned/deleted, including some editorial changes regarding the notes. The Secretariat was accordingly requested to initiate arrangements for the inclusion of these requirements in the MID Basic Air Navigation Plan in accordance with established procedures (**See Appendix 2.1C** to the report on Agenda Item 2.1). Based on the foregoing, the meeting formulated the following draft decision:

**DRAFT DECISION 6/3: AMENDMENT TO THE MID ATS ROUTE NETWORK**

That the Secretariat initiates action in accordance with established procedures, for the amendment to the MID ATS route network for the inclusion of the requirements identified under **Appendix 2.1C** to the report on Agenda Item 2.1 .

2.1.7 The meeting also noted with appreciation the harmonization of the MID and Eastern Mediterranean routes within Damascus FIR. It was pointed out that it would pave the way for the safe implementation of RVSM on 27 November 2003.

**Use and allocation of five-letter name-codes**

2.1.8 The Sub-Group was informed that some States do not liaise with the Regional Office for the allocation of five-letter name-codes. It was also noted that same codes are implemented at different locations within the MID Region.

2.1.9 In view of the above, the group was reminded that:

- a) In accordance with Appendix 2 of Annex 11, States' requirements for coded designators should be notified to the Regional Office of ICAO for coordination.
- b) It should be noted that the advent of Global Navigation Satellite Systems (GNSS) and very long range aircraft have exacerbated the problems associated with attribution of five-letter name-codes as it is becoming more and more important that only ONE code be allocated on a world-wide basis. States are invited to assess the operational impact of such duplication and take necessary steps to eliminate them in co-ordination with ICAO.

2.1.10 The meeting was also apprised of the use by the European and North Atlantic Office of a database which has been developed in close cooperation with Eurocontrol. This database called ICAO Five-Letter Name Code and Route Designator (ICARD) system has now been used by the Paris Office since 1998 and an appreciative amount of time is being saved daily in the management of five-letter name-codes (5LNC) .The 5LNC part of the system enables authorized users from States to identify their preferences from the available 5LNCs and to request formal allocation over the internet. It replicates electronically the traditional paper procedures.

2.1.11 The meeting was also informed that the use of the ICARD system could be extended to the MID Region as the database had been originally designed to be used by other Regions. Close coordination would then be necessary between the Paris Office and Eurocontrol when other regions decide to join and use this database. As a first step, the MID Office would be the only data manager of the ICARD system relating to code allocation to the MID Region. States would have a coded access to the database and choose easily pronounceable and free from ambiguity codes to be allocated in the Region.

2.1.12 The meeting agreed that such a tool would significantly contribute to solving many problems in the management of five-letter name-codes in view of an efficient planning of routes structure and requested the Secretariat to take all necessary action to enable the MID Region to use this database, on the understanding that the current list of codes allocated to the MID Region would not be used by other Regions. In view of the foregoing the Sub-Group formulated the following draft decision.

**DRAFT DECISION 6/4: ALLOCATION OF FIVE-LETTER NAME-CODES**

That, with a view to facilitate the selection and allocation of five-letter name-codes for the designation of reporting points, the Secretariat coordinates with the ICAO Paris Office to enable the MID Office to use the ICAO Five-Letter Name Code and Route Designator (ICARD) System.

*Note: It is clarified that coded access to the MID five-letter name-code database would be reserved to MID Region States only.*

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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 nav aids 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.*

## FRENCH

## SPANISH

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Designation	Significant points Points significatifs Puntos significativos
1	2
LOWER AIRSPACE	

Designation	Significant points Points significatifs Puntos significativos
1	2
UPPER AIRSPACE	

A145	(LUXOR) WEJH GASSIM KING FAHD	UA145	(LUXOR) WEJH GASSIM KING FAHD
A219	(NAWABSHAH) SERKA 2951.0N 06615.0E KANDAHAR (TERMEZ)	UA219	(NAWABSHAH) SERKA 2951.0N 06615.0E KANDAHAR (TERMEZ)
		UA401	GIBAL 2437.2N 03634.7E EGSOP 2251N 05015 E ALPEK 2246.8N 05359.7E LUDID 2302.5 N 05518.0 E OBROD 230812N 0554714E LAKLU 232300N 0570500E ITURA 232225N 0580407E KUSRA 231726N 0585102E RAGMA 230600N 0610539E SETSI 230543N 0614047E RASKI 230330N 0635200E
A408	(ADDIS ABABA) HODEIDAH	UA408	(ADDIS ABABA) HODEIDAH
A411	(CAIRO) SHARM EL SHEIKH PASAM 2730.8N 03455.7E *Note 7(OE) WEJH KING ABDULAZIZ JAZAN	UA411	(CAIRO) SHARM EL SHEIKH PASAM 2730.8N 03455.7E *Note 7(OE) WEJH KING ABDULAZIZ JAZAN
A412	JERUSALEM * Note 4(OJ) AMMAN ZELAF 3257.0N 03800.0E TANF	UA412	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	UA413	TESSO 2828.9N 04927.4E VUXAL 2835.5N 04946.1E ALNIN 2840.9N 05001.6E BUSHEHR
A414	GITLA 3219.1N 03402.8E (SITIA)	UA414	GITLA 3219.1N 03402.8E (SITIA)

Designation	Significant points Points significatifs Puntos significativos
1	2
LOWER AIRSPACE	

Designation	Significant points Points significatifs Puntos significativos
1	2
UPPER AIRSPACE	

A415	KING KHALID DOHA * Note 2 and 3(OE) SHARJAH	UA415	KING KHALID DOHA * Note 2 and 3 (OE) SHARJAH
A416	ARDABIL RASHT NOSHAHR DASHTE NAZ SABZEVAR	UA416	ARDABIL RASHT NOSHAHR DASHTE NAZ SABZEVAR
A417	HAWIJA SAMARRA BAGHDAD HASHIMIYA SHATRA BASRAH ABADAN	UA417	HAWIJA SAMARRA BAGHDAD HASHIMIYA SHATRA BASRAH ABADAN
A418	TEHRAN ESFAHAN SHIRAZ PAPAR 2640N 05427E)* Note 7 (OI and OM) SHARJAH		
A419	ASHGHABAT RIKOP 3740.0N 05814.8E SABZEVAR TABAS DARBAND KERMAN BANDAR ABBAS DARAX 260942N 0555300E SHARJAH ABU DHABI * Note 4 (OM) NORLO 211028N 0510142E TADBO 195538N 0494113 SHARURAH (SHA) SANA'A	UA419	ASHGHABAT RIKOP 3740.0N 05814.8E SABZEVAR TABAS DARBAND KERMAN BANDAR ABBAS DARAX 260942N 0555300E SHARJAH ABU DHABI *Note 4 (OM) NORLO 211028N 0510142E TADBO 195538N 0494113 SHARURAH (SHA) SANA'A
A421	HADITHA * Note 4 (SANLIURFA) (GEMEREK) * Note 3	UA421	HADITHA*Note 4 (SANLIURFA) (GEMEREK) * Note 3
A422	UROMIYEH TABRIZ PARSABAD (BAKU)	UA422	UROMIYEH TABRIZ PARSABAD (BAKU)

Designation	Significant points Points significatifs Puntos significativos
1	2
LOWER AIRSPACE	

Designation	Significant points Points significatifs Puntos significativos
1	2
UPPER AIRSPACE	

A424 BAGHDAD  
RAFHA \* Note 3  
HAIL  
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  
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  
PATIR 285606N 0492923E

UA424 BAGHDAD  
RAFHA \* Note 3  
HAIL  
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  
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  
KUSRA 231726N 0585102E

UA788 SHIRAZ  
BUSHEHR  
KAPIP 290217N 0500054E  
PATIR 285606N 0492923E

Designation	Significant points Points significatifs Puntos significativos
1	2
LOWER AIRSPACE	

Designation	Significant points Points significatifs Puntos significativos
1	2
UPPER AIRSPACE	

	WAFRA 2837.3N 04757.5E HAFR AL BATIN HAIL HALAIFAH		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 RATUN 2646.2N 05108.0E SHARJAH IMLOT 2517.1N 05708.1E (JIWANI)	UA791	SISIK 2936.0N 03241.1E NUWEIBAA KITOT 2902.1N 03450.8E *Note 7 (OE) SOBAS 2756.0N 03904.9E HAIL KING FAHD BAHRAIN RATUN 2646.2N 05108.0E SHARJAH IMLOT 2517.1N 05708.1E (JIWANI)
B121	RUDESHUR(RUS) RASHT(RST) MEGRI(MGR)	UB121	RUDESHUR(RUS) RASHT(RST) MEGRI(MGR)
B400	SEEB (MCT) ITURA 232351N 0580720E IZKI (IZK) HAIMA (HAI) DAXAM 171612N 0544715E BOSKI 1607.3N 5416.8E ALULA 1207.3N 05102.7E (MOGADISHU)	UB400	SEEB(MCT) ITURA 232351N 0580720E IZKI (IZK) HAIMA (HAI) DAXAM 171612N 0544715E) BOSKI 1607.3N 5416.8E ALULA 1207.3N 05102.7E (MOGADISHU)
B401	ARAR BASRAH * Note 3	UB401	ARAR BASRAH * Note 3
B402	HADITHA DIER-ZZOR ALEPPO	UB402	HADITHA DIER-ZZOR ALEPPO
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

Designation	Significant points Points significatifs Puntos significativos
1	2
LOWER AIRSPACE	

Designation	Significant points Points significatifs Puntos significativos
1	2
UPPER AIRSPACE	

B411 METSA 2930.0N 03500.0E  
AL SHIGAR\* Notes2 and 3  
ARAR  
HASHIMIYA  
ZUBEIDIYA  
MANDALY \* Note 3  
MALAYER  
SAVEH  
[TEHRAN] \* Note 1  
DEHNAMAK  
MASHHAD

B412 DAMASCUS  
[AMMAN] \* Note 2(OS)  
AL SHIGAR  
[KING ABDULAZIZ ]

B413 (PORT SUDAN)  
DANAK 1608.0N 04129.0E  
HODEIDAH  
TAIZ  
ADEN

B415 BUNDU 2500.4N 05229.4E  
[DOHA]  
[BAHRAIN] \* Note 3 (OB, OT)

B416 KUWAIT  
KUPER 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  
KUWAIT \*See Note 5  
HAFR AL BATIN  
GASSIM  
KING ABDULAZIZ

B418 SEMRU 2802.0N 03203.0E  
HURGHADA  
WEJH  
MADINAH  
BIR DARB (BDB)  
KING KHALID  
KING FAHD

UB411 METSA 2930.0N 03500.0E  
AL SHIGAR\* Notes2 and 3  
ARAR  
HASHIMIYA  
ZUBEIDIYA  
MALAYER  
SAVEH  
[TEHRAN] \* Note 1  
DEHNAMAK  
MASHHAD

UB412 DAMASCUS  
[AMMAN] \* Note 2(OS)  
AL SHIGAR  
[KING ABDULAZIZ ]

UB413 (PORT SUDAN)  
DANAK 1608.0N 04129.0E  
HODEIDAH  
TAIZ  
ADEN

UB415 BUNDU 2500.4N 05229.4E  
[DOHA]  
[BAHRAIN] \* Note 3 (OB, OT)

UB416 KUWAIT  
KUPER 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  
KUWAIT\*See Note 5  
HAFR AL BATIN  
GASSIM  
KING ABDULAZIZ

UB418 SEMRU 2802.0N 03203.0E  
HURGHADA  
WEJH  
MADINAH  
BIR DARB (BDB)  
KING KHALID  
KING FAHD

Designation	Significant points Points significatifs Puntos significativos
1	2
LOWER AIRSPACE	

Designation	Significant points Points significatifs Puntos significativos
1	2
UPPER AIRSPACE	

PIMAL 2626.5N 05122.1E

B419 [DOHA]  
[KING FAHD] \* Note3 (OE, OT)  
ALVON 2700.2N 05007.2E  
SELEG 2801.5N 04922.2E  
KUWAIT

B441 MASHHAD  
OTRUZ 363108N 0610956E  
ASHGABAT

B450 TOTOX 215030N 0622230E  
\* Note 7  
TULBU 230005N 0571827E

B451 DEHNAMAK  
BOJNORD (BRD)  
DOLOS 375006N 0580200E  
(ASHGABAT)

B457 BAHRAIN  
ELOSA 2548.8N 05142.6E  
\* Note7 (segment ELOSA-REXOD)  
ABU DHABI  
LABRI 240344N 0553842E  
LAKLU 232300N 0570500E  
LOTUD 223720N 0583503E  
REXOD211230N 0613830E

B524 NADSO 244957N 0574926E  
ALPOR 2404 42N 06120E

B525 LALDO 251806N 0563600E  
NADSO 244957N 0574926E  
EGTAL 2434 58N 06037 24E

B526 (ASMARA)  
HODEIDAH

BEIHAN  
ATAQ  
RIYAN  
ODAKA 1440.6N 05234.0E

PIMAL 2626.5N 05122.1E

UB419 [DOHA]  
[KING FAHD] \* Note3 (OE, OT)  
ALVON 2700.2N 05007.2E  
SELEG 2801.5N 04922.2E  
KUWAIT

UB424 HAIMA 00N0441312E

UB441 MASHHAD  
OTRUZ 363108N 0610956E  
ASHGABAT

UB450 TOTOX 215030N 0622230E  
\* Note 7  
TULBU 230005N 0571827E

UB451 DEHNAMAK  
BOJNORD (BRD)  
DOLOS 375006N 0580200E  
(ASHGABAT)

UB457 BAHRAIN  
ELOSA 2548.8N 05142.6E  
\* Note7 (segment ELOSA-REXOD)  
ABU DHABI  
LABRI 240344N 0553842E  
LAKLU 232300N 0570500E  
LOTUD 223720N 0583503E  
REXOD 211230N 0613830E

UB526 (ASMARA)  
HODEIDAH

BEIHAN  
ATAQ  
RIYAN  
ODAKA 1440.6N 05234.0E

Designation	Significant points Points significatifs Puntos significativos
1	2
LOWER AIRSPACE	

B535 (DJIBOUTI)  
ADEN  
RIYAN  
KAPET 1633 22N 0530614E  
SALALAH  
MARMUL(MRL)

B538 (GAZIANTEP)  
ALEPPO  
KARIATAIN  
DAMASCUS \* Note 2(OS)

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

B544 (GAZIANTEP)  
ALEPPO  
TANF  
TURAIK  
AL SHIGAR  
HALAIFA  
MADINAH  
RABIGH  
KING ABDULAZIZ  
ABHA

B545 (MUT)  
BALMA 3428.9N 035 3.0E  
KHALDEH  
AMMAN \* Note 3&4 (OJ)

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  
DAMASCUS  
TANF  
HADITHA  
SAMARRA

Designation	Significant points Points significatifs Puntos significativos
1	2
UPPER AIRSPACE	

UB535 (DJIBOUTI)  
ADEN  
RIYAN  
KAPET 1633 22N 0530614E  
SALALAH  
MARMUL(MRL)

UB538 (GAZIANTEP)  
ALEPPO  
KARIATAIN  
DAMASCUS \* Note 2 (OS)

UB544 (GAZIANTEP)  
ALEPPO  
TANF  
TURAIK  
AL SHIGAR  
HALAIFA  
MADINAH  
RABIGH  
KING ABDULAZIZ  
ABHA

UB545 (MUT)  
BALMA 3428.9N 035 3.0E  
KHALDEH  
AMMAN \* Note 3&4(OJ)

UG202 (VELOX 3349.0N 03405.0E)  
SILKO 3347.9N 03435.0E  
KHALDEH \* Note 4(OS)  
DAKWE 3338.9N 03555.0E  
DAMASCUS  
TANF  
HADITHA  
SAMARRA

Designation	Significant points Points significatifs Puntos significativos
1	2
LOWER AIRSPACE	

Designation	Significant points Points significatifs Puntos significativos
1	2
UPPER AIRSPACE	

	SALAM MANDALY ILAM KHORAM ABAD ESFAHAN NODLA BIRJAND KAMAR 3239.0N 06044.0E DILARAM KANDAHAR (ZHOB) (RAHIM YAR KHAN)		SALAM MANDALY 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	UG206	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)	UG208	(PANJGUR) ZAHEDAN DARBAND NODLA 325330N 0545850E ANARAK TEHRAN ZANJAN UROMIYEH ALRAM 3743.0N 04437.0E (SIIRT)
G452	SHIRAZ KERMAN ZAHEDAN (RAHIMYAR KHAN)	UG452	SHIRAZ KERMAN ZAHEDAN (RAHIMYAR KHAN)
G462	BAHRAIN PIMAL2626.5N 05122.1E * Note 7 between AUH and PIMAL URITO 2616.1N 05148.8 E BALUS 2545.9N 05304.4E ABU DHABI	UG462	BAHRAIN PIMAL2626.5N 05122.1E * Note 7 between AUH and PIMAL URITO 2616.1N 05148.8 E BALUS 2545.9N 05304.4E ABU DHABI
G650	KING ABDULAZIZ RASKA 1908.0N 03903.0E (ASMARA)	UG650	KING ABDULAZIZ RASKA 1908.0N 03903.0E (ASMARA)
G651	ADEN (HARGEISA)	UG651	ADEN (HARGEISA)

Designation	Significant points Points significatifs Puntos significativos
1	2
LOWER AIRSPACE	

Designation	Significant points Points significatifs Puntos significativos
1	2
UPPER AIRSPACE	

G652	ADEN SAYUN * Note 2 (OY) HAIMA ETUKO 2214.0N 05525.2E * Note 7 (OO) TAPDO 2424N 06120 E	UG652	ADEN SAYUN * Note 2 (OY) HAIMA ETUKO 2214.0N 05525.2E * Note 7 (OO) TAPDO 2424N 06120 E
G660	(PORT SUDAN) BOGUM 2006.6N 03803.0E *Note 7(OE) KING ABDULAZIZ ABU DHABI * Note3 (OE)	UG660	(PORT SUDAN) BOGUM 2006.6N 03803.0E *Note 7(OE) KING ABDULAZIZ ABU DHABI * Note3 (OE)
G662	[DAMASCUS] [GURIAT] * Notes 1 and 3 (OS) AL SHIGAR HAIL GASSIM KING KHALID	UG662	[DAMASCUS] [GURIAT] * Notes 1 and 3 (OS) 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	UG666	SHIRAZ * Note 7 (OI) LAMERD LAVAN ORSAR 2604.5N 05357.5E DESDI 2536.1N 05442.5E MIADA 245112N 0545736E
G667	TEHRAN SAVEH AHWAZ ABADAN	UG667	TEHRAN SAVEH AHWAZ ABADAN

Designation	Significant points Points significatifs Puntos significativos
1	2
LOWER AIRSPACE	

Designation	Significant points Points significatifs Puntos significativos
1	2
UPPER AIRSPACE	

	ALSAN 2957.1N 04814.9E FALKA KUWAIT WAFRA MAGALA KING KHALID WADI AL DAWASIR NEJРАН SANA'A		ALSAN 2957.1N 04814.9E FALKA KUWAIT WAFRA MAGALA KING KHALID WADI AL DAWASIR NEJРАН SANA'A
G668	ZHOB GHAZNI RAPTA 3727.0N 06538.0E	UG668	ZHOB GHAZNI RAPTA 3727.0N 06538.0E
G669	KARIATAIN 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]	UG669	KARIATAIN 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]
G670	RASHT LALDA 3817.1N 04943.0E (BAKU)	UG670	RASHT LALDA 3817.1N 04943.0E (BAKU)
G671	TANF HAWIJA MOSUL UROMIYEH * Notes 2 and 3	UG671	TANF HAWIJA MOSUL UROMIYEH * Notes 2 and 3
G674	MADINAH GASSIM 2617.9N 04346.8E	UG674	MADINAH GASSIM 2617.9N 04346.8E
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	UG781	(VAN) BONAM 3802.9N 04418.0E UROMIYEH

Designation	Significant points Points significatifs Puntos significativos
1	2
LOWER AIRSPACE	

ROVON 3716 01N 0455322E  
ZANJAN

G782 KING ABDULAZIZ  
RAGABA  
KING KHALID  
MAGALA  
WAFRA 2837.3N 04757.5E  
KUWAIT

G787E LAKLU 232235N 0570401E  
SEEB(MCT)  
DORAB 235033N 0594746E  
ALPOR 240441N 0612000E  
LATEM  
(KC)

G787W (KC)  
PARET  
TAPDO 242400N 0612000E  
VUSET 235540N 0590812E  
PASOV 243841N 0565037E

G792 (TURKMENBASHI)  
MASHAD  
CHARN 3510.0N 06108.0E  
HERAT  
KANDAHAR  
QUETTA \* Note 3 (OA)

G795 BAHRAIN  
SELEG 2801.5N 04922.2E  
ALSAN 2957.5N 04815.0E \* Note 2  
BASRAH  
RAFHA

Designation	Significant points Points significatifs Puntos significativos
1	2
UPPER AIRSPACE	

ROVON 3716 01N 0455322E  
ZANJAN

UG782 KING ABDULAZIZ  
RAGABA  
KING KHALID  
MAGALA  
WAFRA 2837.3N 04757.5E  
KUWAIT

UG787E LAKLU 232235N 05704 01E  
SEEB(MCT)  
DORAB 235033N 0594746E  
ALPOR 240441N 0612000E  
LATEM  
(KC)

UG787W (KC)  
PARET  
TAPDO 242400N 0612000E  
VUSET 235540N 0590812E  
PASOV 243841N 0565037E

UG792 (TURKMENBASHI)  
MASHAD  
CHARN 3510.0N 06108.0E  
HERAT  
KANDAHAR  
QUETTA \* Note 3 (OA)

UG795 BAHRAIN  
SELEG 2801.5N 04922.2E  
ALSAN 2957.5N 04815.0E \* Note 2  
BASRAH  
RAFHA

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

Designation	Significant points Points significatifs Puntos significativos
1	2
LOWER AIRSPACE	

Designation	Significant points Points significatifs Puntos significativos
1	2
UPPER AIRSPACE	

			PAROT 360940N 0495756E TEHRAN ANARAK DARBAND ZAHEDAN DANIB 2909.5N 06120.1E (PANJGUR)
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 YENBO 2408.8N 03803.9E DAFINAH 2317.0N 04143.2E LOTOS 2200N 05039.2E ALPEK 2246.8N 05359.7E
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		
		UL306	MUSRU 230256N 0592223E TULBU 230005N 0571827E
L315	HURGHADA * Note 3 (HE) GIBAL 2437.2N 03634.7E	UL315	HURGHADA * Note 3 (HE) GIBAL 2437.2N 03634.7E
		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

Designation	Significant points Points significatifs Puntos significativos
1	2
LOWER AIRSPACE	

Designation	Significant points Points significatifs Puntos significativos
1	2
UPPER AIRSPACE	

- |      |   |   |   |
|------|---|---|---|
|      |   | ORSOK 362236N 0523020E<br>AMBEG 351737N 0553059E<br>TASLU 342632N 0574234E<br>SOKAM 331316N 0603754E  |   |
|      | UL425   | KING ABDULAZIZ<br>MALIK 2053.4N 03949.6E<br>AL BAHA<br>BISHA<br>WADI AL DAWASIR<br>TADBO 195538N 0494113E<br>GIPNA 193735N 0514311E<br>GOBRO 193622N 0534741E<br>BOVOS 182230N 0575844E<br>ASPUX 174406N 0600006E<br>(TRIVANDRUM) |   |
| L513 | KHALDEH<br>CHEKKA<br>LEBOR 3415.9N 03635.0E<br>DAMASCUS * Note 3 (OS)<br>BUSRA 3220.0 N 03637.0 E<br>HAZEM 3214.0 N 03638.0 E<br>QUEEN ALIA<br>QATRANEH (QTR) | UL513   | KHALDEH<br>CHEKKA<br>LEBOR 3415.9N 03635.0E<br>DAMASCUS * Note 3 (OS)<br>BUSRA 3220.0 N 03637.0E<br>HAZEM 3214.0 N 03638.0E<br>QUEEN ALIA<br>QATRANEH (QTR) |
| L519 | MIADA 245112N 0545736E<br>KUMUN 254000N 0551512E  |   |   |
|      |   | UL550   | (KAROL 3252.0N 03229.0E)<br>PASOS<br>EL ARISH<br>TABA<br>NUWEIBAA<br>KITOT *Note 7(OE)<br>NIMAR   |
| L555 | LAKLU 232235N 0570401E<br>GIDAN 230104N 0582232E<br>TOTOX 215030N 0622230E  | UL555   | LAKLU 232235N 0570401E<br>GIDAN 230104N 0582232E<br>TOTOX 215030N 0622230E  |
|      |   | UL560   | ARDABIL 3819.9N 04824.9E<br>* Note 3&4 (OI)<br>SEVAN 4032.0N 04456.9E   |
|      |   | UL619   | FESAL 3429.9N 03731.4E<br>* Note 4(OS)<br>NIKAS 3511.6N 03543.0E<br>(VESAR-3554.9N 03401.0E)  |

Designation	Significant points Points significatifs Puntos significativos
1	2
LOWER AIRSPACE	

Designation	Significant points Points significatifs Puntos significativos
1	2
UPPER AIRSPACE	

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  
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

M300 LOTAV 2037N 0605700E  
EMURU 221535N 0584950E

M320 KING FAHD  
JUBAIL  
KUWAIT

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

M555 HAZEM 3214.0 N 03638.0 E  
GURIAT 3124.8 N 03717.2 E  
\* Note 3 (OS, OJ)

UL631 TOTOX 215030N0622230E  
SEVLA 233321N 0591122E

UL675 WADI AL DAWASIR  
NORLO 211028N0510142E  
ETUKO 221354N 0552454E

UL750 ZHOB 3121.3N 06927.6E  
ROSIE 3140.0N 06900.0E  
MAXIM 3246.2N 06727.4E  
HORST 3327.6N 06627.5E  
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

UL883 ETUKO 221354N 0552454E  
EMARA 215222N 0564256E  
GOLNI 210014N 0594130E  
LOTAV 203700N 0605700E

UM300 (CALICUT)  
LOTAV 2037N 0605700E  
EMURU 221535N 0584950E

UM320 KING FAHD  
JUBAIL  
KUWAIT

UM321 RAGHBA  
HAIL

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

UM555 HAZEM 3214.0 N 03638.0E  
GURIAT 3124.8 N 03717.2E  
\* Note 3 (OS, OJ)

Designation	Significant points Points significatifs Puntos significativos
1	2
LOWER AIRSPACE	

M561 KISH \* Note 3&4 (OI)  
MOBET 2645.3N 05609.8E  
PANJGUR

M628 DIPIG 231423N 0562002E  
LAKLU 232235N 0570401E  
GEPOT 231446N 0580053E  
MUSRU 230256N 0592223E  
PARAR 222630N 0630700E

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

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)

M999 (LUXOR)  
DEDLI 2242 32N 03737 19E  
OSAMA 2215 54N 03817 34E  
KING ABDULAZIZ (JDW)

Designation	Significant points Points significatifs Puntos significativos
1	2
UPPER AIRSPACE	

UM561 KISH \* Note 3&4 (OI)  
MOBET 2645.3N 05609.8E  
PANJGUR

UM573 TEHERAN (TRN)  
TABRIZ 3808.3N 04613.9E

UM628 ALPEK 224648N 0535942E  
LUDID 230227N 0551800E  
DIPIG 231423N 0562002E  
LAKLU 232235N 0570401E  
GEPOT 231446N 0580053E  
MUSRU 230256N 0592223E  
PARAR 222630N 0630700E

UM877 VUSET 235540N 0590812E  
KUSRA 232426N 0582611E

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)

UN315 ASPUX 174406N 0600006E  
KUTVI 184306N 0582642E  
HAIMA  
IMDAM 202416N 0550801E  
LOTOS 220000N 0503912E  
RAPMA 232229N 0482010E  
RESAL 240649N 0470427E  
KING KHALED

Designation	Significant points Points significatifs Puntos significativos
1	2
LOWER AIRSPACE	

Designation	Significant points Points significatifs Puntos significativos
1	2
UPPER AIRSPACE	

		UN318	BALMA 3428.9N 03503.0E * Note 7 (OE, OJ, OL, OS) CHEKKA 3418.0N 03542.0E LEBOR 3415.9N 03635.0E KARIATIAN TONTU 314804N 0381110E RAGOM 313227N 0381656E MEDRI 2758 33N 0425306E TOTAD 2750.3N 0433904E KUSAR 2647.7N 04902.3E
		UN319	ZAHEDAN TABAS (TBS) DASHTENAZ (DNZ) (ULDUS- 3800.0N 05101.0E)
N519	KHI -245436N 0671036E SAPNA 233000N 0675000E PRN 213824N 0693948E TAXUN 211906N 0701520E EXOLU 201248N 0713412E (BBB- 190506N 0725230E)		
		UN555	BELGAUM BISET 1823.4N 06918.1E KATBI 1931.6N 06500.0E LOTAV 2037.0N 06057.0E
N563	REXOD 211230N 0613830E EMURU 221357N 0585338E TULBU 230005N 0571827E GOLKO 234312N 0554635E SODEX 234954N 0553202E NOBTO 235525N 0551840E AUH 242612N 0543900E	UN563	(BANGALORE) REXOD 211230N 0613830E EMURU 221357N 0585338E TULBU 230005N 0571827E GOLKO 234312N 0554635E SODEX 234954N 0553202E NOBTO 235525N 0551840E AUH 242612N 0543900E
		UN569	LOTOS ETUKO 221354N 0552454E REXOD 211230N 0613830E
N571	PARAR 2226.5 N 06307E RAGMA 230600N 0610539E * Note 7 (OO) VUSET 235540N 0590812E ENADA 245956N 0563451E ATBOR 251007N 0551947E RANBI 251908N 0544500E	UN571	(SUGID- 1933.1 N 06921.0E) PARAR 2226.5 N 06307E RAGMA 230600N 0610539E * Note 7 (OO) VUSET 235540N 0590812E ENADA 245956N 0563451E ATBOR 251007N 0551947E

Designation	Significant points Points significatifs Puntos significativos
1	2
LOWER AIRSPACE	

BALUS 254554N 0530424E

N629 TARDI 243418N 0560915E  
NOSMI 241757N 0563002E  
RAGUD 234701N 0571644E  
SEEB (MCT)

N767 PARAR 222630N 0630700E  
SEVLA 233321N 0591122E  
SEEB (MCT) \* Note 7

P302 HALAIFA\*Note 4(OE)  
GURIAT

P312 RIYAN  
(HARGEISA)

P316 SALALLAH \* Note 7 (OO)  
DAXAM  
GAGLA 180505N 0552410E  
RADAX 220809N 0580230E  
SEEB (MCT)

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

Designation	Significant points Points significatifs Puntos significativos
1	2
UPPER AIRSPACE	

RANBI 251908N 0544500E  
BALUS 254554N 0530424E

UN629 TARDI 243418N 0560915E  
NOSMI 241757N 0563002E  
RAGUD 234701N 0571644E  
SEEB (MCT)

UN644 (DERA ISMAIL KHAN)  
GHAZNI (GN)  
LEMOD 3610.0N 06417.5E  
(MEKOL -3730.0N 06200.0E)  
(TABIP-3900.0N 05820.0E)

UN767 PARAR 222630N 0630700E  
SEVLA 233321N 0591122E  
SEEB (MCT) \* Note 7

UN881 RASKI 230330N 0635200E  
SETSI 230412N 0614410E  
MUSRU 230256N 0592223E  
\* Note 7

UP302 HALAIFA \*Note 4(OE)  
GURIAT

UP312 RIYAN  
(HARGEISA)

UP316 SALALLAH \* Note 7 (OO)  
DAXAM 171612N 0544715E  
GAGLA 180505N 0552410E  
RADAX 220809N 0580230E  
SEEB (MCT)

UP318N NOBAT 2109 02N 0680000E  
KABIM 2330 00N 06628 00E  
PAXUR-2400N 0660000E  
PARET 2527.2N 06451.5E  
PANJGUR \* Note 7 (OI)

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

Designation	Significant points Points significatifs Puntos significativos
1	2
LOWER AIRSPACE	

Designation	Significant points Points significatifs Puntos significativos
1	2
UPPER AIRSPACE	

		UP323	DONSA 143518N0651533E GIDAS 142004N0600000E KADER151300N 05500E SHARURAH 1728.2N 04708E AL-GHAIDAH 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	UP555	NUWEIBAA RASDA 3306.0N 03057.0E (KAVOS)
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)
P570	KITAL 2003N 06018E MIBSI 234139N 0575523E	UP567	BIRJAND ODKAT 3540.6N 05457.2E DASHT-E-NAZ -3638.7N 05311.4E (ULDUS -3800.0N 05101.0E)
P571	LABNI 16 620N 0410921E NISMI 162415N 0421838E	UP570	TRIVENDRUM VISET1831 12N 06229 64E KITAL 2003N 06018E MIBSI 234139N 0575523E
		UP571	LABNI 165620N 0410921E NISMI 162415N 0421838E

Designation	Significant points Points significatifs Puntos significativos
1	2
LOWER AIRSPACE	

Designation	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-PARAR) PAPAR 264000N 0542700E SHIRAZ ESFAHAN TEHRAN ULDUS
		UP634	LALDO 251806N 0563600E ATBOR 251007N 0551947E
P899	PARAR 222630N 0630700E MIBSI 234139N 0575523E PAXIM 240245N 05617631E ITRAX 241248N 0554749E AL AIN (ALN) ABU DHABI	UP899	PARAR 222630N 0630700E MIBSI 234139N 0575523E PAXIM 240245N 05617631E ITRAX 241248N 0554749E AL AIN (ALN) ABU DHABI
R205	ANARAK BIRJAND	UR205	ANARAK BIRJAND
R219	SHARJAH * Note 7 (OM) RATUN 2646.2N 05108.0E KING FAHD BOROP 2653 17 N 04852 03E KEDAT 2721 49N 04759 01E KING KHALID (KMC) TAMRO 2838.6N 04240.8E TURAIF FESAL3429.9N 037 31.4E BASEL 3434.1N 03624.4E FANOS 3436.5N 03541.0E	UR219	PARAR 2226.5N 06307.0E * Note 7 ENADA 245956N 0563451E PIMAL 2626.5N 05122.1E ALVON 2700.2N 05007.2E KEDAT 2721 49N 04759 01E KING KHALID (KMC) TAMRO 2838.6N 04240.8E TURAIF FESAL3429.9N 03731.4E BASEL 3434.1N 03624.4E FANOS 3436.5N 03541.0E
R401	AMPEX 0810.0N 05500.0E SUHIL 1200.0N 05500.0E KADER 1506.0N 05500.0E AVAVO 1647.1N 05526.1E HAIMA	UR401	AMPEX 08 10.0N 055 00.0E SUHIL 12 00.0N 055 00.0E KADER 15 06.0N 055 00.0E AVAVO 16 47.1N 055 26.1E HAIMA

Designation	Significant points Points significatifs Puntos significativos
1	2
LOWER AIRSPACE	

Designation	Significant points Points significatifs Puntos significativos
1	2
UPPER AIRSPACE	

	DEBOK 2328.5 N 05544.0 E MUSAP241754N 0555245E GIDIS 243600N 0555600E RAS AL DARAX		DEBOK 2328.5 N 05544.0 E MUSAP 241754N 0555245E GIDIS 243600N 0555600E RAS AL KHAIMAH DARAX
R402	LAKLU 232235N 0570401E DEKLI 220201N 0564510E HAIMA (HAI)	UR402	LAKLU 232235N 0570401E DEKLI 220201N 0564510E HAIMA (HAI)
B407	KING ABDULAZIZ MAHDI 2026.0N 03739.3E (PORT SUDAN)	UB407	KING ABDULAZIZ MAHDI 2026.0N 03739.3E (PORT SUDAN)
R456	KITAL200300N 0601800E (MALE)	UR456	KITAL200300N 0601800E (MALE)
R462	(JIWANI) DENDA 2442.5N 06054.8E VUSET 235540N 0590812E MIBSI 234139N 0575523) *Note 7 (OO)	UR462	(JIWANI) DENDA 2442.5N 06054.8E VUSET 235540N 0590812E MIBSI 234139N 0575523E *Note 7 (OO)
R650	LUXOR HURGHADA SHARM EL SHEIKH NUWEIBAA NALSO 2932.0N 03453.0E	UR650	LUXOR HURGHADA SHARM EL SHEIKH NUWEIBAA NALSO 2932.0N 03453.0E
R651	TANF SHATRA	UR651	TANF SHATRA
R652	TURAIIF *Note 7(OE) GURIAT QATRANEH AQABA METSА 2930.0N 03500.0E	UR652	TURAIIF *Note 7(OE) GURIAT QATRANEH AQABA METSА 2930.0N 03500.0E
R653	JERUSALEM* Note 4(OS) RAMTHA DAMASCUS	UR653	JERUSALEM * Note 4(OS) RAMTHA DAMASCUS
R654	ESFAHAN YAZD KERMAN NABOD 2816.1N 05825.3E CHAH BAHAR (CBH)	UR654	ESFAHAN YAZD KERMAN NABOD 2816.1N 05825.3E CHAH BAHAR (CBH)

Designation	Significant points Points significatifs Puntos significativos
1	2
LOWER AIRSPACE	

DENDA  
VAXIM 231900N 0611100E

R655 (LARNACA)  
CHEKKA  
KARIATAIN

R658 SEEB  
MELMI 2647.0N 05723.0E  
BANDAR ABBAS

R659 SHIRAZ  
DOHA  
SANA'A \* Note 3 (OY)

R660 (ERZERUM)  
DASIS 38 54.5N 044 12.5E  
TABRIZ  
RASHT  
TEHRAN

R661 DULAV 3857.0N 04537.9E  
TABRIZ  
ZANJAN  
RUDESHUR  
VARAMIN  
DEHNAMAK

R775 LUXOR  
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

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  
BASRAH  
SHATRA  
ZUBEIDYA

Designation	Significant points Points significatifs Puntos significativos
1	2
UPPER AIRSPACE	

DENDA  
VAXIM 231900N 0611100E

UR655 (LARNACA)  
CHEKKA  
KARIATAIN

UR658 SEEB  
MELMI 2647.0N 05723.0E  
BANDAR ABBAS

UR659 SHIRAZ  
DOHA  
SANA'A \* Note 3 (OY)

UR660 RASHT  
TEHRAN

UR661 DULAV 3857.0N 04537.9E  
TABRIZ  
ZANJAN  
RUDESHUR  
VARAMIN  
DEHNAMAK

UR775 LUXOR  
KING ABDULAZIZ  
DANAK 1608.0N 04129.0E  
(ASSAB)

UR777 DANAK 1608.0N 04129.0E  
SANA'A  
TAIZ  
ARABO 1238.8N 04404.0E  
TORBA 1210.6N 04402.1E

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  
BASRAH  
SHATRA  
ZUBEIDYA

Designation	Significant points Points significatifs Puntos significativos
1	2
LOWER AIRSPACE	

Designation	Significant points Points significatifs Puntos significativos
1	2
UPPER AIRSPACE	

SALAM 3400.0N 04442.0E  
 HAWIJA  
 MOSUL  
 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)

SALAM 3400.0N 04442.0E  
 HAWIJA  
 MOSUL  
 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)

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ATM/SAR/AIS SG/6  
 Appendix 2.1B to the Report on Agenda Item 2.1

**RECOMMENDED EASTBOUND TRAFFIC**

<b>NO</b>	<b>FROM-TO</b>	<b>CURRENT</b>	<b>RECOMMENDED</b>
1	SALUN - IMRAD	BRN-KATAB-AST-LXR-IMRAD	BRN-KATAB-DCT SEMRU-HGD-TO SILK
2	PAXIS - IMRAD	PAXIS-GESAD-KATEX-DBA-KATAB-AST-LXR-IMRAD	PAXIS-GESAD-KATEX-DBA-FYM-DIR SEMRU-HGD-TO SILKA
3	LOSUL - IMARD	BRN-KATAB-AST-LXR-IMRAD	BRN-KATAB-DCT SEMRU-HGD-TO SILKA
4	HECA - SILKA	CVO-SEMRU-HGD-SILKA	CVO-DIR HGD-SILKA
5	HECA-DEDLI	CVO-SEMRU-LXR-DEDLI	CVO-DIR-HGD-TO GIBAL
6	RASDA-SILKA	MILAD-BLT-CVO-SEMRU-HGD-SILKA	MILAD-BLT-CVO-DIR HGD-SILKA
7	PAXIS-DEDLA	PAXIS-GESAD-DBA-KATAB-AST-LXR-DEDLI	PAXIS-GESAD-DBA-KATAB-FYM-SEMRU-HGD-TO GIBEL
8	KUMBI-HESH	KUMBI-BLT-CVO-SHM	KUMBI-BLT-DCT ISMAILYAH-DIR CAT-DIR SHM
9	BOMOR-LAKTO	BOMOR-AST-LUBOS-CVO-BLT-MILAD-LAKTO	BOMOR-DIR DANAD-DIR KATAB-DIR MENKU-MILAD-LAKTO

**RECOMMENDED WESTBOUND TRAFFIC**

<b>NO</b>	<b>FROM-TO</b>	<b>CURRENT</b>	<b>RECOMMENDED</b>
1	NUBAR-RASDA	NWV-AST-LUBOS-CVO-BLT-MILAD-RASDA	SML-DCTAST-LUBOS-CVO-BLT-MILAD-RASDA
2	METSA-LOSUL	MESTA-NWB-SISIK-MENLI-CVO-MENKU-AXD-OTIKO-DBA-NANVO-BRN-LOSUL	METSU-NWB-SISIK-MENLI-CVO-DIR NANVO-BRN-LOSUL
3	PASAM-RASDA	PASAM-SHM-CVO-BLT-MILAD-RASDA	PASAM-SHM-DIR LAKTO-DIR MAROS
4	PASAM-LOSUL	PASAM-SHM-CVO-MENKU-AXD-OTIKO-DBA-NANVO-BRN-LOSUL	FROM SILKA TO SEMRU-DCT KATA B-BRN-LOSUL

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ATM/SAR/AIS SG/6  
Appendix 2.1C to the Report on Agenda item 2.1

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**ATS routes to be created/realigned or deleted**

**Draft Proposal for the amendment of the MID Basic Air Navigation Plan**

**ATM/SAR/AIS**

**1. ATS routes/route segment(s) to be created**

**Amend** the requirement for the inclusion of the following routes/route segment(s) to the MID ATS route network (amendment 02/01 dated 22 January 2002 refers):

- i) **UM574**  
**(MALE)**  
**(POPET) N0713.7 E 06813.6**  
**NABIL N1222.0 E 06000.0**  
**ODAKA N1440.6 E05234.0**  
**SYN N1557.7 E04847.2**  
**HELAL N1716.0 E04422.0**  
**NOBSU N1715.9 E04313.3**  
**ABHA N1814.4 E04239.5**  
**JEDDAH**
  
- ii) **L300**  
**LUXOR**  
**GIBAL (2437.2N 03634.7E)**

**2. ATS routes to be realigned**

- i) **A/UA453**

**Realign** segment of A/UA453 from Kish Bahrain to pass via PIMAL as follows:

**KISH**  
**PIMAL (2626.5N 05122.1E)**  
**BAHRAIN**

**ii) M561**

**Realign** segment of M561 between MOBET and PANJGUR as follows:

KISH  
MOBET  
EGSAL(2716.8N 06249.0E)  
PANJGUR

**iii) UM561**

**Realign** UM561 as follows:

RATUN (2646.2N 05108.0E)\*See Note 7  
MIDSI (2641.7N 05154.7E)  
KISH  
MOBET \*See Note 3  
EGSAL(2716.8N 06249.0E)  
PANJGUR

**iv) R654**

**Realign** R654 as follows:

ZANJAN  
SAVEH  
ESFAHAN  
YAZD  
KERMEN  
NABOD 2816.1N 05825.3E  
CHAH BAHAR (CBH)  
DENDA  
VAXIM 231900N 0611100E

**v) UR654**

**Realign** UR654 as follows:

(YEREVAN FIR)  
MEGRI (MGR)  
ZANJAN

2.1C-3

**SAVEH**  
ESFAHAN  
YAZD  
KERMAN  
NABOD 2816.1N 05825.3E  
CHAH BAHAR (CBH)  
DENDA  
VAXIM 231900N 0611100E

**3. ATS routes/route segments to be deleted:**

**i) R/UR658**

**Delete** the requirement for ATS route R/UR658

**ii) UR661**

**Delete** the requirement for segment DULAV-TABRIZ for UR661.

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**REPORT ON AGENDA ITEM 2.2: IMPLEMENTATION OF RNP/RNAV ROUTES IN THE MID REGION**

2.2.1 Under this agenda item the Sub-Group recalled that MIDANPIRG/7 meeting had endorsed under Conclusion 7/5, the MID Region Phase 2 RNP/RNAV implementation strategy. To that effect, the meeting noted that the RNP/RNAV Task Force, guided by the above principles, is exploring ways and means of taking full advantage of the benefits offered by the implementation of RNP/RNAV routes/areas in the Region.

2.2.2 While discussing instances where implementation of unidirectional routes with lateral separation in accordance with Annex 11, Attachment B, is not feasible due to airspace constraints or when this measure does not provide the necessary capacity on route segments where procedural longitudinal separation minima are applied, the Sixth meeting of the RNP/RNAV Task Force, under Conclusion 6/2, agreed that:

## Quote

- a) Systems of closely spaced parallel RNP route systems be introduced to reduce the lateral overlap probability, thereby permitting safe implementation of RVSM;
- b) offset distance of closely spaced parallel RNP route systems be determined based upon an aeronautical study, hereunder navigation performance monitoring, of the navigational characteristics of the airspace infrastructure and the population of aircraft using the airspace.
- c) the exact offset distance will be calculated on the basis of additional traffic monitoring data to be provided by Bahrain, Egypt and Oman for a period of one month from 15 April to 15 May 2002 *ote.*

2.2.3 To this effect, the meeting noted that data was accordingly sent by Egypt to the Middle East Central Monitoring Agency (MECMA) with a view to have an indication on the exact offset distance to be used in the region, in an RNP 5 environment.

2.2.4 Based on the foregoing, the Sub-Group was of the view that further guidance be given by ICAO over the issue and accordingly framed the following draft conclusion:

**DRAFT CONCLUSION 6/5: ESTABLISHMENT OF CLOSELY SPACED PARALLEL RNP ROUTE SYSTEM**

That ICAO provides guidance on offset distance of closely spaced parallel RNP routes to be implemented in cases where implementation of unidirectional routes with lateral separation in accordance with Annex 11, Attachment B, is not feasible due to airspace constraints or when this measure does not provide the necessary capacity on route segments where procedural longitudinal separation minima are applied.

2.2.5 The sub-Group noted the offer by MECMA for carrying out the safety and airspace monitoring aspects regarding RNP/RNAV implementation. Under Conclusion 6/3 the RNP/RNAV Task Force assigned the responsibility for carrying out this task. To this effect, the Terms of Reference of MECMA was amended to include additional tasks to be carried out. The Sub-Group accordingly endorsed the revised Terms of Reference of MECMA indicated at **Appendix 2.2A** to the report on Agenda Item 2.2.

2.2.6 It was noted that the Sixth meeting of the RNP/RNAV Task Force also addressed the need for the implementation of ATS safety management programmes in the MID Region. The meeting recalled

that the ICAO Council, in reviewing the report of MIDANPIRG/7 meeting Conclusion 7/9 concerning the establishment of a regional safety and monitoring agency, requested MIDANPIRG to consider the regional implementation of ATS safety management programmes. The Sub-Group accordingly endorsed the following draft conclusion of the Task Force as follows:

**DRAFT CONCLUSION 6/6: IMPLEMENTATION OF THE ATS SAFETY MANAGEMENT PROGRAMMES IN THE MID REGION**

That:

In accordance with the provisions of Annex 11(Chapter 2 paragraph 2.26), States shall implement systematic and appropriate ATS safety management programmes with a view to ensure that:

- a) the established level of safety applicable to the provision of ATS within an airspace or at an aerodrome is met; and
- b) safety-related enhancements are implemented whenever necessary.

2.2.7 Under Decision 6/5 of the RNP/RNAV Task Force, it was agreed that with a view to assist the different planning mechanisms established for the enhancement of safety and airspace capacity in the region, the Secretariat will provide to the Traffic Forecasting Group, the format of traffic data requirements as presented by IATA.

2.2.8 The Sub-Group was apprised on concerns raised by some States and IATA on the separation minima to be applicable in an RNP 5 environment. It was noted that the application of 10 minutes longitudinal separation within some FIRs, in an RNP 5 environment, was causing unnecessary traffic congestion and separation minima had to be increased to 10 minutes within other adjacent FIRs so as not to create bottlenecks. The meeting also requested the Secretariat to provide guidance on the use of Mach number technique (MNT) with a view to reduce longitudinal separation in the Region. This situation is having a major impact on airspace capacity within some FIRs. Based on the foregoing the meeting formulated the following draft conclusion:

**DRAFT CONCLUSION 6/7: SEPARATION MINIMA TO BE APPLICABLE IN AN RNP 5 ENVIRONMENT**

That:

- a) the secretariat provides guidance to States on the conditions for further reduction of separation minima in an RNP 5 environment; and
- b) guidance be also provided on the use of the Mach number technique for the reduction of separation minima.

2.2.9 The Sub-Group was also inf

Implementation Project, from 29 September to 3 October 2002, organized by ICAO. The findings/recommendations which emanated from the workshop are mainly addressed to ICAO and are summarized as follows:

- i) need to establish training requirements for procedure design;
- ii) to develop guidelines for the implementation of Quality Management systems for procedure design;

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- iii) PANS/OPS (Doc 8168) provides necessary guidance to be reflected in aeronautical charts and databases and also provide information to assist procedure designers in integrating the database issues in the design process;
- iv) to develop SARPs for aeronautical databases and navigation computers to ensure proper integration of RNAV and RNP flight procedures;
- v) to develop guidance material to enable States to validate automated tools for the design of flight procedures.

2.2.10 It was agreed that the Secretariat will follow-up on the findings of the Workshop.

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### **RNP-RELATED DUTIES AND RESPONSIBILITIES OF THE MECMA**

The following duties and responsibilities as indicated under *h*) to *k*) below are being conferred to the Middle East Central Monitoring Agency (MECMA) with respect to required navigation performance (RNP). The revised duties and responsibilities are as follows:

#### **Duties and Responsibilities of the MECMA**

The Middle East Central Monitoring Agency (MECMA) for RVSM 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 will be 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 MECMA 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
  - i) coordination of the Global Positioning System Monitoring System (GMS); and
  - ii) 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; and
- 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 on a specified date.
- h) to establish and maintain a data base containing the results of navigation error monitoring;
- i) to prepare, each six months, reports setting out the results of navigation error monitoring for the preceding six-month period. These reports shall be presented to the ICAO Middle East Regional Office, Cairo, and States as part of their decision process related to safety management;
- j) to conduct safety assessments as an aid for the Middle East RNP/RNAV Task Force for decision making in conjunction with expansion or changes to the RNP route structure within the Middle East Region;
- k) to liaise with other Regional monitoring agencies and organizations to harmonise RNP implementation and upgrading;

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**REPORT ON AGENDA ITEM 2.3: REVIEW OF THE REPORT OF RVSM TASK FORCE MEETINGS**

2.3.1 Under this agenda item the Sub-Group reviewed the reports of the RVSM Task Force meetings which have been organized since MIDANPIRG/7. The activities/outcome of the three Work Groups, which have been created by the Task Force, namely the ATC Work Group (ATC/WG), the Operations/airworthiness work Group (OPS/AIR/WG) and the Safety and Airspace Monitoring Work Group (SAM/WG), were summarized as follows:

**ATC Work Group (ATC/WG)**

- i) the draft ATC Manual was developed and will be forwarded to MIDANPIRG/8 for endorsement and sent to States for regional application/ development of their own manuals.
- ii) Training guidelines have been developed to assist States in the development of their own RVSM implementation training programme.
- iii) Problems associated with the continuation/harmonisation of the MID and Eastern Mediterranean route network was addressed;
- iv) Coordination problems over the Red Sea area which may have a negative impact on the safe implementation of RVSM on 27 November 2003, was highlighted and the Secretariat has been requested to organise a meeting involving all parties concerned with a view to find a solution.

**Operations/airworthiness work Group (OPS/AIR/WG)**

- i) Draft Operations/airworthiness manual was developed and would be presented to MIDANPIRG/8 for endorsement;
- ii) The need for an RVSM implementation campaign indicating that RVSM will be implemented in the MID Region on 27 November 2003 was highlighted;

**Safety and Airspace Monitoring Work Group (SAM/WG)**

- i) An RVSM safety plan model was been developed and States have been requested to use the model in the development of their own national RVSM safety plans.

2.3.2 The Sub-Group accordingly endorsed the provisions of the draft ATM Manual, the training guidelines, the draft Operations/airworthiness Manual and the RVSM Safety Plan Model and agreed that it be presented to MIDANPIRG/8 for endorsement and eventually be sent States for regional application. Based on the foregoing it formulated the following draft conclusion:

**DRAFT CONCLUSION 6/8:      ENDORSEMENT OF GUIDANCE MATERIALS DEVELOPED WITHIN THE  
FRAMEWORK OF THE RVSM TASK FORCE**

That:

- a) The draft ATC Manual, the training guidelines, the draft Operations/airworthiness Manual and the RVSM Safety Plan Model be presented to MIDANPIRG/8 meeting for endorsement;
- b) States and organizations concerned be invited to use the provisions of these guidance materials for the development of their own Manuals/Procedures; and
- c) the procedures may be used for Regional application.

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**REPORT ON AGENDA ITEM 2.4:      REVIEW OF THE REPORT OF ATS INCIDENT ANALYSIS TASK FORCE MEETING**

2.4.1      Under this agenda item, the Sub-Group reviewed the report of the Second meeting of the ATS Incident Analysis Task Force, which was held in Cairo from 26 27 January 2003. The outcome of the meeting is summarized as follows:

- i)      It reviewed its Terms of Reference and Work Programme;
- ii)     It developed a methodology for ATS Incident Analysis;
- iii)    It developed a simplified form for prompting reports on ATS incidents by ATC personnel;
- iv)    It agreed that IATA will continue to play a leading role in the process and will keep the database on ATS incidents in the MID Region;
- v)     It highlighted the need for the development of an awareness programme for prompting reports from ATS units on ATS incidents;
- vi)    It carried out an analysis of the ATS incidents as reported by IATA and accordingly framed conclusions regarding ATC proficiency, communications problems within some FIRS and requested that ICAO organizes seminars/workshops on the establishment of safety management systems in the region.

2.4.2      The Sub-Group accordingly reviewed and endorsed the conclusions/decisions emanating from the Task Force with slight amendments. While discussing the outcome of the Task Force meeting, concerns were raised on the nature and confidentiality of the data received. It was clarified that the rationale for the collection and analysis of data on aircraft incidents was only for the sake of identification of major deficiencies in the region, which may have an impact on the safety of air navigation, or if unattended, it may eventually result in an accident.

2.4.3      The Sub-Group was of the view that unless incident reports are received from all parties concerned (Pilots and ATCs), the analysis of data received may seem to be biased. It urged States to ensure that information related to any situation which may have an impact on the safety of air navigation be sent to consolidate the IATA database, with copy to ICAO.

2.4.3      The Sub-Group accordingly endorsed the following draft conclusions/Decisions:

**DRAFT DECISION 6/9:      TERMS OF REFERENCE AND WORK PROGRAMME OF THE ATS INCIDENT ANALYSIS TASK FORCE**

That the revised Terms of Reference and Work Programme at **Appendix 2.4A** to the report on Agenda Item 2.4, be adopted for the ATS Incident Analysis Task Force.

**DRAFT CONCLUSION 6/10:      METHODOLOGY FOR THE REPORTING AND ANALYSIS OF ATS INCIDENTS.**

That:

- a)      The methodology indicated at **Appendix 2.4B** to the report on Agenda Item 2.4 be adopted for the reporting and analysis of ATS incidents in the region;
- b)      With a view to simplify and facilitate the reporting of ATS incidents to consolidate the IATA database, States/service providers use the simplified ATC Incident Reporting form at **Appendix 2.4C** to the report on Agenda Item 2.4 for the reporting of data;

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- c) States explore ways and means of establishing a non-punitive system for prompting ATCs to report any incident or situation which might have an impact on the safety of air navigation in the region; and
- d) States accord high priority to any incident attributed to human factors, in particular, taking into account the new CNS/ATM manmachine automated environment.

**DRAFT CONCLUSION 6/11: ESTABLISHMENT OF A DATABASE AND THE REPORTING OF INFORMATION RELATING TO ATS INCIDENTS IN THE REGION**

That with a view to assist the Task Force:

- a) IATA establishes database for the collection of information on ATS incidents in the region;
- b) States are urged to regularly send reports on ATS incidents, including remedial action(s) being taken to IATA with copy to ICAO; and
- c) Air Traffic Controllers are invited to contribute to the IATA database by reporting through their authorities, any incident, situation or deficiency, which might have an impact on the safety of air navigation in the region.

**DRAFT CONCLUSION 6/12: ESTABLISHMENT OF AN AWARENESS PROGRAMME FOR PROMPTING REPORTS ON ATS INCIDENTS**

That with a view to prompt reports on ATS incidents in the region, an awareness programme be initiated, highlighting the objectives and nature of the process;

**DRAFT CONCLUSION 6/13: ATC PROFICIENCY**

States be invited, through their safety management programmes, to evaluate and identify the requirement for ATC refresher courses, including English language training for Air Traffic Controllers with a view to ensure that the level and quality of services are maintained.

**DRAFT CONCLUSION 6/14: COMMUNICATIONS/COORDINATION PROBLEMS**

Taking into account the number of recurring incidents attributed to poor communications in the region, ICAO is invited to explore, through its regional planning mechanism, ways and means of addressing the problem.

**DRAFT CONCLUSION 6/15: ESTABLISHMENT OF SAFETY MANAGEMENT SYSTEMS**

In view of the mandatory requirement for the establishment of safety management programmes by States (*27 November 2003*), ICAO be invited to organize Seminars/workshops in the Region so as to assist in the process.

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## TERMS OF REFERENCE OF THE ATS INCIDENT ANALYSIS TASK FORCE

### 1. Terms of Reference

To establish a mechanism for the analysis of ATS incident reports in the MID region with a view to:

- i) have an indication on the frequency and nature of ATS incidents occurring in the MID Region and to propose corrective actions;
- ii) assist States/service providers in the identification of deficiencies and to take appropriate remedial actions;
- iii) Keep MIDANPIRG apprised of recurring incidents which may have a serious impact on the safety of air navigation in the region

### 2. Work Programme

- i) Review the compliance of States of the Middle East Region with LIM MID RAN Recommendation 2/31, Reporting and analysis of ATS incidents by States
- ii) Develop a statement of the objectives of the regional ATS incident analysis process.
- iii) Carry out an analysis of ATS incident reports received through the IATA database, determine the probable cause(s), including contributory factors, and propose remedial action(s) as necessary.
- iv) Make recommendations concerning the type of incidents which should be included in the regional analysis, and the form of reports which should be produced for MIDANPIRG and its Sub-Groups.
- v) Identify elements which could be added in the IATA ATS incident data base.
- vi) Explore ways and means of establishing a non-punitive voluntary reporting system for the MID Region with provisions for protecting the sources of the information.

### 3. Composition: All States on the MID Region, IATA, IFALPA and IFATCA.

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<b>METHODOLOGY FOR THE MID REGIONAL ATS INCIDENT ANALYSIS TASK FORCE</b>		
		<b>Appendix 3-A</b>
<b>SECTION 1</b>		<b>REMARKS</b>
<b>COLLECTION OF DATA ON ATS INCIDENTS</b>		
<b>INPUT</b>	<b>RECIPIENT (S)</b>	
1.PILOT REPORTS <i>(Use ICAO Model on ATS Incident report form)</i>  2.ATC REPORTS <i>(Use simplified form for ATC reporting)</i>  3.IFALPA <i>(Using ICAO Model on ATS Incident report form)</i>  4.IFATCA <i>(using ATC simplified report forms)</i>  5.AIRLINE REPRESENTATIVES <i>(Use ICAO Model on ATS Incident report form)</i>  6.OTHER SOURCES	IATA, MID (Preferably through email) ICAO, MID (preferably through email)	1.Report should indicate whether it is an Airprox or procedure or Facility related 2. Reports should be of confidential nature thus protecting the source of the information, unless otherwise indicated.
<b>SECTION 2</b>		
<b>RESPONSIBILITY</b>		
<b>IATA</b>	-Carry out an initial analysis of the report and update the data base accordingly; -Highlight the need for immediate action if required and initiate action through ICAO	Need to specify whether it is an Airprox facility related

	MID or directly to the State or Organization(s) concerned , with copy to ICAO; -Indicate impact on safety and efficiency	
<b>TASK FORCE</b>	-Review the reports with a view to identify the probable cause(s) -identify remedial action(s) to be taken and determine priority *(U) or **(A)	
<b>ICAO</b>	-Take follow-up action and identify rationale for non implementation Apprise MIDANPIRG of developments	Indicate whether related to human resources, funding
<b>STATES/SERVICE PROVIDERS</b>	Take appropriate action; -Indicate target date(s) on which remedial action (s) will be taken; -Identify rationale for non-implementation; and -Request assistance from ICAO for implementation <i>(if needed)</i> .	

impact on safety and requiring immediate corrective actions.

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*ATS INCIDENT REPORTING FORM					
<b>STATE/FIR:</b>		<b>DATE:    TIME    (UTC)</b>		<b>REMARKS</b>	
<b>**PRIORITY: U   A   L</b>					
<b>REPORTING AGENCY/AUTHORITY</b>	<b>*** TYPE OF INCIDENT</b>	<b>ATC</b>			
<b>NATURE OF REPORT</b>		<b>PROCEDURE</b>			
FORMAL:		<b>FACILITY:</b>			
INFORMAL:		<b>PILOTS</b>			
CONFIDENTIAL:		<b>OTHERS</b>			
<b>ADDITIONAL DETAILS</b>					
<b>PROPOSED REMEDIAL ACTION(S)</b>					
<b>ANY OTHER RELEVANT INFORMATION:</b>					

- \*\*U:** Urgent/immediate action required
- A:** To be considered of high priority and may have an impact on safety.
- L:** Low priority/no immediate action required
- \*\*\*** Examples for type of incidents could be as follows: Procedures-Lack of/or non-failures, unauthorized climb/descent,. Coordinatio

*\*Note1:- This form does NOT replace the ICAO model air traffic incident reporting form indicated in the PANS ATM-4444-Appendix 4). The intent of this form is to prompt reports from different sources with a view to identify deficiencies in the region and to take remedial action as necessary, and is to be used only for the sake of sending information to consolidate the IATA data base.*

*Note2:-.These forms should be sent through the appropriate authority in accordance with local procedures/instructions.*

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**REPORT ON AGENDA ITEM 3: REVIEW OF THE IMPLEMENTATION STATUS OF ICAO REQUIREMENTS IN THE AIS/MAP FIELD AND OTHER RELATED ISSUES****Agenda Item 3.1: Integrated Aeronautical Information Package and AIRAC System**

3.1.1 Under this agenda item the meeting was presented with an overview on ICAO requirements pertaining to the Integrated Aeronautical Information Package elements (AIP including AIP Amendments, AIP Supplements, NOTAM, AIC and Checklists and Summaries).

3.1.2 With respect to the status of implementation of the aforementioned elements, the meeting was also presented with a table containing a record of all the aeronautical information publications issued by MID States and received at MID Regional Office during 2002. In this table are recorded the reference number, date of publication, effective date, subject and remarks, if any, related to each AIS publication.

3.1.3 The meeting noted that all States to which the Middle East Regional Office is accredited have issued Aeronautical Information Publication. However, some AIPs are still in the old format and/or not regularly updated. The status of implementation of the restructured AIP in the new format is shown at **Appendix 3A** to the report on Agenda Item 3.

3.1.4 It was highlighted that keeping AIPs up to date and issuing AIP Amendments on a regular basis presents an important issue for safety, regularity and efficiency of international air navigation.

3.1.5 The Sub-Group expressed concern about the non-compliance with the requirements, danger, restricted or prohibited areas and of activities requiring temporary airspace reservations, in the sense that this non-compliance did not give operators sufficient delay to process information and to plan accordingly.

3.1.6 The Sub-Group noted that a number of NOTAMs, AIP Supplements and AICs remain in force for indefinite periods when the information contained therein would be more appropriate for inclusion into the AIP.

3.1.7 With regard to the monthly plain-language summary of NOTAM in force, the meeting considered the requirement to include in this summary the references of the latest AIP Amendments and the checklists of AIP Supplements and AIC issued; and to be prepared on a monthly basis and forwarded by the most expeditious means to all recipients of the Integrated Aeronautical Information Package. The Sub-Group was informed that almost half of MID States are not issuing the plain language summary of NOTAM.

3.1.8 The meeting was also presented with an overview on ICAO requirements pertaining to the AIRAC System. It was, therefore, highlighted that the effectiveness of an AIS is dependent upon timely provision of the required information which relies on the co-operation of all technical services such as route and airspace planners, procedure designers, navaid maintainers, communications, aerodromes, etc.

3.1.9 With respect to the status of implementation of AIRAC system, the meeting noted that system and 3 other States, although they issue AIRAC, they do not fully adhere to it. The main difficulties seem to be shortage of qualified AIS personnel and lack of coordination between AIS and the technical departments providing the raw material to the AIS for promulgation.

3.1.10 The meeting, then, reviewed the Draft FASID Table AIS-8 (Requirement of the Integrated Aeronautical Information Package) presented by the Secretariat. The updated Table AIS-8 is shown at **Appendix 3B** to report on Agenda Item 3 .

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3.1.11 In view of the above, the Sub-Group agreed to the following conclusions:

**DRAFT CONCLUSION 6/16: INTEGRATED AERONAUTICAL INFORMATION PACKAGE**

That in accordance with ICAO provisions:

- a) States, not having done so, are urged to make their national AIP available in the new format without further delay; being aware that publication of the AIP in this restructured new format represents the first step towards the development of the electronic AIP.
- b) States note the vital importance for safety to keep the AIP up to date and are encouraged to issue AIP Amendments on a regular basis. Recourse to hand amendments or annotations shall be kept to the minimum.
- c) States refrain from retaining NOTAMs, AIP Supplements or AICs in force for indefinite periods when the information contained therein would be more appropriate for inclusion in the AIP.
- d) are issued to activate an established danger, restricted or prohibited area or for airspace restrictions/reservation.
- e) A monthly printed plain-language summary of NOTAM in force, including references to the latest AIP Amendments, checklists of AIP Supplements and AIC issued, is required to be prepared with a minimum of delay and forwarded by the most expeditious means to all recipients of the Integrated Aeronautical Information Package.

**DRAFT CONCLUSION 6/17: AIRAC SYSTEM**

That, in accordance with the MID Basic ANP Chapter VIII, provisions:

- a) States take the necessary actions to improve coordination between AIS and other air navigation services providing aeronautical raw data, to ensure that the required information is supplied to the AIS as promptly and accurately as possible and to permit effective implementation of double AIRAC cycle; and
- b) A schedule of AIRAC effective dates, publication dates and cut-off dates for the receipt by AIS of the raw information to be promulgated through the AIRAC system should be issued by means of AIC once a year and distributed to all services and agencies responsible for the origination of the raw information.

**DRAFT CONCLUSION 6/18: NOTIFICATION OF DIFFERENCES**

That States, which have not done so, notify ICAO of any differences, which may exist between their national regulations and ICAO provisions related to AIS/MAP and ensure that relevant information is also published under paragraph GEN 1.7 of their national AIP.

**Agenda Item 3.2: Aeronautical Charts**

3.2.1 The meeting was informed that FASID Table AIS-6 sets out the requirements for aeronautical charts. A draft of this Table prepared by the Secretariat based on the information received from MID States in response to State Letters AN 9/2 -029 of 18 February 2002 and AN 9/2-098 of 24 April 2002, and also based on the information published in the e aforementioned State Letters, was presented to the meeting for review and update.

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3.2.2 In this respect, it was highlighted that the Air Navigation Plan (ANP) is a that the facilities and services shown in the ANP/FASID should represent those, which will be needed for a reasonable planning of approximately 5 years. However, the existing facilities and services should be shown in the AIPs published by States. To make the difference between the requirements for planning purposes and the implementation status more clear, the Sub-Group agreed to adopt for FASID Tables AIS-5 (WGS-84 requirements) and FASID Table AIS-6 (Aeronautical charts requirements) the same technique adopted for the FASID table CNS-3, i.e. use: "X" for required and not implemented and "XI" for required and implemented.

3.2.3 The Sub-Group then, reviewed and updated the Draft FASID Table AIS-6 (Aeronautical Chart Requirements) as shown at **Appendix 3C** to the report on Agenda Item 3, with a view to be incorporated in the final draft of MID Basic ANP and FASID.

3.2.4 It was underlined then that some MID States have still not completed part or all of the implementation and publication of the mandatory charts. An overall view of the status of implementation of these charts in the MID Region is summarized hereafter:

- Only 2 States have produced the Enroute Chart
- 5 States have not yet produced the Aerodrome/Heliport Chart
- 2 States have not yet produced the Aerodrome Obstacle Chart Type A;
- 8 States have partly produced the Aerodrome Obstacle Chart Type A;
- 2 States have not yet produced the Instrument Approach Chart and few other States have partly implemented it.
- Among 6 States having runways CAT II and/or III, 2 States have not yet produced related Precision Approach Terrain Chart

3.2.5 Regarding the status of implementation of the conditionally mandatory charts in the MID Region, the meeting noted the following:

- No State has implemented the Aerodrome Obstacle Chart ;
- 4 States have implemented the Area Chart
- 8 States have implemented the Standard Departure Chart and 2 States have partly implemented it;
- 4 States have implemented the Standard Arrival Chart and 2 States have partly implemented it;
- One State has implemented the Visual Approach Chart States have partly implemented it.

3.2.6 With reference to Annex 4 Appendix 5 and the Middle East Region FASID Table AIS-7 attached as **Appendix 3D** to the report on Agenda Item 3 and which sets out the

(WAC), the meeting noted that 10 MID States have been assigned the responsibility for the production of this chart and that the production responsibility for certain sheets (2426 and 2445) has been accepted by more than one State. These States by mutual agreement should define limits of responsibility for those sheets. The meeting then expressed concern with respect to the status of implementation of the (WAC) in the MID Region which appears to be a specific domain with low degree of implementation. In fact:

- Only one State of the MID Region has published information in its AIP regarding the availability of the corresponding sheets of the World Aeronautical Chart

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- 3 States have made reference to the Operational Navigation Charts ONC 1:1 000 000 available on request from the accredited Chart Agents.

3.2.7 In this regard the meeting was informed that the 1:1 000 000 scale Operational Navigation Chart (ONC) and the 1: 500 000 scale Tactical Pilotage Chart (TPC) are not ICAO specification charts and differ from the WAC and Aeronautical Chart mostly in that they do not show the required detail of the ATS system and have a different hypsometric tinting scheme and consequently should not be regarded as replacements for the WAC and Aeronautical Chart

3.2.8 During discussion of this agenda item, the meeting recalled also that the MID Basic ANP and FASID did not assign any responsibility for the production of the WAC sheets: 2548, 2563 and 2670. It was agreed to initiate consultations with States supposed to be covered by the aforementioned sheets with a view to identifying those States that could accept to produce these sheets and/or provide assistance to other States in this respect.

3.2.9 Regarding the World Aeronautical Chart raised regarding the cost of producing this chart and the real operational need for such chart.

3.2.10 Complementary to the above information, it was underlined that, there is no "Differences" so far notified by MID States pertaining to the implementation of aeronautical charts (Article 38 of the Convention on International Civil Aviation (Doc 7300/8) and Supplement to Annex 4, refers) and this does not correspond to the current level of implementation of aeronautical charts in the MID Region.

3.2.11 In view of the foregoing, the meeting concluded:

**DRAFT CONCLUSION 6/19: IMPLEMENTATION OF ICAO AERONAUTICAL CHARTS**

That, in accordance with ICAO Annex 4 provisions, MID States not having done so, are urged to make the mandatory aeronautical charts available without further delay.

**DRAFT CONCLUSION 6/20.: RESPONSIBILITY FOR THE PRODUCTION OF THE WORLD AERONAUTICAL CHART**

That the Sub-Group:

- a) Call the attention of MID States to the fact that MID Basic ANP and FASID did not assign any responsibility for the production of the World and 2670; and
- b) Initiates consultations with States supposed to be covered by the aforementioned sheets with a view to identifying those States that could accept to produce these sheets and/or provide assistance to other States in this respect.

**DRAFT CONCLUSION 6/21: USE OF AND IN FASID TABLE AIS-5 AND AIS-6**

That, in order to make the difference between the requirements for planning purposes and the implementation status more clear, the ATM/SAR/AIS Sub-Group agreed to adopt for FASID Tables AIS-5 (WGS-84 requirements) and FASID Table AIS-6 (Aeronautical charts requirements) the same technique adopted for the FASID table CNS-3, i.e. use: "X" for required and not implemented and "XI" for required and implemented.

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**Agenda Item 3.3: WGS-84 Implementation**

3.3.1 The meeting recalled that MIDANPIRG/6 meeting under Conclusion 6/1 adopted the new format for reporting the status of implementation of WGS-84 which was consequently included in the MID FASID as FASID Table AIS-5. The Sub-Group took note also of MIDANPIRG/7 Conclusion 7/25, which replaced the MIDANPIRG/6 Conclusion 6/1.

3.3.2 It was then indicated that the new table was forwarded with State Letter AN 8/1.1 327 dated 19 December 2000 to all MID States which were requested to submit up-to-date and detailed information related to their WGS-84 implementation status. As a follow-up action to MIDANPIRG/7 Conclusion 7/25, the ICAO MID Regional Office, through State Letters AN 8/1.1-031 of 18 February 2002 and AN 8/1.1 - 230 of 19 August 2002, urged MID States that have not reported the status of WGS-84 implementation using the ICAO uniform format, to do so and to send the updated table as soon as possible, with a view to be incorporated in the final draft version of the MID FASID. The replies received can be summarized as follow:

- a) 13 States have reported using the ICAO uniform format.
- b) 3 States have not yet provided information.
- c) 2 States have given their plans for implementation of WGS-84.
- d) 1 State has informed that WGS-84 implementation is under process without giving any timeline.

3.3.3 On the basis of information received, the Secretariat prepared a draft of FASID Table AIS-5, which was presented to the meeting for review and update. The Sub-Group then, carried out a complete review and updated the Draft FASID Table AIS-5 (WGS-84 Requirements) as shown at **Appendix 3F** to the report on Agenda Item 3, with a view to be incorporated in the final draft of MID FASID.

3.3.4 A simplified Status report of WGS-84 implementation in the MID Region is also presented at **Appendix 3E** to the report on Agenda Item 3.

3.3.5 In reviewing the status of implementation of WGS-84 in the MID Region, it was highlighted that:

- No State has fully implemented WGS-84;
- -84
- No State has fully implemented the geoid undulation (GUND)
- system.

3.3.6 Complementary to the information provided by States, it was underlined that, there is no "Differences" so far notified by MID States pertaining to the implementation of WGS-84 (Supplement to Annexes 4, 11, 14 and 15 refers) and that this does not correspond to the current level of implementation of WGS-84 in the region. The List of States Having notified ICAO with differences related to the implementation of WGS-84 was presented to the meeting for information (Supplements to Annexes 4, 14 and 15 refers). This list is attached as **Appendix 3G** to the report on Agenda Item 3.

3.3.7 Under this agenda item the meeting was also presented with particular issues related to WGS-84 implementation, mainly the Geoid undulation and Quality Systems.

3.3.8 Regarding the "Geoid undulation" (GUND), it was mentioned in particular that the implementation of RNAV and GNSS in the terminal area (TMA) and especially for the precision approaches, is very dependent on a full implementation of WGS-84 including Geoid undulation (GUND) and Quality System.

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3.3.9 With reference to DOC 9674 (WGS-84 Manual) and Annexes 4, 14 and 15 to the Convention on International Civil Aviation, the Sub-Group noted that:

- the WGS-84 Geoid undulation at aerodrome elevation position should be determined with an accuracy of 0.5m or 1ft and published with a resolution of 1m or 1ft in the AIP section AD 2.2, paragraph 4).
- the WGS-84 Geoid undulation at runway threshold should be determined with an accuracy of 0.25m or 1ft for precision approach runways and published with a resolution of 0.5m or 1ft in the AIP section AD 2.12, paragraph 5) and on the aerodrome Chart-ICAO.
- the WGS-84 Geoid undulation at runway threshold should be determined with an accuracy of 0.5m or 1ft for non-precision approach runways and published with a resolution of 1m or 1ft in the AIP section AD 2.12, paragraph 5) and on the aerodrome Chart-ICAO.

3.3.10 In view of the foregoing, the following draft conclusion was formulated:

**DRAFT CONCLUSION 6/22: WGS-84 IMPLEMENTATION IN THE MID REGION**

That States:

- a) not having done so, are urged to achieve the total implementation of the WGS-84 System;
- b) use the ICAO uniform format (FASID Table AIS-5) for reporting the status of implementation of WGS-84; and
- c) report the status of implementation of WGS-84 on a regular basis until the system is fully implemented.

**Agenda Item 3.4: AIS/MAP Automation and Quality System**

***AIS/MAP Automation***

3.4.1 Under this agenda item the meeting was presented with materials highlighting the importance of the implementation of automation in the AIS/MAP field and the requirements for the implementation of a Quality system. In this regard, with reference to Annex 15, it was recalled that the major objective of AIS is to ensure the flow of aeronautical information necessary for the safety, regularity and efficiency of international civil aviation and that States shall take all necessary measures to ensure that aeronautical information/data they provide is adequate, of required quality and timely.

3.4.2 It was mentioned in this respect that although the paper-based AIS in operation now has served the aeronautical community for more than 50 years, and led to the establishment of a whole AIS support industry, it is becoming more and more archaic and incompatible with increasingly automated flight and air traffic management systems, which largely rely on timely, accurate and quality assured aeronautical data and that the paper-based AIS is source of integrity errors, incoherence and distribution delays.

3.4.3 It was highlighted also that present and future navigation and other ATM systems are data-dependent, all requiring access to Aeronautical Information of a considerably higher quality and timeliness than is currently generally available. Aeronautical Information has therefore become a crucial and critical component of the present and future ATM systems and has to be developed to support seamless air traffic services and navigation covering all the phases and procedures related to flight. Essential improvement of current methods of operation must continue, whilst in parallel, AIS must transit to significantly different methods of information provision and management so as to meet the future needs of airspace users in a safe, timely and cost effective way.

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3.4.4 With a view to obtain information from States regarding to what extent automation is included within their Aeronautical Information Services, a questionnaire prepared by the secretariat was presented to the meeting for review. The meeting then agreed that the questionnaire shown at **Appendix 3H** to the report on Agenda Item 3, be sent by the ICAO MID Regional Office to all States of the region for a survey on automation of Aeronautical Information Services and that the results of this survey should serve as a basis for the development of an AIS/MAP Automation Plan for the MID Region.

3.4.5 The Sub Group was informed also that the concept of Computerized AIS System (CAIS), developed by the East Tennessee State University (ETSU) in accordance with the ICAO request, has been presented to the ANC in May 2002. This concept defines the provision of distributed aeronautical information in real time. The ultimate goal of the system will be to provide in real time quality aeronautical information to any user, anytime, anywhere (3 A's).

3.4.6 The meeting was made aware that ICAO has abandoned the approach aimed towards standardisation at the highest conceptual level of aeronautical information (the approach attempted earlier by Standard ICAO Conceptual Information Model (SICIM) at the AIS/MAP Divisional meeting, 1998). Instead, concentration is on the codification and exchange of aeronautical information and updates to it. The new goal is to have a system, which is capable of storing and retrieving electronic AIPs and broadcast AIP updates.

#### **Quality System**

3.4.7 With regard to Quality Systems, it was underlined that the role of the AIS/MAP is one of the main elements for the successful transition to a Global CNS/ATM System. At the core of these elements lies the quality system that will provide not only quality but also timely aeronautical information/data to the International Aviation Community. The meeting then recalled that Amendment 29 to Annex 15 introduced the requirements for the implementation of a quality system, within the Aeronautical Information Services. As of 1 January 1998:

*Each Contracting State shall take all necessary measures to introduce a properly organized quality system containing procedures, processes and resources necessary to implement quality management at each function Stage as outlined in 3.1.7 above (an Aeronautical Information Service shall receive and/or originate, collate or assemble, edit, format,*

*such a quality management shall be made demonstrable for each function stage, when required Annex 15, Chapter 3 paragraph 3.2.1, refers).*

3.4.8 Reference was made also to Paragraph 3.2.2 of Annex 15 which recommends that the quality system established should be in conformity with the International Organization for Standardization (ISO) 9000 series of quality assurance standards, and certified by an approved organization and to ICAO Doc. 9750-AN/963 Global Air Navigation Plan for CNS/ATM Systems, Chapter 9, which underlines the concept of Quality System.

3.4.9 For clarification purposes, the meeting was presented with more background materials on quality management systems, particularly the ISO 9001 version 2000 concept and requirements.

3.4.10 The Sub-group noted that the implementation of the quality system appears to be a specific domain with low degree of implementation among MID States. It was agreed then, that in States where the implementation of a Quality System is not yet planned, improvements could be made by checking the current status and improving the procedures

areas where quality assurance could be introduced pending the ISO 9000 certification. The draft Checklist as well as some Key Performance Indicators (KPIs) prepared by the secretariat were reviewed and adopted by the Sub-Group as shown in **Appendix 3I** to the report on Agenda Item 3 .

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3.4.11 It was also brought to the attention of the meeting that, the AIS/MAP Section in Montreal is developing the Quality Assurance Manual for AIS and MAP services together with the Training Manual for AIS/MAP personnel and that these two manuals are in the final stages and completion is expected in April 2003.

**AIS/MAP Task Force**

3.4.12 With a view to reactivate the AIS/MAP Task Force to examine the Status of implementation of the ICAO requirements in the field of AIS/MAP and recommend action to be taken to overcome difficulties/deficiencies in that field with emphasis on AIS Automation and Quality Management Systems, the meeting recalled that the MIDANPIRG AIS Task Force was established pursuant to Decision 2/5 of the ATM/AIS SG/2, which was held in Cairo, 2-4 December 1996. The AIS Task Force held its first meeting in Cairo, 3-6 March 1997 and has reported directly to MIDANPIRG/4, which was held in Cairo, 01-05 December 1997. MIDANPIRG/4 under Decision 4/18 decided that, the AIS Task Force, further study problems facing the implementation of the following AIS issues and recommend applicable and practical solutions for them:

- *WGS-84*
- *ICAO Charts*
- *New AIP*
- *AIRAC System*
- *AIS Automation*

3.4.13 The meeting noted also that since 1997 the AIS follow-up in the MID Region was ensured at the level of the ATM/SAR/AIS Sub-Group and that no AIS Task Force meeting has been held since the first one held in March 1997. The Sub-Group accordingly agreed to reactivate the AIS/MAP Task Force and endorsed its revised Terms of Reference and Work Programme indicated at **Appendix 3J** to the report on agenda Item 3.

3.4.14 In view of the above, the Sub-Group agreed to the following conclusions:

**DRAFT DECISION 6/23: AIS/MAP TASK FORCE**

That the AIS/MAP Task Force be reactivated with revised Terms of Reference and Work Programme, as shown in **Appendix 3J** to the report on Agenda Item 3, to examine the Status of implementation of the ICAO requirements in the field of AIS/MAP and recommend action to be taken to overcome difficulties/deficiencies in that field with emphasis on AIS Automation and Quality Management Systems.

**DRAFT CONCLUSION 6/24: PROPER STATUS OF AIS**

That in accordance with the MID Basic ANP Chapter VIII provisions, States are reminded of the requirement for ensuring that:

- a) AIS is given proper status in their Administrations;
- b) investment in the improvement of AIS has a return in the safety, regularity and efficiency of air navigation; and
- c) sufficient funds and trained personnel are made available to AIS.

**DRAFT CONCLUSION 6/25: SURVEY ON AUTOMATION OF AERONAUTICAL INFORMATION SERVICES**

That:

- a) the questionnaire at **Appendix 3H** to the report on Agenda Item 3 be sent by ICAO MID Office to MID States, for a survey on automation of Aeronautical Information Services;

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- b) the results of this survey should serve as a basis for the development of an AIS/MAP Automation Plan for the MID Region; and
- c) the AIS/MAP Task Force evaluate the level of AIS automation required for the MID region.

**DRAFT CONCLUSION 6/26: INTRA AND INTER-REGIONAL CO-OPERATION IN AIS AUTOMATION**

That the various experiences of MID States and other States from adjacent Regions in the field of AIS/MAP automation be taken into consideration in any regional approach to automation, pending the development of guidelines by ICAO regarding storage and exchange of electronic aeronautical information/data.

**DRAFT CONCLUSION 6/27: QUALITY SYSTEM**

*That in accordance with Annex 15 provisions, MID States, not having done so, are urged to take the necessary measures to introduce a properly organized quality system within their Aeronautical Information Services, containing procedures, processes and resources necessary to implement quality management at each function Stage.*

**DRAFT CONCLUSION 6/28: AIS QUALITY ASSURANCE AND AIS/MAP AUTOMATION PLANS**

That, inter alia, an AIS Quality assurance/management Plan and an AIS/MAP Automation Plan for the MID Region, have to be developed by the AIS/MAP Task Force. A progress report on the status of implementation of both plans has to be presented to the ATM/SAR/AIS Sub-Group for consideration and eventual proposal to MIDANPIRG for approval.

**DRAFT CONCLUSION 6/29: AIS/MAP SEMINAR/WORKSHOP IN THE MID REGION**

That a Seminar/Workshop be organized in the MID Region to address issues related to the latest developments in the field of AIS/MAP particularly AIS automation and Quality Systems.

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Appendix 3A to the Report on Agenda Item 3

**MID STATES AIP STATUS**

State	AIP Edition	Last Amendment (NR/date)	Remarks
<i>Afghanistan</i>	Fifth Edition/ Dec. 90	NR 36 dated 01 Dec 90	<b>AIP old Format</b>
<i>Bahrain/Qatar</i>	Fourth Edition/ Nov. 00	NR 196 dated 05 Sep 02	AIP new Format
<i>Egypt</i>	Eighth Edition/ Aug. 02	NR 75 dated 01 Sep 02	AIP new Format
<i>Iran</i>	New Edition/ Jan. 97	NR 06/02 dated 01 Nov 02	AIP new Format
<i>Iraq</i>	Fourth Edition/ Jul 90	NR 13 dated 15 Jul 90	<b>AIP old Format</b>
<i>Israel</i>	New Edition/ Dec. 96	NR 101/01 dated 29 Nov 01	AIP new Format
<i>Jordan</i>	Third Edition/ Oct. 96	NR 25/02 dated 01 Nov 02	AIP new Format
<i>Kuwait</i>	Fourth Edition/ Sep. 96	NR 26 dated 27 Dec 01	AIP new Format
<i>Lebanon</i>	Fourth Edition/ Jan. 99	NR 11/01 dated 14 Jun 01	AIP new Format
<i>Oman</i>	Second Edition/ Mar 96	NR 02/02 dated 28 Nov 02	AIP new Format
<i>Saudi Arabia</i>	Fourth Edition/ Feb. 98	NR 11/02 dated 26 Dec 02	AIP new Format
<i>Syria</i>	New Edition/ Sep. 99	New Edition/ Sep. 99	No AIP AMDT received since 01 Sep 1999 date of issuance of the new AIP
<i>U.A.E</i>	Second Edition / Jul 00	NR 58 dated 28 Nov 02	AIP new Format
<i>Yemen</i>	First Edition/ Mar. 96	First Edition/ Mar. 96	No AIP AMDT received since 28 Mar 1996 date of issuance of the new AIP
<i>Cyprus</i>	Third Edition/ Apr 96	NR 01/02 dated 24 Jan 02	AIP new Format
<i>Libya</i>	Fourth Edition/ Aug. 80	NR 7 dated 07 Jul 83	<b>AIP old Format</b>
<i>Pakistan</i>	Sixth Edition (Draft)/ Aug 01	Sixth Edition (Draft)/ Aug 01	Draft version (new format) 6 <sup>th</sup> Edition received on 22 Jan 02.  pages but some pages are dated 26 Aug 01
<i>Sudan</i>	Fourth Edition/ Jul. 94	Fourth Edition/ Jul. 94	<b>AIP old Format</b>

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

*EXPLANATION OF THE TABLE*

*Column*

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

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 APPENDIX 3B

3B-2

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

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Appendix 3C to the Report on Agenda Item 3

**FASID TABLE AIS-6 AERONAUTICAL CHART REQUIREMENTS**

*EXPLANATION OF THE TABLE*

*Column*

- |    |   |                              |
|----|---|------------------------------|
| 1  | Name of the State, territory or aerodrome for which aeronautical chart is required with the designation of the aerodrome use:<br><br>RS international scheduled air transport, regular use<br>RNS international non-scheduled air transport, regular use<br>RG international general aviation, regular use<br>AS international scheduled air transport, alternate use |                              |
| 2  | Runway designation numbers  |                              |
| 3  | Type of each of the runways to be provided. The types of runways, as defined in Annex 14, Volume 1, Chapter I, are:<br><br>NINST non-instrument runway;<br>NPA non-precision approach runway<br>PA1 precision approach runway, Category I;<br>PA2 precision approach runway, Category II;<br>PA3 precision approach runway, Category III.                             |                              |
| 4  | Requirement for the Enroute Chart - covered.  |                              |
| 5  | Requirement for the Instrument Approach Chart designation to be covered.  | against the runway           |
| 6  | Requirement for the Aerodrome/Heliport Chart to be covered.   |                              |
| 7  | Requirement for the Aerodrome Obstacle Chart ICAO Type A (AOC- runway designation to be covered.  | against the                  |
| 8  | Requirement for the Precision Approach Terrain Chart runway designation to be covered.  |                              |
| 9  | Requirement for the Area Chart  | the aerodrome to be covered. |
| 10 | Requirement for the Standard Departure Chart-Instrument runway designation to be covered.   |                              |
| 11 | Requirement for the Standard Arrival Chart-Instrument runway designation to be covered.   |                              |
| 12 | Requirement for the Visual Approach Chart runway designation to be covered.   |                              |
| 13 | Requirement for the Aerodrome Obstacle Chart ICAO Type C (AOC-C), sho aerodrome to be covered.  |                              |
| 14 | Remarks.  |                              |

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

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





STATE, TERRITORY OR AERODROME FOR WHICH THE CHART IS REQUIRED			MANDATORY CHARTS					CONDITIONALLY MANDATORY CHARTS					REMARKS
CITY/AERODROME/	RWY No	RWY TYPE	ENRC	IAC	ADC	AOC-A	PATC	ARC	SID	STAR	VAC	AOC-C	
1	2	3	4	5	6	7	8	9	10	11	12	13	14
<b>IRAN</b>			XI										
OIKB Bandar Abbass RS					X								
	03R 21L	NPA PA1		XI XI		X X			XI XI	XI XI			
	03L 21R	NINST NINST				X X							
OIFM Esfahan/Shahid Beheshti RS					X								
	08R 26R	NPA PA1		XI XI		X X			XI XI	XI			
OIMM Mashhad/Shahid Hashemi Nejad RS					XI								
	13R 31R	NPA PA1		XI XI		X X			XI XI	XI XI			
OISS Shiraz/shahid Dastghaib RS						X							
	11R 29L	NPA PA1		XI		X X			XI XI	XI			
	11L 29R	NPA PA1		XI		X X			XI XI	XI			
OITT TABRIZ/Tabriz RNS					X								
	12L 30R	NPA PA1		XI XI		X X			XI XI	XI XI			
OIII TEHRAN/Mehrabad Intl RS					XI			XI					
	11R 29L	NPA PA1		XI XI		X X	XI XI		XI XI	XI XI			
OIIE TEHRAN/Emam Khomeini Intl RS (Future)						X							
	11L 29R	NPA PA1		XI XI		X X	XI XI		XI XI	XI XI			
OIZH ZAHEDAN/Zahedan Intl RS					X								
	17 35	NPA NPA		XI		X X			XI XI	XI			

STATE, TERRITORY OR AERODROME FOR WHICH THE CHART IS REQUIRED			MANDATORY CHARTS					CONDITIONALLY MANDATORY CHARTS					REMARKS
CITY/AERODROME/	RWY No	RWY TYPE	ENRC	IAC	ADC	AOC-A	PATC	ARC	SID	STAR	VAC	AOC-C	
1	2	3	4	5	6	7	8	9	10	11	12	13	14
<b>IRAQ</b>			X										
ORBS BAGHDAD/Saddam Intl. RS	15L 33R	PA2 PA2		X X		XI XI	X X						
	15R 33L	PA1 PA1		X X		XI XI							
ORMM BASRAH/Basrah Intl.	14 32	PA2 PA2		X X		XI XI	X X						
<b>ISRAEL</b>			X										
LLET EILAT/Eilat RNS	03 21	NPA NINST		XI		XI XI			XI XI		XI		
LLHA HAIFA/Haifa RS	16 34	NINST NINST			XI								
LLJR JERUSALEM/Atarot RS	12 30	PA1 NPA		XI		XI XI			XI XI				
LLOV OVDA/Intl RNS	02L 20R	NINST NPA			XI	XI XI							
LLBG TEL AVIV/Ben Gurion RS	03 21 08 26 12 30	NPA NINST NPA PA1 PA1 NPA			XI	XI XI XI XI XI XI		XI	XI XI XI XI XI XI			XI	
LLSD TEL AVIV/Sde-Dov AS	03 21	NINST NINST			XI		X X		XI XI				
<b>JORDAN</b>													
OJAM AMMAN/Marka Intl AS	06 24	NPA PA1		XI XI		XI XI			XI XI	XI XI			

STATE, TERRITORY OR AERODROME FOR WHICH THE CHART IS REQUIRED			MANDATORY CHARTS					CONDITIONALLY MANDATORY CHARTS					REMARKS
CITY/AERODROME/	RWY No	RWY TYPE	ENRC	IAC	ADC	AOC-A	PATC	ARC	SID	STAR	VAC	AOC-C	
1	2	3	4	5	6	7	8	9	10	11	12	13	14
OJAI AMMAN/Queen Alia RS					XI								
	08R 26L	NPA PA1		XI XI		XI XI			XI XI	XI XI			
	08L 26R	PA1 NPA		XI XI		XI XI			XI XI	XI XI			
OJAQ AQABA/Aqaba Intl					XI						XI		
	01 19	PA1 NPA		XI XI		XI XI			XI XI				
OJJR JERUSALEM/Jerusalem RS													
	12 30	NPA PA1											
<b>KUWAIT</b>													
OKBK KUWAIT/Kuwait Intl. RS			XI										
	33L 15R	PA2 PA2		XI XI		XI XI	XI XI		XI XI	XI XI			
	33R 15L	PA2 PA2		XI XI		XI XI	XI XI		XI XI	XI XI			
<b>LEBANON</b>													
OLBA BEIRUT Intl. RS			XI										
	17 35	PA1 NINST		XI		XI X			XI	XI			
	18 36	PA1 NINST				XI X				XI			
	03 21	PA1 NINST		XI		XI XI			XI XI	XI	XI		
<b>OMAN</b>													
OOMS MUSCAT/Seeb Intl RS					XI								
	08 26	PA1 PA1		XI XI		XI XI			XI XI	XI XI			
OOSA SALALAH/Salalah AS	07 25	NPA PAI		XI XI		X X			XI XI	XI XI		XI	
<b>QATAR</b>													
OTBD DOHA/Doha Int RS			X										
	16 34	NPA PA2		XI XI		XI XI	XI					XI	

STATE, TERRITORY OR AERODROME FOR WHICH THE CHART IS REQUIRED			MANDATORY CHARTS					CONDITIONALLY MANDATORY CHARTS					REMARKS
CITY/AERODROME/	RWY No	RWY TYPE	ENRC	IAC	ADC	AOC-A	PATC	ARC	SID	STAR	VAC	AOC-C	
1	2	3	4	5	6	7	8	9	10	11	12	13	14
<b>SAUDI ARABIA</b>			X										
OEDF DAMMAM/King Fahd Intl RS					XI			XI					
	16L 34R	PA1 PA1		XI XI		XI XI	XI XI		XI XI				
	16R 34L	PA1 PA1		XI XI		XI XI	XI XI		XI XI				
OEJN JEDDAH/King Abdulaziz RS					XI			XI					
	16R 34L	PA2 PA2		XI XI		XI XI	XI XI		XI XI				
	16C 34C	PA2 PA2		XI XI		XI XI	XI XI		XI XI				
	16L 34R	PA1 PA1		XI XI		X X			XI XI				
OEMA MADINAH/Prince Mohammad Bin Abdulaziz RS					XI			XI					
	17 35	PA1 PA1		XI XI		X X			XI XI				
	18 36	NPA PA1		XI XI		X X			XI XI				
OERK RIYADH/King Khalid Intl RS					XI			XI					
	15L 33R	PA1 PA1		XI XI		XI XI	XI XI		XI XI				
	15R 33L	PA1 PA1		XI XI		XI XI	XI XI		XI XI				
<b>SYRIA</b>			X										
OSAP ALEPPO/Aleppo Intl. RS					XI								
	09 27	NINST NPA		XI		X X							
OSLK BASSEL AL-ASSAD/Latakia RS					XI								
	17 35	NPA NINST		XI		X X							
OSDI DAMASCUS/Damascus Intl RS					XI						XI		
	05L 23R	NPA PA1		XI XI		XI XI	XI XI		XI XI				
	05R 23L	NPA NPA		XI XI		X X	XI XI		XI XI				

STATE, TERRITORY OR AERODROME FOR WHICH THE CHART IS REQUIRED			MANDATORY CHARTS					CONDITIONALLY MANDATORY CHARTS					REMARKS
CITY/AERODROME/	RWY No	RWY TYPE	ENRC	IAC	ADC	AOC-A	PATC	ARC	SID	STAR	VAC	AOC-C	
1	2	3	4	5	6	7	8	9	10	11	12	13	14
<b>UNITED ARAB EMIRATES</b>			X										
OMAA ABU DHABI Intl RS	13R 31L	PA1 PA3		XI XI	XI			XI XI	XI XI				
	13L 31R	PA3 PA1		XI XI				XI XI	XI XI				
OMAL AL AIN/AI Ain Intl RS					XI								
	01 19	PA1 NPA		XI XI									
OMDB DUBAI/Dubai Intl RS	12L 30R	PA3 PA3		XI XI		XI XI	XI XI		XI XI	XI XI			
	12R 30L	PA2 PA2		XI XI		XI XI	XI XI		XI XI	XI XI			
OMFJ FUJAIRAH/Fujairah Intl RS					XI								
	11 29	NPA PA1		XI		XI XI			XI				
OMRK RAS AL KHAIMAH/Ras Al Khaimah Intl RS					XI								
	16 34	NPA PA1		XI XI					XI				
OMSJ SHARJAH/Sharjah Intl RS					XI								
	12 30	NPA PA2		XI XI			XI		XI XI	XI XI			
<b>YEMEN</b>			X										
OYAA ADEN/Aden Intl RS					XI			XI					
	08 26	NPA PAI		XI XI		XI XI							
OYHD HODEIDAH/Hodeidah RS					XI			XI			XI		
	03 21	NPA NPA		XI XI		X X							
OYRN MUKALLA/Riyan RS					XI			XI					
	06 24	NPA NPA		XI		X X							
OYSN RS					XI			XI					
	18 36	PA1 NPA		XI		XI XI			XI XI	XI XI			
OYTZ TAIZ/Ganad RS					XI						XI		
	01 19	NPA NPA		X X		X X							

ATM/SAR/AIS SG/6  
Appendix 3D to the Report on Agenda Item 3

**PRODUCTION RESPONSIBILITY FOR SHEETS OF  
THE WORLD AERONAUTICAL CHART ICAO 1:1 000 000  
(MID FASID TABLE AIS-7)**

*EXPLANATION OF THE TABLE*

*Column:*

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

State	Sheet number(s)	Remarks
<b>Afghanistan</b>	2336, 2337, 2430, 2431, 2442	
<b>Bahrain</b>	2547	
<b>Egypt</b>	2447, 2448, 2543, 2544	
<b>Iran, Islamic Republic of</b>	2338, 2339, 2428, 2429, 2443, 2444	
<b>Iraq</b>	2427, 2445	
<b>Israel</b>		
<b>Jordan</b>		
<b>Kuwait</b>	2445	<i>Note: Kuwait to cover its own territory in the Kuwait FIR</i>
<b>Lebanon</b>	2426	<i>Note: Lebanon to cover its own territory in the Beirut FIR</i>
<b>Oman</b>		
<b>Qatar</b>		
<b>Saudi Arabia</b>	2446, 2545, 2546, 2564, 2565, 2566, 2668, 2669	Not yet published
<b>Syrian Arab Republic</b>	2426 ( <i>Syrian Arab Republic only</i> )	
<b>United Arab Emirates</b>		
<b>Yemen</b>	2686, 2687	

**Notes.** - In those instances where the production responsibility for certain sheets has been accepted by more than one State, these States by mutual agreement should define limits of responsibility for those sheets.  
- The responsibility for the production of the WAC sheets: 2548, 2563, and 2670 is not yet assigned to any States.

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**Simplified Status Report of WGS-84 implementation 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 (no information available)
BAHRAIN	F	F	F	F	F	F	N	N	F	
CYPRUS	F	F	F	F	F	F	N	N	F	
EGYPT	F	F	F	P	F	F	P	F	F	
IRAN	F	F	P	F	F	F	N	F	F	
IRAQ	N	N	N	N	N	N	N	N	N	Implementation was expected for <b>October 2002</b>
ISRAEL	N	N	N	N	N	N	N	N	N	Implementation planned for <b>July 2003</b>
JORDAN	F	F	F	F	F	F	N	N	F	
KUWAIT	F	F	F	F	F	F	N	N	F	
LEBANON	F	F	F	F	F	F	N	N	F	
LYBIA	P	P	P	P	P	P	N	N	N	Under process
OMAN	F	F	F	F	F	F	N	F	F	
PAKISTAN	N	N	N	P	P	P	N	N	N	The end of the Implementation process is expected for <b>March 2003</b>
QATAR	F	F	F	F	F	F	N	N	F	
SAUDI ARABIA	F	F	N	F	F	N	N	N	F	
SUDAN	F	F	P	F	F	N	N	N	N	
SYRIA	N	F	P	P	P	P	N	N	N	Under Process
UNITED ARAB EMIRATES	F	F	F	F	F	F	P	F	F	
YEMEN	N	N	N	N	F	F	N	N	N	Not reported using uniform format Publication expected <b>June 2003</b>
TOTAL (%)	F	63	69	47	58	68	58	0	21	58
	P	5	5	21	21	16	16	11	0	0
	N	32	26	32	21	16	26	89	79	42

Legend:

F: Fully implemented

P: Partly implemented

N: Not implemented

-----

ATM/SAR/AIS SG/6  
Appendix 3G to the Report on Agenda Item 3**List of States Having notified ICAO with differences related to  
the implementation of WGS-84****SUPPLEMENT TO ANNEX 14 Volume I**

Differences Notified by	Paragraph	Subject
<b>Germany</b>	Appendix 5 (Table 2)	The WGS-84 geoid undulation at aerodrome elevation position will not be published in Germany. <b>Remark:</b> <i>This item needs not to be published because for non-precision approaches the MDH is referred to the THR position at all German IFR aerodromes.</i>
<b>Netherlands</b>	2.5.3 2.5.4	In the Netherlands it is not yet considered necessary to determine the geographical coordinates of the taxiway centre line points in terms of WGS-84. In the Netherlands it is not yet considered necessary to determine the geographical coordinates of the aircraft stands in terms of WGS-84.

**SUPPLEMENT TO ANNEX 15**

Differences Notified by	Paragraph	Subject
<b>Argentina</b>	3.6.4.2 and 3.6.4.4	The geoid undulation will not be provided. Geoid undulation will not be applied. The order of resolution of the geographical coordinates will be applied partially in accordance with details in Appendix 7 and Appendix 1.
<b>Belarus</b>	3.6.4	The WGS-84 system is being implemented gradually at the present time.
<b>Canada</b>	3.6.4	Canada uses the North American Datum 1983 (NAD 83) as a geodetic reference datum. NAD 83 is equivalent to WGS84 for aeronautical purposes.
<b>China</b>	3.6.4.1 and 3.6.4.2	WGS-84 is being progressively introduced. WGS-84 geoid undulation not published at present
<b>Denmark</b>	3.6.4.2	Reference to the geoid undulation is not yet available.
<b>Germany</b>	Appendix 7 (Table A7-2)	The WGS-84 geoid undulation at aerodrome/heliport elevation position will not be published in Germany
<b>United Republic of Tanzania</b>	3.6.4.1	Only a few coordinates at airports are published in WGS-84 geodetic reference.
<b>Uzbekistan</b>	3.6.4.1 and 3.6.4.2	The geodetic coordinates of WGS-84 are not used. Information on geoid undulation will not be provided

**SUPPLEMENT TO ANNEX 4**

Differences Notified by	Paragraph	Subject
<b>Australia, Ecuador and New Zealand</b>	<b>Chapter 13.</b> Aerodrome/Heliport Chart ICAO. Paragraph 13.6.1 c)	<i>Geoid undulation data not available/published.</i>
<b>France</b>	<b>Chapter 13.</b> Aerodrome/Heliport Chart ICAO. Paragraph 13.6.1 c)	So as not to detract from legibility of the charts, only one geoid undulation, valid for the aerodrome as a whole, is published.

ATM/SAR/AIS SG/6  
 Appendix 3H to the Report on Agenda Item 3

**ICAO MIDDLE EAST OFFICE  
 SURVEY ON AUTOMATION OF AERONAUTICAL INFORMATION SERVICES (AIS)  
 IN THE MID REGION**

**Introduction:**

The purpose of this questionnaire on automation of Aeronautical Information Services in the MID Region is to collect information from States regarding to what extent automation is included within their Aeronautical Information Services. The outputs of this survey should serve as a basis for the development of an AIS/MAP Automation Plan for the MID Region.

NAME OF STATE	DATE

**Focal point:** Who in your State could we contact for further clarification concerning AIS automation?

NAME: \_\_\_\_\_  
 ORGANIZATION: \_\_\_\_\_  
 TITLE: \_\_\_\_\_  
 PHONE: \_\_\_\_\_  
 FAX: \_\_\_\_\_  
 E-MAIL: \_\_\_\_\_

1. **Provision of aeronautical information services:** a)  b)  c)

- a) Has the aeronautical information service been provided by your State? or
- b) Has your State agreed with one or more other Contracting State(s) for the provision of a joint service?
- c) Has your State delegated the authority for the provision of the aeronautical information service to other State or non-

2. **Geographical coverage area:** Indicate the approximate number of States with which you exchange aeronautical information? a)  b)  c)

- a) less than 50; or
- b) between 50 and 100; or
- c) More than 100.

**3. Statistics for National Publications:** Please fill in the table below

AIS Publication	AIP Amendments		AIP Supplements		AIC	NOTAM	NOTAM Summary
	Normal	AIRAC	Normal	AIRAC			
<b>Total Number</b> (per year)							

*Note: Please use 2000, 2001 and 2002 as reference.*

**4. Aeronautical database:** Have you established an aeronautical database?

Yes	No
-----	----

a) If YES, please specify

✓ if the information stored in the database accessible by and/or exchangeable with other users

✓

✓ if the NOTAM production process automatically uses this database; YES/NO

✓ if the NOTAM reception process automatically uses this database; YES/NO

✓ if the AIP Amendments and Supplements production processes are based on an automatic or man

✓ if the aeronautical chart production process is based on an automatic or manual extraction

✓ if the integrity of the information contained in this database is regularly checked using a Cyclic Redundancy Check tool (CRC), YES/NO

✓ if this database is accessible by internet, if no do you have plans for that YES/NO

✓ if this database is accessible from on-  
if no do you have plans fo

b) If NO, do you have plans to do so and when?

5. **NOTAM Office:** Is your NOTAM Office automated

a)		b)		c)	
----	--	----	--	----	--

- a) not automated; or
- b) partially automated; or
- c) fully automated.

Please give more detail: If not automated please give the reason(s) and the intended plan and in case partially or fully automated give a brief description of the automated Tasks/functions:

6. **Aerodrome AIS Units:** Are your Aerodrome AIS Units automated?

Yes		No	
-----	--	----	--

a) If YES, please specify

- ✓ Do they use a local database or a central database for the production of Pre-flight Information
  
- ✓ Do they produce all types of PIBs as specified in Doc 8126 paragraph 5.7.2 (including the narrow path rout
  
- ✓ Is the PIB production is filtered based on the NOTAM qualifiers YES/NO
  
- ✓ Please describe any other available automated task/function related to pre-flight information

b) If NO, do you have plans to do so and when

7. **AIP:** Is the production process of your Aeronautical Information Publications (AIP, AIP Amendments, AIP Supplements and AICs) automated? 

a)		b)		c)	
----	--	----	--	----	--
- a) not automated; or  
b) partially automated; or  
c) fully automated.

Please give more detail: If not automated please give the reason(s) and the intended plan and in case partially or fully automated give a brief description of the automated Tasks/Functions. Please specify also if your Aeronautical Information Publications are available on a CD-ROM and/or on a Website and do they include aeronautical charts in an electronic format.

8. **Aeronautical Charts:** Is the production process of your Aeronautical Charts automated? 

a)		b)		c)	
----	--	----	--	----	--
- a) not automated; or  
b) partially automated; or  
c) fully automated.

Please give more detail: If not automated please give the reason(s) and the intended plan and in case partially or fully automated give a brief description of the automated Tasks/Functions. Please specify also the software and hardware used for the production of aeronautical Charts.

9. **Quality System:** Have you implemented a Quality System within your AIS?

Yes	No
-----	----

a) If YES, please

✓

✓

✓

✓

b) If NO, do you have plans to do so and when

10. **AIS Automation difficulties:** Have you encountered/Do you still have some difficulties to introduce automation within your AIS?

Yes	No
-----	----

If YES, please describe areas where assistance could be offered in the field of AIS automation

11. **Other helpful information:** What other information might be helpful for Regional AIS Automation Plan?

## **Draft AIS improvement Checklist and Key Performance Indicators (KPIs)**

### **DATA ORIGINATION**

1. Have you performed monitoring and quality control of the data received?
2. Have you informed data originators about the results of your control?
3. Are the data originators aware of the importance of the data and time of distribution?
4. Have you arranged with your data originators the format in which you prefer to receive data?

### **INTERNAL PROCESSES**

1. Do you regularly review the entire product spectrum to ensure that it is updated and is meeting user requirements?
2. Do you regularly check that stored information is available as decided/required?
3. Does the staff know what it has to do according to the standards?
- 4.
5. Is there a periodic review of resources available to conduct identified tasks?
6. Is there a mechanism to take the results of periodic reviews in account in the definition of priorities and budget?
7. Are the human resources adequate (including training)?
8. Do you have feed back mechanisms for your own staff?
9. Do you have feed back mechanisms for your users?
10. Do you internally communicate your strategy and performance?

### **CUSTOMER RELATIONS**

1. Do you have regular meetings with your customers?
2. Do you check that your customers receive the product transmitted and in a timely manner?
3. Do you check that the products you produce meet your customer requirements/
4. Do you publish your verification statistics?
5. Do you send your verification statistics to your customers?
6. Does your contracts include required performance Indicators?
7. Is there a clearly identified way for customers to complain?
8. Can your service adapt quickly and flexibly to your customer requirements?
9. Do you have a news bulletin or Internet notice board (for example) for passing on information to your customers?
- 10.
- 11.
12. Are you fully meeting Annex 4 and Annex 15 requirements?
13. Are you ISO 9001:2000 compliant?

**KEY PERFORMANCE INDICATORS (KPIs)**

**Introduction**

Measuring and monitoring are very important part of a quality management system. They are required in order to facilitate:

- ✓ Customer focus
- ✓ Continual improvement
- ✓ Factual approach to decision making.

In fact a new item that has been introduced into ISO 9001:2000 is the requirement for the organisation to monitor information on customer satisfaction as a measure of system performance. On the other hand monitoring and measurement of products and processes are stated as the obligatory standards requirements in the ISO 9001:2000. The Key Performance Indicators (KPIs) are the heart of monitoring process.

The following list is an extensive (but not exhaustive) list of possible KPIs. It was extracted from the Eurocontrol website: [www.eurocontrol.int/ais](http://www.eurocontrol.int/ais) (→AIS AHEAD).

No	KPI	Description
<b>Customer Satisfaction</b>		
1	Customer Satisfaction Index	Numerical scale for quantifying customer satisfaction according to user complaints via support office/help desk and/or customer satisfaction surveys.
<b>Financial</b>		
2	Cost of AIS Services	Percentage of the route charges used in the AIS Services.
<b>Human Factors</b>		
3	Personnel Capability	Qualitative indicators measuring capability of the personnel involving in the AIS production process as a team rather than as individuals.
4	Personnel Continuity	Annual Staff turnover rate.
5	Team coordination	Ratio of total number of errors to total number of publications (only for the ones having being coordinated with neighboring countries).
<b>Process-Efficiency</b>		
6	Rework Level	Ratio of total number of reworks (i.e., changes) made on the products to the total number of products.
7	Time spent on Product	Elapsed time between the time of modification request for certain product and its implementation.
<b>Process-Quality</b>		
8	Security	Number of unauthorized accesses or attempts to access resources illegally.
9	Traceability	Average time to trace data back to the point of its origination
10	User Inquiries	Ratio of user inquiries to the total number of products, publications and services.
11	Availability	Fraction of the total time that AIS products and services need to be up.
12	Timeliness	Number of occasions where the effective dates of the AIRAC cycle are not respected.

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ATM/SAR/AIS SG/6  
Appendix 3F to the Report on Agenda Item 3

**FASID TABLE AIS-5 WGS-84 REQUIREMENTS**

*EXPLANATION OF THE TABLE*

*Column*

1	Name of the State, territory or aerodrome for which WGS-84 coordinates are required with the designation of the aerodrome use:  RS international scheduled air transport, regular use RNS international non-scheduled air transport, regular use RG international general aviation, regular use AS international scheduled air transport, alternate use	
2	Runway designation numbers	
3	Type of each of the runways to be provided. The types of runways, as defined in Annex 14, Volume 1, Chapter I, are:  NINST non-instrument runway; NPA non-precision approach runway PA1 precision approach runway, Category I; PA2 precision approach runway, Category II; PA3 precision approach runway, Category III.	
4	Requirement for the WGS-covered.	
5	Requirement for the WGS-territory to be covered.	State or
6	Requirement for the WGS-aerodrome to be covered.	
7	Requirement for the WGS-designation to be covered.	way
8	Requirement for the WGS-to be covered.	
9	Requirement for the WGS-84 coordinates for Aerodrome/Heliport points (e.g. aerodrome/heliport referen	
10		
11	Requirement for the WGS-84 Quality System, shown by covered.	
12	Requirement for publication of WGS-territory to be covered.	
13	Remarks (timetable for implementation)	
	<i>Note.- For Columns 4 to 12 use the following symbols:</i>	
	X- Required but not implemented	
	XI- Required and implemented	

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

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

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

STATE, TERRITORY OR AERODROME FOR WHICH WGS-84 IS REQUIRED			WGS-84 REQUIRED									REMARKS
CITY/AERODROME/	RWY No	RWY TYPE	FIR	ENR	TMA CTA CTZ	APP	RWY	AD/ HEL	GUND	QUALITY SYSTEM	AIP	
1	2	3	4	5	6	7	8	9	10	11	12	13
<b>IRAN</b>			XI	XI						XI	XI	
(OIKB) Bandar Abbass RS	03R 21L	NPA PA1			XI	XI XI	XI XI			X X		
	03L 21R	NINST NINST				XI XI	XI XI					
(OIFM) Esfahan/ Shahid Beheshti RS	08L 26R	NPA PA1				XI XI	XI XI			X X		
	08R 26L	NPA NPA				XI XI	XI XI			X X		
(OIMM) Mashhad/ Shahid Hashemi Nejad RS	13L 31R	NPA PA1				XI XI	XI XI			X X		
	13R 31L	NPA PA1				XI XI	XI XI			X X		
(OISS) Shiraz/shahid Dastghaib RS	11R 29L	NPA PA1				XI XI	XI XI			X X		
	11L 29R	NPA PA1				XI XI	XI XI			X X		
(OITT) Tabriz RNS	12L 30R	NPA PA1			XI	XI XI	XI XI			X X		
	12R 30L	NINST NINST				XI XI	XI XI					
(OIII) Tehran/ Mehrabad RS	11R 29L	NPA PA1				XI XI	XI XI			X X		
	11L 29R	NPA NPA				XI XI	XI XI			X X		
(OIII) TEHRAN/Emam Khomeini Intl RS (Future)	11L 29R	NPA PA1			X	X X	X X		X	X X		
(OIZH) Zahedan RS	17 35	NPA NPA			X	XI XI	XI XI		XI	X X		

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

Expected date of  
Implementation:  
15 Oct 2002

The end of the  
implementation  
process is  
expected for  
**July 2003**  
  
Publication of  
coordinates in the  
AIP is expected for  
**November 2003.**

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

STATE, TERRITORY OR AERODROME FOR WHICH WGS-84 IS REQUIRED			WGS-84 REQUIRED										REMARKS
CITY/AERODROME/	RWY No	RWY TYPE	FIR	ENR	TMA CTA CTZ	APP	RWY	AD/ HEL	GUND	QUALITY SYSTEM	AIP		
1	2	3	4	5	6	7	8	9	10	11	12	13	
(OEJN) JEDDAH/King Abdulaziz RS	16R 34L	PA2 PA2			X	XI XI	XI XI	X	X X				
	16C 34C	PA2 PA2				XI XI	XI XI		X X				
	16L 34R	PA1 PA1				XI XI	XI XI		X X				
	17 35	PA1 PA1			X	XI XI	XI XI	X	X X				
(OEMA)MADINAH/Prince Mohammad Bin Abdulaziz RS	18 36	NPA PA1				XI XI	XI XI		X X				
	15L 33R	PA1 PA1			X	XI XI	XI XI	X	X X				
(OERK) RIYADH/King Khalid Intl RS	15R 33L	PA1 PA1				XI XI	XI XI		X X				
	<b>SYRIA</b>			X	XI					X	X		
(OSAP) Aleppo Intl. RS	09 27	NINST NPA			XI	XI XI	XI XI	X	X			WGS-84 coordinates published in AIP Supplement 02/01 dated 01Aug.2001	
	17 35	NPA NINST			X	X X	X X	X					
(OSLK) Bassel Al-Assad RS	05L 23R	NPA PA1			XI	X XI	X XI	XI	X X				
	05R 23L	NPA NPA				X X	X X		X X				
	<b>UNITED ARAB EMIRATES</b>			XI	XI					XI	XI		
(OMAA) Abu Dhabi Int. Airport	31L 13R	PA3 PA1			XI	XI XI	XI XI	XI	XI XI				
	13L 31R	PA3 PA1				XI XI	XI XI		XI XI				
	01 19	PA1 NPA			X	XI XI	XI XI	XI	X X				
(OMAL) Al Ain Int. Airport RS					X		XI						

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

WGS-84  
Implementation is  
under process.  
Publication  
expected June  
2003  
(Not yet reported  
using uniform  
format)

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

**1. Terms of Reference**

The AIS/MAP Task Force shall:

- 1) Examine the Status of implementation of the ICAO requirements in the field of AIS/MAP and recommend action to be taken to overcome difficulties/deficiencies in the following areas:
  - *AIRAC System*
  - *WGS-84*
  - *Aeronautical Charts*
  - *Quality System:*
  - *AIS Automation:*
- 2) Prepare amendments to relevant MID Basic ANP and FASID, as appropriate.
- 3) 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 formally to the ATM/SAR/AIS Sub-Group at each Sub-Group meeting.

**2. Work Programme**

Ref	Tasks	Priority	Target Completion Date
1	Identify reasons that hinder States from implementation and adherence to the AIRAC System and suggest ways and means, which would facilitate adherence to the AIRAC System.	A	2003
2	Analyze the status of implementation of WGS-84 in the MID Region and recommend measures to be taken to improve the situation.	A	2004
3	Review the status of implementation of ICAO Charts in the MID Region.	A	2003
4	Foster the standardized production of aeronautical charts in the MID Region, identifying the obstacles that States could have in adjusting to the specifications of ICAO Annex 4.	A	2003
5	Recommend possible course of action to be taken by States in order to comply with ICAO Annex 4 requirements.	A	2004
6	Define technical and administrative aspects to facilitate the production of aeronautical charts based on WGS-84.	A	2004
7	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	2004
8	Recommend possible course of action to be taken by each State in order to comply with ICAO requirements pertaining to Quality system.	A	2004
9	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.	A	2005
10	Develop a cohesive Air Navigation Plan concerning AIS Automation in the MID Region taking into consideration the outcomes of the AIS/MAP 98 Divisional meeting in terms of data models, exchange of electronic aeronautical information, electronic aeronautical charts and Study/develop technical requirements for the provision of electronic data.	A	2005
11	Describe the integrated Regional Automated AIS System for the MID Region: <ul style="list-style-type: none"> <li>✓ Recommend distribution and fall-back procedures;</li> <li>✓ Recommend the communications network requirements for the MID Region Automated AIS Systems;</li> <li>✓ Recommend provisions to meet reliability and redundancy requirements;</li> <li>✓ Recommend common AIS query procedures;</li> </ul>	A	2005
12	Carry out studies for the harmonization and automated processing of AIS, MET and FPL products in the MID Region;	A	2005
13	Prepare amendments to relevant MID Basic ANP and FASID, as appropriate.	A	-
14	Ensure that AIS is given proper status in the Civil Aviation Administrations and that AIS personnel is well trained; and recommend possible course of action to be taken by each State in order to meet the future CNS/ATM requirements.	A	2004

**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**

All MID States + IATA + IFALPA

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ATM/SAR/AIS SG/6  
Report on Agenda Item 4

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**REPORT ON AGENDA ITEM 4: REVIEW AND UPDATE OF MID BASIC ANP AND FASID**

- 4.1 Under this agenda item the meeting recalled that on 26 February 1997, the divided into two documents; namely the Basic ANP and Facilities and Services Implementation Document (FASID), with a view to streamline and expedite the amendment procedures. The Council had agreed that amendment to the FASID, which contains dynamic material be simplified in order to expedite its amendment procedure. Meanwhile, the stable information contained in the Basic ANP shall be subjected to the traditional amendment process and approval. The migration from current single volume ANP into two volumes, the Basic ANP and FASID, for all regional ANPs are at different stages of development.
- 4.2 It was also brought to the attention of the meeting that the MID Basic ANP and FASID reflecting the future plans of the States in the MID Region, which was developed by the ANP/FASID Task Force was circulated to Provider States and Users to obtain regional agreement for replacement of the existing Air Navigation plan format (Doc 9708). 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 ICAO-HQ for completion, approval and publication as a matter of priority, in accordance with established procedures.
- 4.3 The updated draft of the MID Basic ANP and FASID prepared by ICAO-HQ was distributed during the MIDANPIRG/7 meeting. Each of the Provider States and user organizations were given 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. Subsequently MIDANPIRG/7 through Conclusion 7/35 requested States and users to 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.
- 4.4 It was also underlined that the MID Regional Office, noting that number of replies from MID States was insufficient and that the data contained especially in the FASID Tables were incomplete/not precise, carried out a follow-up action through State Letters AN 9/2-029 dated 18 Feb 2002 and AN 9/2-098 dated 24 April 2002, urging States to check again and provide their comments about the materials contained in the latest updated working draft version 3 of MID Basic ANP and FASID, available at that time on the MID Office Website: [www.icao.int/mid](http://www.icao.int/mid).
- 4.5 The Sub-Group was informed that the actual working draft version 3 of MID Basic ANP and FASID is no longer available on the MID Office Website: [www.icao.int/mid](http://www.icao.int/mid), and has been transferred to ICAO-NET website: [www.icao.int/icaonet](http://www.icao.int/icaonet), under "Regional Offices" linked and placed under the MID Office "E-documents" page.
- 4.6 Even though many updates have been made to the working draft version 3, including the comments received from ICAO AIS/MAP Section in Montreal as well as from States and users through direct correspondences or through MIDANPIRG Subsidiary bodies meetings (AOP SG/3, CNS/MET SG/5), the updated MID Basic ANP - ATS 1 Table (ATS Routes) was not yet included in the ANP. In this regard, the meeting was informed that the proposal for amendment of the MID Basic ANP (Serial No. MID 02/01-ATS) was approved by the President of the Council last week (22 January 2003). Moreover, concern was raised about some tables of the MID FASID and especially those of the AIS part, which are still incomplete and necessitate to be updated. The meeting then, reviewed and updated FASID Tables AIS-1, AIS-2, AIS-4A, AIS-4B and AIS-4C which are attached as **Appendices 4A, 4B and 4C** to report on Agenda Item 4.
- 4.7 The Sub-Group then requested the Secretariat to incorporate the outcomes of the meeting in the working draft version 4 of MID Basic ANP and FASID, which should be finalized pursuant to this meeting to be endorsed by MIDANPIRG/8 and submitted to ICAO-HQ as the final draft, for completion, approval and publication in accordance with established procedures.

ATM/SAR/AIS SG/6  
Appendix 4A to the Report on Agenda Item 4

FASID TABLE AIS-1 ESTABLISHMENT OF AERODROME AIS UNITS

STATE OR TERRITORY	AIS AERODROME UNITS REQUIRED AT CITY
<b>AFGHANISTAN</b>	KABUL/Kabul
	KANDAHAR/Kandahar
<b>BAHRAIN</b>	BAHRAIN/Bahrain Intl
<b>EGYPT</b>	ALEXANDRIA/Alexandria
	ASWAN/Aswan
	ASYUT/Asyut
	CAIRO/Cairo Intl
	HURGHADA/Hurghada
	LUXOR/Luxor
	SHARM-EL-SHEIKH/Sharm El Sheikh
	ST. CATHERINE/St. Catherine
	RAS EL NAKAB/Taba
<b>IRAN, ISLAMIC REPUBLIC OF</b>	BANDAR ABBAS/Bandar Abbas
	ESFAHAN/Esfahan
	MASHHAD/Shahid Hashemi Nejad Intl
	SHIRAZ/Shiraz Intl
	TABRIZ/Tabriz
	TEHRAN/Mehrabad Intl
	TEHRANE/Emam Khomeini Intl
	ZAHEDAN/Zahedan Intl
<b>IRAQ</b>	BAGHDAD/Saddam Intl
	BASRAH/Basrah Intl
<b>ISRAEL</b>	BEER-SHEBA/Teyman
	EILAT/Eilat
	HAIFA/Haifa
	JERUSALEM/Atarot

STATE OR TERRITORY	AIS AERODROME UNITS REQUIRED AT CITY
	OVDA/Intl
	TEL AVIV/Ben Gurion
<b>JORDAN</b>	AMMAN/Marka Intl
	AMMAN/Queen Alia
	AQABA/Aqaba Intl
	JERUSALEM/Jerusalem
<b>KUWAIT</b>	KUWAIT/Kuwait Intl
<b>LEBANON</b>	BEIRUT/Intl
<b>OMAN</b>	MUSACT/Seeb Intl
	SALALAH/Salalah
<b>QATAR</b>	DOHA/Doha Intl
<b>SAUDI ARABIA</b>	DAMMAM/King Fahd Intl
	JEDDAH/King Abdulaziz
	MADINAH/Prince Mohammad Bin Abdulaziz
	RIYADH/King Khalid Intl
<b>SYRIAN ARAB REPUBLIC</b>	ALEPPO/Aleppo Intl
	BASSEL AL-ASSAD/Latakia
	DAMASCUS/Damascus Intl
<b>UNITED ARAB EMIRATES</b>	ABU DHABI/Abu Dhabi Intl
	AL AIN/Ain Intl
	DUBAI/Dubai Intl
	FUJAIRAH/Fujairah Intl
	RAS AL KHAIMAH/Ras Al Khaima Intl
	SHARJAH/Sharjah Intl
<b>YEMEN</b>	ADEN/Aden Intl
	HODEIDAH/Hodeidah
	TAIZ/Ganad

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ATM/SAR/AIS SG/6  
 Appendix 4B to the Report on Agenda Item 4

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**FASID TABLE AIS-2      AERONAUTICAL INFORMATION SERVICES REQUIRED AT AERODROMES**

*EXPLANATION OF THE TABLE*

*Column*

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

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



ATM/SAR/AIS SG/6-REPORT  
**APPENDIX 4B**

4B-4

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



ATM/SAR/AIS SG/6-REPORT  
**APPENDIX 4B**

4B-6

Aerodrome where service is required			Responsible AIS Office		AIS information to be provided					Area of coverage By AFTN routing areas	Post Flight Report	Remarks
					AIP+		PIB					
Name	Use	ICAO Loc. Ind.	Name	ICAO loc. Ind.	L	S	F I L	P1 P2 P3	P R E P			
1	2	3	4	5	6					7	8	9
<b>UNITED ARAB EMIRATES</b>												
ABU DHABI/ Abu Dhabi Intl	RS	OMAA										
AL AIN/Ain Intl	RS	OMAL										
DUBAI/Dubai Intl	RS	OMDB										
FUJAIRAH/Fujairah Intl	RS	OMFJ										
RAS AL KHAIMAH/Ras al Khaima Intl	RS	OMRK										
SHARJAH/Sharjah Intl	RS	OMSJ										
<b>YEMEN</b>												
ADEN/Aden Intl	RS	OYAA										
HODEIDAH/Hodeidah	RS	OYHD										
	RS	OYSN										
TAIZ/Ganad	RS	OYTZ										

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**FASID TABLE AIS-4  
AVAILABILITY OF AERONAUTICAL INFORMATION**

*EXPLANATION OF THE TABLE*

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

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

which the integrated aeronautical information package is required. from

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

Aerodrome/Heliport use Designation:

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

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4C2-5

AIS-4-A			From MID														
Integrated Aeronautical Information Package TO BE AVAILABLE IN			Afghanistan	Bahrain	Egypt	Iran	Iraq	Israel	Jordan	Kuwait	Lebanon	Oman	Qatar	Saudi Arabia	Syria Arab Rep	United Arab Emirates	Yemen
City/Aerodrome	Use	ICAO Loc. Ind.															
RAS AL KHAIMAH/Ras al Khaima Intl	RS	OMRK		X								X	X			X	
SHARJAH/Sharjah Intl	RS	OMSJ		X	X	X			X	X	X	X		X	X	X	
<b>YEMEN</b>																	
ADEN/Aden Intl	RS	OYAA															
HODEIDAH/Hodeidah	RS	OYHD															
	RS	OYSN															
TAIZ/Ganad	RS	OYTZ															

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4C3-7

AIS-4-B			From EUR																												
Integrated Aeronautical Information Package TO BE AVAILABLE IN			Austria	Belgium	Bulgaria	Croatia	Cyprus	Czech Rep	Denmark	Finland	France	Germany	Greece	Hungary	Ireland	Italy	Luxembourg	Malta	Netherlands, Kingdom of	Norway	Poland	Portugal	Romania	Russian Federation	Slovakia	Spain	Sweden	Switzerland	Turkey	Ukraine	United Kingdom
Name	Use	ICAO Loc. Ind.																													
<b>YEMEN</b>																															
ADEN/Aden Intl	RS	OYAA																													
HODEIDAH/Hodeidah	RS	OYHD																													
	RS	OYSN																													
TAIZ/Ganad	RS	OYTZ																													

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**REPORT ON AGENDA ITEM 5: REVIEW OF AIR NAVIGATION DEFICIENCIES IN THE ATM/SAR AND AIS/MAP FIELDS**

5.1 Under this agenda item, the Sub-Group recalled that MIDANPIRG/7 meeting under Conclusion 7/44 endorsed the revised uniform methodology, including the new definition of \*deficiency, in addressing the deficiencies in the MID Region and urged States and organizations concerned to take appropriate corrective action(s) for the elimination of the deficiencies.

*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*

5.2 The Sub-Group was informed that in discussing ways and means to resolving the air navigation deficiencies, the ICAO Council recently observed that many deficiencies continue to persist for a number of years thus causing concern. While recognizing that problems with funding could be one of the delaying factors in eliminating the deficiencies by the States, it was decided that the States should be reminded of their responsibility under Article 28 of the *Convention on International Civil Aviation* (Doc 7300) for providing safe air navigation services. Furthermore, States should increase their efforts in overcoming the delay in mitigating the air navigation deficiencies identified by Planning and Implementation Regional Groups (PIRGs). It was also stated that some of the deficiencies might have a negative effect on the safety issues covered by the Global Aviation Safety Plan (GASP). The Council requested that measures be taken to accord priority to this matter through the allocation of adequate financial and human resources.

5.3 As a follow-up action to the ICAO Council Decision 154/19, the Secretary General has addressed State letter M 6/1-02/79 dated 27 September 2002 to the Ministers of Civil Aviation inviting their attention to resolving the deficiencies through the allocation of appropriate resources.

5.4 Furthermore, it was pointed out that State letter M6/1-02/79 accompanied by an individual list of deficiencies pertaining to the State concerned, has been sent by ICAORD Cairo to all MID States which are experiencing air navigation deficiencies.

5.5 The updating on the status of implementation of deficiencies, which have been identified in the MID Region, is an on-going activity of the Secretariat. States and Organizations are being urged to take corrective actions in relation to air navigation deficiencies through their executing bodies.

5.6 The Sub-Group accordingly reviewed the list of deficiencies in the ATM/SAR and AIS/MAP fields brought forward by the Secretariat (**See Appendices 5A and 5B** to the report on Agenda Item 5). It was however agreed that an updated list of deficiencies will be provided by IATA in due course and all parties concerned were requested to make collective efforts for ensuring that appropriate remedial action is taken for the elimination of the deficiencies. Furthermore, States concerned were requested to inform ICAO of any implementation problems they encounter in the elimination of deficiencies in the region and it was agreed that an updated list together with any implementation problems being encountered be presented to MIDANPIRG/8 meeting for consideration. Based on the foregoing, the Sub-group formulated the following draft conclusion:

**DRAFT CONCLUSION 6/30: ELIMINATION OF DEFICIENCIES**

That:

- a) with a view to enhance safety of air navigation services in the region, States be invited to take appropriate remedial action(s) for the elimination of deficiencies which have been reported; and
- b) Inform ICAO of any implementation problems they are encountering and the rationale for non-implementation of requirements.

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ATM/SAR/AIS SG/6  
Appendix 5A to the Report on Agenda Item 5

**UPDATED AIR NAVIGATION DEFICIENCIES IN THE MIDDLE EAST REGION  
ATM/SAR FIELD**

Item No	Identification		Deficiencies			Corrective Action			
	Requirement	States/facilities	Description	Date first reported	Remarks	Description	Executing body	Date of complete	Priority for action*
1	LIM/MID/RAN Concl. 3/7  Cooperation between States in SAR	All MID States	Lack of Search and Rescue Agreements between neighboring States	11/11/94	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.	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	All MID States	A. 31/12/03  B. 31/12/03  C. 31/12/03	A
2	MID ANP Table ATS-1  Plan of ATS routes	Afghanistan Uzbekistan	ATS route <b>A219</b> not implemented	5/12/97	Implemented Nawabshah to Kandahar as B466. Re-designated because of prior use of this designator in ASIA/PAC region <i>Segment Kandahar Termez:Not implemented</i>	ICAO to follow up with States to determine what action is needed to achieve implementation Probably to extend B466 till TERMEZ in the MID Plan and delete requirement for A219.	Afghanistan Uzbekistan	31/12/03	■
3	MID ANP Table ATS-1  Plan of ATS routes	Israel Jordan Syria	ATS route <b>A412</b> not implemented	5/12/97	Jerusalem to Amman not yet implemented. <i>(Jerusalem- Amman :not implemented. Segment Amman Tanf shown as A 52)</i> (Need to implement segment Jerusalem Amman and designator A52 to change to A412)	ICAO to follow up with States to determine what action is needed to achieve implementation	ICAO	TBD	B
4	MID ANP Table ATS-1  Plan of ATS routes	Cyprus Greece	ATS route <b>A414</b> not implemented	5/12/97	Route as currently defined lies outside the MID region. To be extended to Tel Aviv. <i>(shown as UA 014//UM 872)</i> <i>Need to change designator to A414</i>	ICAO to follow-up	Cyprus, Greece, Israel, ICAO (Paris and MID Offices)	31/12/03	B

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Item No	Identification		Deficiencies			Corrective Action			
	Requirement	States/facilities	Description	Date first reported	Remarks	Description	Executing body	Date of complete	Priority for action*
5	MID ANP Table ATS-1 Plan of ATS routes	Bahrain Qatar Saudi Arabia	ATS route <b>A415</b> not implemented	5/12/97	Not yet implemented Doha to King Khalid	Saudi Arabia and Qatar to continue negotiations to open this route.	Saudi Arabia Qatar	TBD	A
6	MID ANP Table ATS-1 Plan of ATS routes	Iraq	ATS route <b>A417</b> not implemented	5/12/97	No sections implemented	ICAO to follow up. See Item 1.	ICAO	TBD	B
7	MID ANP Table ATS-1 Plan of ATS routes	Bahrain Saudi Arabia U.A.E Yemen	ATS route <b>A419</b> not implemented	5/12/97	1.ASHGABA- RIKOP-SABZEVAR: different designator(A420/A416 2.SABZEVAR-DARBAND: Not implemented 3.NORLO ( Abu Dhabi) to		A. States B. States and ICAO C. States	A. 1 Q 2001 B. 2 Q 2001 C. 3 Q 2001	B
8	MID ANP Table ATS-1 Plan of ATS routes	Bahrain Iran Qatar	ATS route <b>A453</b> not implemented	5/12/97	Not yet implemented Kish to Bahrain	IATA and Bahrain have developed proposal for re-alignment. To be co-ordinated with Iran	Bahrain Iran ICAO	31/12/03	B
9	MID ANP Table ATS-1 Plan of ATS routes	Iraq Saudi Arabia	ATS route <b>B401</b> not implemented	5/12/97	No sections implemented	See Item 1.	Saudi Arabia, Iraq	TBD	B
10	MID ANP Table ATS-1 Plan of ATS routes	Iraq Syria	ATS route <b>B402</b> not implemented	5/12/97	No sections implemented		Syria, Iraq	TBD	B
11	MID ANP Table ATS-1 Plan of ATS routes	Israel Cyprus	ATS route <b>B406</b> not implemented	5/12/97	No sections implemented Implemented as B17/UB17 Larnaca- MERVA(FIR BDY)	To be followed by both the ICAO EUR and MID Offices	Israel Cyprus ICAO to assist	31/12/03	B
12	MID ANP Table ATS-1 Plan of ATS routes	Cyprus Lebanon Syria Turkey	ATS route <b>B410</b> not implemented	5/12/97	No Section implemented. Need to consider other routes: UL620 proceeding to BALMA then, R655-Chekka	To be discussed in EMAC*** meetings.	Syria ICAO to assist	31/12/03	B

Item No	Identification		Deficiencies			Corrective Action			
	Requirement	States/facilities	Description	Date first reported	Remarks	Description	Executing body	Date of complete	Priority for action*
13	MID ANP Table ATS-1  Plan of ATS routes	Jordan Saudi Arabia Syria	ATS route <b>B412</b> not implemented	5/12/97	No sections implemented Saudi Arabia and Jordan ready to implement. <i>(route via Halaifa(B554). Segment Halaifa- King Abdulaziz:B412)</i>	States to co-ordinate to finalize implementation	Jordan Saudi Arabia Syria ICAO to assist	31/12/03	B
14	MID ANP Table ATS-1  Plan of ATS routes	Bahrain Qatar	ATS route <b>B415</b> not implemented	5/12/97	Not implemented Doha to Bahrain  Subject to military restrictions	States to continue negotiations with one another and military	Bahrain Qatar	31/12/00	B
15	MID ANP Table ATS-1  Plan of ATS routes	Bahrain Qatar Saudi Arabia	ATS route <b>B419</b> not implemented	5/12/97	Not implemented Doha - King Fahd  Subject to military restrictions	States to continue negotiations with one another and military	Bahrain Qatar Saudi Arabia	31/12/00	B
16	MID ANP Table ATS-1  Plan of ATS routes	Syria Turkey	ATS route <b>B538</b> not implemented	5/12/97	<i>-(Segment Gaziantep Aleppo:B544/VB36)</i> <i>- (segment Aleppo kariatain:W5)</i> <i>-(Not implemented:Aleppo Damascus)</i>	ICAO to follow up with States to determine what action is needed to achieve implementation	ICAO	31/12/03	B
17	MID ANP Table ATS-1  Plan of ATS routes	Cyprus Jordan Lebanon Turkey	ATS route <b>B545</b> not implemented	5/12/97	Segment MUT- BALMA: Implemented as UL620. Segment BALMA-KHALDEH-AMMAN: Not implemented  <i>Segment BALMA-Khaldeh: B15)</i>	To be discussed in EMAC*** meetings. ICAO to follow-up	Cyprus Jordan Lebanon Turkey	TBD	B
18	MID ANP Table ATS-1  Plan of ATS routes	Cyprus Iraq Lebanon Syria	ATS route <b>G202</b> not implemented	5/12/97	Not implemented DAKWE - Damascus - Not implemented TANF-Samarra.	ICAO to follow-up	Iraq Lebanon Syria	31/12/03	B

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Item No	Identification		Deficiencies			Corrective Action			
	Requirement	States/facilities	Description	Date first reported	Remarks	Description	Executing body	Date of complete	Priority for action*
19	MID ANP Table ATS-1 Plan of ATS routes	Bahrain Saudi Arabia Yemen	ATS route <b>G652</b> not implemented	5/12/97	Not implemented ETUKO to Aden	A. States to organize informal coordination meeting to review route structure from Gulf south into Arabian Peninsula  B. Develop ANP amendment proposal for revised route structure  C. Implement revised route structure	A. States + IATA  B. States and ICAO  C. States	A. 2 Q 2003  B2 Q 2003  C. 3 Q 2003	B
20	MID ANP Table ATS-1 Plan of ATS routes	Bahrain Saudi Arabia U.A.E.	ATS route <b>G660</b> not implemented	5/12/97	Not implemented King Abdulaziz to Abu Dhabi	A. States to organize informal coordination meeting to review route structure from Gulf south into Arabian Peninsula  B. Develop ANP amendment proposal for revised route structure  C. Implement revised route structure	A. States  B. States and ICAO  C. States	A. 1 Q 2001  B. 2 Q 2001  C. 3 Q 2001	B
21	MID ANP Table ATS-1 Plan of ATS routes	Jordan Syria	ATS route <b>G662</b> not implemented	5/12/97	Not implemented Damascus to Guriat	States to continue coordination to achieve implementation	Jordan Syria	31/12/00	B
22	MID ANP Table ATS-1 Plan of ATS routes	Cyprus Israel Jordan	ATS route <b>G664</b> not implemented	5/12/97	No sections implemented	To be discussed in EMAC*** meetings.	Cyprus Israel Jordan	31/12/03	B
23	MID ANP Table ATS-1 Plan of ATS routes	Iran	ATS route <b>G665</b> not implemented	5/12/97	Implemented, but segment Shiraz - NABOD is only available at night	ICAO to follow up with Iran to determine what action is needed to achieve full implementation	ICAO	31/12/03	B

Item No	Identification		Deficiencies			Corrective Action			
	Requirement	States/facilities	Description	Date first reported	Remarks	Description	Executing body	Date of complete	Priority for action*
24	MID ANP Table ATS-1  Plan of ATS routes	Iraq	ATS route <b>G669</b> not implemented	5/12/97	Not yet implemented NISER to SOLAT	ICAO to follow up.  See Item 1.	ICAO	TBD	B
25	MID ANP Table ATS-1  Plan of ATS routes	Iran Iraq Syria	ATS route <b>G671</b> not implemented	5/12/97	No sections implemented	ICAO to follow up with States to determine what action is needed to achieve implementation	ICAO	31/12/03	B
26	MID ANP Table ATS-1  Plan of ATS routes	Afghanistan Iran Pakistan Turkmenistan	ATS route <b>G792</b> not implemented	5/12/97	No sections implemented Domestic designator on segment Charn Kandahar:V390	ICAO to follow up with States to determine what action is needed to achieve implementation	ICAO	31/12/03	B
27	MID ANP Table ATS-1  Plan of ATS routes	Iraq	ATS route <b>G795</b> not implemented	5/12/97	Not yet implemented segment: Basra - Rafha	ICAO to follow up.  See Item 1.	ICAO	TBD	B
28	MID ANP Table ATS-1  Plan of ATS routes	Iraq	ATS route <b>R651</b> not implemented	5/12/97	No sections implemented	ICAO to follow up.  See Item 1.	ICAO	TBD	B
29	MID ANP Table ATS-1  Plan of ATS routes	Israel Jordan Syria	ATS route <b>R653</b> not implemented	5/12/97	No sections implemented			31/12/03	B
30	MID ANP Table ATS-1  Plan of ATS routes	Iran Oman	ATS route <b>R658</b> not implemented	5/12/97	No sections implemented	States to coordinate to achieve implementation	Iran Oman	31/12/03	B

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**APPENDIX 5A**

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Item No	Identification		Deficiencies			Corrective Action			
	Requirement	States/facilities	Description	Date first reported	Remarks	Description	Executing body	Date of complete	Priority for action*
31	MID ANP Table ATS-1 Plan of ATS routes	Bahrain Saudi Arabia Qatar Yemen	ATS route <b>R659</b> not implemented	5/12/97	Not implemented Doha to	A. States to organize informal coordination meeting to review route structure from gulf south into Arabian Peninsula  B. Develop ANP amendment proposal for revised route structure  C. Implement revised route structure	A. States + IATA  B. States and ICAO  C. States	A. 1 Q 2001  B. 2 Q 2001  C. 3 Q 2001	B
32	MID ANP Table ATS-1 Plan of ATS routes	Iraq Turkey	ATS route <b>R784</b> not implemented	5/12/97	Not implemented SIDAD to Siirt	ICAO to follow up with States to determine what action is needed to achieve implementation	ICAO	TBD	B
33	MID-ANP Table ATS-1 routes	Jordan Saudi Arabia	R785 Flight level restrictions	30/02/03	Upper limit restricted to FL280	States to follow-up ICAO to assist	Jordan Saudi Arabia	31/12/03	A
34	Longitudinal separation	Syria, Jordan, Saudi Arabia, Bahrain	Longitudinal separation is 10 minutes along some strategic routes and States concerned are obliged to increase to 10 minutes so as not to create bottlenecks	30/01/03	Urgent action required. Sates and ICAO to assist	Longitudinal separation of 10 minutes within Damascus FIR is obliging other Sates to increase longitudinal separations so as not to create bottlenecks	Bahrain, Jordan, Saudi Arabia Syria	31/12/03	A

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

AU@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.

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AA@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.

AB@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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**UPDATED AIR NAVIGATION DEFICIENCIES IN THE MIDDLE EAST REGION  
 AIS/MAP FIELD**

Item No	Identification		Deficiencies			Corrective Action			
	Requirement	States/ Facilities	Description	Date first reported	Remarks	Description	Executing body	Date of complete	Priority for action*
1	ANNEX 15: Para 4.1.1	Afghanistan, Iraq	Newly Restructured AIP	June 1996		Need to produce and issue the new restructured AIP	Indicated States	Within the least possible time	U
2	ANNEX 15: Para 4.2.9 & 4.3.7	Afghanistan, Iraq, Israel, Kuwait, Syria, Yemen	Lack of regular and effective updating of the AIP	January 2003	ICAO to follow up with States	Need to update the AIP on a regular basis	Indicated States	Within the least possible time	A
3	ANNEX 15: Para 6.	Afghanistan, Iraq, Israel, Kuwait, Oman, Syria	Lack of implementation of AIRAC System	May 1995	ICAO to follow up with States	Need for implementation of AIRAC requirements	Indicated States	Within the least possible time	A
4	ANNEX 15: Para. 6.1	Jordan, Yemen	Lack of effective application of AIRAC System	January 2003	ICAO to follow up with States	Need for an effective application of AIRAC System	Indicated States	Within the least possible time	A
5	ANNEX 15: Para 3.6.4	Afghanistan, Iraq, Israel,	Implementation of WGS-84	December 1997		Need to implement WGS-84	Indicated States	Within the least possible time	U
6	ANNEX 15: Para 3.6.4	Bahrain, Egypt, Iran, Jordan, Kuwait, Lebanon, Oman, Qatar, Saudi Arabia, Syria, Yemen	Lack of full implementation of WGS-84 including GUND implementation and publication of the WGS-84 coordinates in the AIP	January 2003	ICAO to follow up with States to determine what action is needed to achieve implementation.	Need to complete the full implementation of WGS-84	Indicated States	Yemen: June 2003  The remaining States: Within the least possible time	A

Item No	Identification		Deficiencies			Corrective Action			
	Requirement	States/ Facilities	Description	Date first reported	Remarks	Description	Executing body	Date of complete	Priority for action*
7	ANNEX 15 Para. 3.2	Afghanistan, Bahrain, Iraq, Israel, Jordan, Kuwait, Lebanon, Qatar, Saudi Arabia, Syria, Yemen,	Implementation of a Quality System	January 2003		Need to introduce a properly organized quality system in conformity with ISO 9000 series of quality assurance standards.	Indicated States	Saudi Arabia: Dec. 2004  The remaining States: Within the least possible time	A
8	ANNEX 15 Para. 5.2.8.3	Afghanistan, Iraq, Israel, Oman, Syria	Non-production of the monthly printed plain language summary of NOTAM	January 2003		Need to produce the monthly printed plain language summary of NOTAM	Indicated States	Within the least possible time	A
9	ANNEX 4 Para. 7.2	Afghanistan, Bahrain, Iran, Iraq, Israel, Jordan, Oman, Qatar, Saudi Arabia, Syria, UAE, Yemen	Non-production of the Enroute Chart-ICAO	May 1995		Need to produce the Enroute Chart-ICAO	Indicated States	Saudi Arabia: May 2004 UAE: July 2003 Yemen: June 2003  The remaining States: Within the least possible time	A
10	ANNEX 4 Para. 3.2	Afghanistan, Iran, Oman, Saudi Arabia, Syria, Yemen	Non-production of Aerodrome Obstacle Chart-ICAO Type A	May 1995	For some RWYs in Oman, Saudi Arabia, Syria and Yemen the Aerodrome Obstacle Chart-ICAO Type A has not been produced	Need to produce Aerodrome Obstacle Chart-ICAO Type A for all except if a notification to this effect is published in the AIP (if no significant obstacles exist)	Indicated States	Yemen: June 2003  The remaining States: Within the least possible time	A
11	ANNEX 4 Para. 13.2	Afghanistan, Bahrain, Iran, Iraq, Qatar	Non-production of Aerodrome/Heliport Chart - ICAO	May 1995		Need to produce Aerodrome/Heliport Chart - ICAO for	Indicated States	Within the least possible time	A

Item No	Identification		Deficiencies			Corrective Action			
	Requirement	States/ Facilities	Description	Date first reported	Remarks	Description	Executing body	Date of complete	Priority for action*
12	ANNEX 4 Para. 11.2	Afghanistan, Iraq, Yemen	Non-production of Instrument Approach Chart-ICAO	January 2003	Yemen has produced the Instrument Approach Chart-ICAO except for TAIZ/Ganad (OYTZ) Airport	Need to produce Instrument Approach Chart- Aerodromes	Indicated States	Yemen: June 2003  The remaining States: Within the least possible time	A
13	ANNEX 4 Para. 6.2	Egypt, Iraq	Non-production of Precision Approach Terrain Chart-ICAO	January 2003		Need to produce Precision Approach Terrain Chart-ICAO for precision approach RWYs CAT II and III.	Indicated States	Within the least possible time	A
14	ANNEX 4 Para. 16.2	Afghanistan Bahrain, Egypt, Iran Iraq, Kuwait, Lebanon, Saudi Arabia, Syria, Yemen	Non-production of World Aeronautical Chart ICAO 1:1 000 000	May 1995		Need to produce the assigned sheets of the World Aeronautical Chart ICAO 1:1 000 000	Indicated States	Saudi Arabia: May 2004 Yemen: June 2003  The remaining States: 2004	B

**EXPLANATORY NOTES**

\* Priority for action to remedy the 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.

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ATM/SAR/AIS SG/6  
Report on Agenda Item 6

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**REPORT ON AGENDA ITEM 6: IMPLEMENTATION OF SEARCH AND RESCUE SERVICES IN THE MID REGION**

6.1 Under this agenda item, the Sub-Group recalled that under Decision 7/23, MIDANPIRG/7 meeting requested the Secretariat to update, in consultation with States, the status of requirements in the search and rescue (SAR) field. To this effect, a survey was carried out with a view to have an indication on action being taken by States pursuant to ICAO provisions in the SAR field. The meeting was apprised that replies were received from only four States and is not representative of the situation prevailing in the region.

6.2 The Sub-Group requested the Secretariat to carry out another survey on the status of implementation of SAR provisions in the region as indicated at **Appendix A** to the report on Agenda Item 6, for consideration by MIDANPIRG/8 meeting. It was agreed that the status of implementation be

A	=	Not implemented
B	=	Initial implementation
C	=	Meets Annex 12 requirements in some areas
D	=	Meets Annex 12 requirements in most areas
E	=	Fully meets Annex 12 requirements
Blank	=	No response

6.3 The Sub-Group agreed that the results of the survey would be used to update the status of implementation of SAR provisions in the region and non-implementation would be classified as a deficiency.

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STATUS OF IMPLEMENTATION OF SEARCH AND RESCUE REQUIREMENTS IN THE MID REGION

CONCLUSIONS/RECOMMENDATIONS IN THE SEARCH AND RESCUE FIELDS APPLICABLE TO THE MID REGION

STATES	LIM/MID REC.3/9 Chart SAR 1	LIM/MID REC.3/4 Co-ordination SAR Authorities and IMO	ASIAPAC REC. 7/6 Provision of SAR facilities	ASIAPAC REC.7/5 Capacity of rescue units	LIM/AFI REC. 3/6 Satellite aided SAR	ASIAPAC REC.7/24 SAR escort service	ASIAPAC REC.7/11 Assistance-SAR services	LIM/MID REC. 3/14 emergency frequency 2182 Khz	LIM/MID REC. 3/15 development of pre- search procedures	ASIAPAC REC. 7/12a)	com. between Acft ASIAPAC A REC.7/13	com. means for LIM/MID REC.3/16 Carriage of survival radio equipment	ASIAPAC REC.7/16 A)&B). Ship reporting system	ASIAPAC REC.7/16 C) RCC and RSC	LIM/MID REC.3/17 AMVER system	ASIAPAC REC.7/17 SAR Exercises	ASIAPAC REC7/18 SAR training	ASIAPAC REC.7/9 co-operation between States	ASIAPAC REC.7/15 Improvement to SAR system
Afghanistan																			
Bahrain	✓	✓	✓	✓	✓	X	✓	X	X	X	✓	✓	✓	✓	✓	X	✓	✓	
Egypt	E	E	C	C	E	D	E	E	D	D	E	E	E	D	A	D	E	A	C
Iran, Islamic Republic																			
Iraq																			
Israel																			
Jordan	✓	✓	✓	✓	*	✓	NO	✓	NO	✓	NO	✓	✓	NO	✓	✓	✓	✓	
Kuwait																			
Lebanon																			
Oman																			
*Pakistan	E	D	D	D	C	D	D	D	D	C	E	E	D	E	D	B	C	C	C
Qatar																			
Saudi Arabia																			
Syrian Arab Republic																			
United Arab Emirates	X	X	N/A	N/A	NO	N/A	N/A	N/A	NO	N/A	N/A	✓	N/A	N/A	NO	N/A	N/A	N/A	N/A
Yemen																			

- A=not implemented, B=initial implementation, C=meets Annex 12 requirements in some areas, D= meets Annex 12 requirements in most areas,
- E=Fully meets Annex 12 requirements, Blank=no response.

**Chart SAR 1 constitutes the plan of MID search and rescue regions**

States within the region should establish and/or maintain rescue co-ordination centres (RCCs) or rescue sub-centres (RSCs) on a 24-hour basis, and ensure continual availability of search and rescue (SAR) facilities listed in Table SAR 1. [LIM/MID (COM/MET/RAC), Rec. 3/9]

**Co-ordination with maritime SAR authorities and IMO.**

To ensure compatibility between aeronautical and maritime search and rescue regions (SRRs), aeronautical search and rescue (SAR) authorities in States should maintain close liaison with their maritime counterparts and the International Maritime Organization (IMO). [LIM/MID (COM/MET/RAC), Rec.3/4]

**Continuous provision of SAR facilities.**

States, when necessary, should take urgent action to ensure the continuous provision of search and rescue (SAR) facilities in accordance with the Regional Air Navigation Plan Publications. [ASIA/PAC/3, Rec. 7/6]

**Capacity of rescue units and associated facilities**

[ASIA/PAC/3, Rec. 7/5]

States should:

- a) take due account of the large size and passenger-carrying capacity of commercial aircraft operating within their area of responsibility, and of the possibility of aircraft ditching in water near airports, in planning for search and rescue (SAR) and emergency care facilities; and
- b) be encouraged to provide and use for SAR, wherever practicable, helicopters equipped with suitable winching equipment.

**Satellite-aided search and rescue**

[LIM/MID (COM/MET/RAC), Rec. 3/6]

States should:

- a) take appropriate action to reduce the number of false alarms on 121.5/243 MHz caused by inadvertent activation of emergency transmitters and eliminate

unauthorized use of those frequencies;

- b) encourage the early introduction of emergency locator transmitters (ELTs) transmitting on 406 MHz and establish a register of such ELTs;
- c) make available information as to how ELT registration information can be obtained rapidly by rescue co-ordination centres (RCCs) of other States; and
- d) provide to ICAO a search and rescue (SAR) point of contact (SPOC) for inclusion in Table SAR 1 of the respective Air Navigation Plan (ANP).

**SAR escort service**

[ASIA/PAC/3, Rec. 7/24]

States should provide search and rescue (SAR) escort service to aircraft in difficulties.

**Assistance in establishing SAR services**

[ASIA/PAC/3, Rec. 7/11]

States requesting assistance in establishing or improving search and rescue (SAR) services should first endeavour to satisfy the following basic requirements:

- a) a rescue co-ordination centre/rescue sub-centre (RCC/RSC) location (which could be an air traffic control unit);
- b) a designated RCC Chief, knowledgeable in air traffic control and trained in the planning of searches and the co-ordination of SAR missions;
- c) personnel to be trained to serve as SAR mission co-ordinator;
- d) adequate staff for 24-hour operation of the RCC; and
- e) appropriate RCC material and equipment.

**Use of 2182 kHz in emergency communications**

SAR aircraft to be used in maritime areas should be equipped to permit communications on 2182 kHz. [LIM/MID (COM/MET/RAC), Rec. 3/14]

States are encouraged to develop pre-search procedures, whereby ships equipped with 2182 kHz can be

requested to guard that frequency, so as to enable SAR aircraft operating over the areas in which they are sailing to enter into direct and immediate communication with them whenever this is considered necessary.

*Note.C Such pre-search procedures might be included in the detailed SAR plans required by Annex 12, 4.2.1. [LIM/MID (COM/MET/RAC), Rec. 3/15]*

#### **Communications between aircraft and ships**

[ASIA/PAC/3, Rec. 7/12 a)]

States should develop procedures to be included in the detailed search and rescue (SAR) plans which enable civil aircraft and SAR aircraft to enter rapidly into communications with ships when necessary.

#### **Search and rescue operations**

##### **Communications for survivors**

[ASIA/PAC/3, Rec. 7/13]

States should encourage operators to carry means for survivors to communicate with aircraft on 121.5 MHz.

##### **Carriage of survival radio equipment**

[LIM/MID (COM/MET/RAC), Rec. 3/16]

The provisions of Annex 6, Part I, 6.6, shall apply for flights as prescribed in the relevant Aeronautical Information Publications (AIP), over the following designated land areas:

Afghanistan, Bahrain, Islamic Republic of Iran, Iraq, Jordan, Kuwait, Saudi Arabia, Syrian Arab Republic, United Arab Emirates and Yemen.

##### **Ship reporting systems**

States should:

- a) through their maritime authorities, encourage ships to participate in an appropriate ship reporting system for search and rescue (SAR); and
- b) record information on the position of ships at sea and disseminate such information to SAR authorities of other States requesting it, to facilitate response to cases of distress.

[ASIA/PAC/3, Rec. 7/16 a) and b)]

Rescue co-ordination centre (RCC) and rescue sub-centre (RSC) plans of operation should provide

guidance on how information from available ship reporting systems can be obtained.  
[ASIA/PAC/3, Rec. 7/16 c)]

*Note.C The Automatic Mutual-assistance Vessel Rescue (AMVER) system is a world-wide ship reporting system for SAR, operated by the United States Coast Guard. Any RCC can obtain information about ships in the vicinity of a distress by contacting any RCC of the United States Coast Guard.*

- a) States recording information on the position of selected merchant or other ships at sea in the maritime expanses should disseminate, on request, such information to other States in this area; and
- b) States concerned which are not presently participating in a merchant ship reporting system should be encouraged to join one of the existing systems or to develop their own system.  
[LIM/MID (COM/MET/RAC), Rec. /17]

##### **SAR exercises**

States, which introduce a search and rescue (SAR) organization, handle relatively few actual SAR cases, or need to co-ordinate SAR operations with neighbouring States, should use SAR exercises to improve proficiency and procedures.  
[ASIA/PAC/3, Rec. 7/17]

*Note.C Exercises may be conducted on three levels: communications exercises; co-ordination exercises (without involving SAR units); and field exercises (involving actual SAR unit deployment).*

##### **SAR training**

[ASIA/PAC/3, Rec. 7/18]

States should be encouraged to:

- a) arrange for regular high quality search and rescue (SAR) training for its rescue co-ordination centre personnel, nationally or regionally, as part of its aeronautical training or maritime SAR schools;
- b) grant scholarships to SAR personnel as necessary to enable them to attend a SAR training course; and
- c) make use of the ICAO TRAINAIR course development methodology to assist in the

production of standardized training packages in the field of SAR.

*Note.C The ICAO TRAINAIR programme provides for an effective means of analysing and determining skills required, creates training objectives by setting standards for job performance and produces material-dependent courseware.*

**Co-operation between States**

[ASIA/PAC/3, Rec. 7/9]

To promote greater efficiency and economy in the provision and use of available search and rescue (SAR) facilities, States providing SAR services in adjacent search and rescue regions (SRRs) should enter into formal arrangements for mutual assistance in order to:

- a) help meet and exceed the minimum requirements specified in Table SAR 1 at minimal cost;
- b) ensure full SRR coverage;
- c) provide for technical and operational SAR co-operation and co-ordination;
- d) establish common SAR procedures, where practicable;
- e) conduct joint training and exercises, as appropriate, to maximize proficiency; and
- f) promote effective liaison between air traffic services and RCC personnel within and between the States involved.

*Note.C SAR agreements are particularly important for border areas where concerns for sovereignty and saving lives must be balanced, high sea areas, and inhospitable areas where rapid response is essential to successful SAR operations.*

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**State processes to improve the SAR system**

[ASIA/PAC/3, Rec. 7/15]

States, when undertaking the continued improvement in the provision of search and rescue (SAR) services, should consider the following:

- a) the establishment of a national SAR co-ordinating committee to improve inter-agency co-operation, information exchange and development of national SAR policies and procedures; and
- b) nationally or in co-operation with neighbouring States, development of:
  - 1) SAR manuals;
  - 2) SAR plans and agreements for co-operation, co-ordination and the effective use of all available SAR resources;
  - 3) rescue co-ordination centre/rescue sub-centre (RCC/RSC) plans of operation and other operational documents;
  - 4) SAR training capability, especially for search planners, SAR mission co-ordinators and on-scene commanders; and
  - 5) organizational and operational working relationships; and
- c) effective use of relevant international documents.

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**REPORT ON AGENDA ITEM 7: ANY OTHER BUSINESS**

7.1 Under this agenda item, the Sub-Group was informed of the State Letter originated by the Secretary General of ICAO (Ref. AN 13/35.1-02/57 dated 28 June 2002), concerning the proposal for the amendment of Annexes 11 and 15 relating to air traffic contingency matters. It was noted that the new provisions would become applicable as from 27 November 2003.

7.1.1 The proposal for amendment of Annex 11 reads as follows:

***Proposed Amendment to Annex 11- Air Traffic Services*****CHAPTER 2. GENERAL****2.27 Contingency Arrangements**

*2.27.1 Air traffic authorities shall develop and promulgate contingency plans for implementation in the event of disruption, or potential disruption, of air traffic services and related supporting services in the airspace for which they are responsible for the provision of such services. Such contingency plans shall be developed with the assistance of ICAO as necessary, in close coordination with the air traffic services authorities responsible for the provision of services in adjacent portions of airspace and with airspace users concerned.*

*Note 1. Guidance material relating to the development, promulgation, and implementation of contingency plans is contained in Attachment D.*

*Note 2. Contingency plans may constitute a temporary deviation from the approved regional Air Navigation Plans; such deviations are approved by the President of the ICAO Council on behalf of the*

7.1.2 The Sub-Group recalled that with the implementation of the revised ATS route network, including the EMARSSH routes in the region, with effect from 28 November 2002, the contingency routing Scheme Asia- Middle East-Europe (CRAME) is no longer applicable and needs to be reviewed. To this effect, it urged all States of the MID Region to develop contingency plans for implementation in the event of major disruption of air traffic services. Based on the foregoing the Sub-Group formulated the following draft conclusion:

**DRAFT CONCLUSION 6/31: THE DEVELOPMENT AND PROMULGATION OF CONTINGENCY PLANS**

That:

- a) in accordance with the provisions of Annexes 11 and 15 concerning contingency arrangements, which will become applicable as from 27 November 2003, States are invited to develop and promulgate contingency plans ;
- b) Such contingency plans shall be developed with the assistance of ICAO as necessary, in close coordination with the air traffic services authorities responsible for the provision of services in adjacent portions of airspace and with airspace users concerned.

**Date and Venue of the next ATM/SAR/AIS Sub-Group Meeting**

7.2 The meeting also discussed the date and venue of the next ATM/SAR/AIS Sub-Group meeting. It was agreed that the next meeting would be held in 2004, prior to MIDANPIRG/9 meeting. The exact date would be dictated by progress achieved within the framework of the RNP/RNAV Task Force, the AIS automation Task Force, the RVSM Task Force and the ATS Incident Analysis Task Force, and will be coordinated with the chairman of the Sub-Group.

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ATM/SAR/AIS SG/6  
Appendix A to the Report

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5 March 2003

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