

INTERNATIONAL CIVIL AVIATION ORGANIZATION

REPORT OF THE EIGHTH MEETING OF THE AERODROME OPERATIONAL PLANNING SUB-GROUP

AOP SG/8

(Cairo, 13 – 15 February 2012)

The views expressed in this Report should be taken as those of the MIDANPIRG Aerodrome Operational Planning Sub-Group and not of the Organization. This Report will, however, be submitted to the MIDANPIRG and any formal action taken will be included in the Report of the MIDANPIRG.

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

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AOP SG/8 History of the Meeting

PART I - HISTORY OF THE MEETING

1. PLACE AND DURATION

1.1 The Eighth Meeting of the MIDANPIRG Aerodrome Operational Planning Sub-Group (AOP SG/8) was held at ICAO Middle East Regional Office, Cairo, 13 – 15 February 2012.

2. OPENING

- Mr. Mohamed R. M. Khonji, ICAO Regional Director, welcomed all the delegates to Cairo and gave a brief information on the importance of aerodromes to support Air Navigation activities and meet the rapid growth of air transport in the MID Region. He made a reference to the fact that the meeting had to be postponed from 2011 due to unavailability of an AGA Officer in Cairo for some time and urged the AOP to work hard to assure that such delay has no negative impact. He further, highlighted the requirement to support of the performance-based transition envisaged in the Global and Regional Air Navigation Plan and the requirement to improve the adequacy, of aerodromes in the MID Region for the safe and efficient aircraft operations. He brought to the attention of the meeting that ICAO has recently conducted a Seminar on High Level Briefing for the Aviation System Block Upgrade (ASBU) in Cairo. He invited the participants' attention to several issues to be addressed by the Sub-Group with a focus on monitoring the elimination of Aerodrome Deficiencies, implementation of Certification of Aerodromes, Safety Management Systems and Safety of Runway Operations. Mr. Khonji wished the meeting every success in its deliberations.
- 2.2 The AOP SG Vice-Chairperson, Mr. Nabil Bin Yehia Al Kutbi from Saudi Arabia, chaired the meeting instead of the Chairperson, Mr. Saleh Al Amoush from Jordan, who did not attend the first day of the meeting. Mr. Nabil Al Kutbi invited the meeting to actively, support its activities.

3. ATTENDANCE

3.1 The meeting was attended by a total of twenty nine (29) participants, including experts from nine (9) States (Bahrain, Egypt, Iraq, Jordan, Kuwait, Oman, Qatar, S. Arabia and UAE) and (1) one International Organizations (IATA). The list of participants is at the **Attachment A** to the Report.

4. OFFICERS AND SECRETARIAT

4.1 Mr. Adel Ramlawi, Regional Officer, Aerodromes and Ground Aids supported by Mr. Jehad Faqir, Deputy Regional Director from the ICAO Middle East Cairo Office, was Secretary of the meeting.

5. LANGUAGE

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

AOP SG/8 History of the Meeting

6. AGENDA

6.1 The following Agenda was adopted:

Agenda Item 1: Adoption of Provisional Agenda

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

AOP field

Agenda Item 3: Review and update Tables AOP1 of MID ANP & FASID in Relation to

Aerodromes

Agenda Item 4: Implementation of Certification of Aerodromes in the MID Region

Agenda Item 5: Implementation of SMS at Aerodromes in the MID Region

Agenda Item 6: Enhancement of Runway Operation Safety and Efficiency at MID

Aerodromes

Agenda Item 7: Aerodrome Emergency Planning

Agenda Item 8: Review of Air Navigation Deficiencies in the AOP field

Agenda Item 9: MID Region Aerodromes Performance Objectives

Agenda Item 10: Air Navigation Global Developments

Agenda Item 11: Future Work Programme

Agenda Item 12: Any other business.

7. CONCLUSIONS AND DECISIONS – DEFINITION

- 7.1 The Sub-Group records its actions in the form of Draft Conclusions and Draft Decisions for further action and adoption by the MIDANPIRG as its Conclusions and Decisions with the following significance:
 - a) **Conclusions** deal with matters which, in accordance with the Group's terms of reference, merit directly the attention of States on which further action will be initiated by ICAO in accordance with established procedures; and
 - b) **Decisions** deal with matters of concern only to the MIDANPIRG and its contributory bodies.

AOP SG/8 History of the Meeting

8. LIST OF DRAFT CONCLUSIONS AND DECISIONS

DRAFT CONCLUSION 8/1: PROPOSAL FOR AMENDMENT TO MID BASIC ANP &

FASID - AOP TABLES

DRAFT CONCLUSION 8/2: AERODROMES CERTIFICATION IMPLEMENTATION AND

ACTION PLAN

DRAFT CONCLUSION 8/3: IMPLEMENTATION OF STATE SAFETY PROGRAMME AND

AERODROMES SAFETY MANAGEMENT SYSTEM

DRAFT CONCLUSION 8/4: AMENDMENT OF RUNWAY END SAFETY AREA

REQUIREMENT

DRAFT CONCLUSION 8/5: NATIONAL PERFORMANCE FRAMEWORK

AOP SG/8 Report on Agenda Item 1

PART II: REPORT ON AGENDA ITEMS

ORT ON AGENDA ITEM 1: ADOPTION OF THE PROVISIONAL AGENT

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

AOP SG/8 Report on Agenda Item 2

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

- 2.1 The meeting noted the status of relevant MIDANPIRG/12 Conclusions and Decisions related to the AOP field and the follow-up actions taken by States, the secretariat and other parties concerned as at **Appendix 2A** to the Report on Agenda Item 2.
- 2.2 The meeting agreed also to review the Conclusions and Decisions, which are still current, under the associated Agenda Items with a view to propose to MIDANPIRG/13 appropriate follow-up action (re-iterate, remove or replace these Conclusions/Decisions with more up-to-date ones or issue appropriate Proposals for Amendments to the MID Basic ANP/FASID to reflect their content, etc).

AOP SG/8 Appendix 2A to the Report on Agenda Item 2

FOLLOW-UP ACTION PLAN ON MIDANPIRG/12 AND DGCA-MID/1 CONCLUSIONS AND DECISIONS

CONCLUSIONS AND DECISIONS	FOLLOW-UP	TO BE INITIATED BY	DELIVERABLE	TARGET DATE	REMARKS
CONC. 12/4: REQUIREMENT FOR ICAO GUIDANCE ON AERODROME OPERATIONAL MANAGEMENT PROCEDURES					
That, an ICAO Guidance material on aerodrome operational management procedures is urgently requested as complementary to the implementation of the SARPs contained in Annex 14, Vol. I	Implementation of the Conclusion	ICAO	PANS-Aerodromes	2013	Ongoing
DEC. 12/5: ESTABLISHMENT OF AERODROME CERTIFICATION IMPLEMENTATION TASK FORCE					Ongoing
That, an Aerodromes Certification Implementation Task Force (ADCI TF) be established in accordance with the agreed Terms of Reference (TOR):	Implementation of the Conclusion	MIDANPIRG/12	TF established	October 2010	
DEC. 12/6: SURVEY ON AERODROME EMERGENCY PLAN AND EMERGENCY OPERATION CENTRE					
That,	Implementation of the	ICAO	State Letter	May 2011	Ongoing
a survey on Aerodrome Emergency Plan and Emergency Operation Centre be conducted in the MID Region; and	Conclusion	States			SL Ref.: ME 3/56. 4- 11/275 dated
b) the result of the survey be analyzed by ICAO MID Regional Office and presented to AOP SG/8 for further course of actions as appropriate.		AOP SG/8	AOP SG/8 Report	December 2011	2 November 2011 4 States replied

CONCLUSIONS AND DECISIONS	FOLLOW-UP	TO BE INITIATED BY	DELIVERABLE	TARGET DATE	REMARKS
CONC. 12/7: RUNWAY SAFETY					
That, a) ICAO to consider organizing a Seminar/Workshop on Runway Safety during the year 2011, with focus on runway excursion prevention measures; and b) MID States be encouraged to host the Seminar/Workshop	Implementation of the Conclusion	ICAO	Conduct a Seminar	December 2011	Completed Regional Runway Safety Seminar scheduled 14-16 May 2012 in Amman, Jordan
CONC. 12/8: QUALITY OF AERODROME AERONAUTICAL DATA AND COORDINATION BETWEEN AERODROME OPERATORS AND AIS					Actioned
That,	Implementation of the Conclusion	ICAO	Guidance Material	December 2013	(To be closed)
a) ICAO to consider development of additional guidance on the implementation of quality requirements for protection and reporting aerodrome-related aeronautical data in accordance with the SARPs contained in Annex 14, Volume I; and		States	Service Letter Agreements (SLA) AOP SG/8 Report	December 2011	
b) MID States to ensure proper coordination with the Aeronautical Information Services and aerodrome authorities/operators for the timely transfer of aerodrome operational data through Service Level Agreements (SLA), worldwide best practices, etc					

AOP SG/8 Report on Agenda Item 3

REPORT ON AGENDA ITEM 3: REVIEW AND UPDATE TABLES AOP1 OF MID ANP & FASID IN RELATION TO AERODROMES

- 3.1 The meeting recalled that MIDANPIRG/12 recognized that the current format and content of the Regional ANPs as well as the amendment process do not meet the need of States and users and are inconsistent with the new requirements set-forth by the ATM Operational Concept, the Global ANP and the Performance Based Approach. Accordingly, it was agreed that a significant revision of the current Regional ANPs, format and content was required in order to meet the intended objectives and increase their effectiveness.
- 3.2 The meeting reviewed, updated and agreed on a Proposed Amendment to MID Basic ANP AOP tables as at **Appendix 3A** to the Report on Agenda Item 3 for processing by the MID Regional Office for further approval by the Council before incorporation in the MID BASIC ANP Doc 9708, the updates shall be based on:
 - Change of area of accreditation to the ICAO MID Regional Office and MIDANPIRG Provider States.
 - Updates received from MID States to the list of their respective International Aerodromes required for Air Navigation.
- 3.3 The meeting was of the view that consequent amendment to the AOP-1 tables of MID FASID would be further processed to reflect changes to the MID basic ANP –AOP-1Tables and any other updates thereof that might be received from MID States in accordance with the established procedures.
- 3.4 The meeting noted that there is a consequent need to reflect changes that were made to MID FASID AOP-1 and to agree on a Proposal for Amendment as highlighted and contained at **Appendix 3B** to the Report on Agenda Item 3.
- 3.5 Accordingly, the meeting agreed to the following Draft Conclusion:

DRAFT CONCLUSION 8/1: PROPOSAL FOR AMENDMENT TO MID BASIC ANP & FASID - AOP TABLES

That, States, which have not yet done so, be urged to provide ICAO MID Office with necessary updates of MID Basic ANP and FASID-AOP-1 Tables contained at **Appendices 3A** and **3B** to the Report on Agenda Item 3.

- 3.6 The meeting was informed that ICAO HQ Aerodromes Section has developed, in coordination with the Aerodromes and Ground Aids (AGA) Officers in Regional Offices, a new format for ANP AOP FASID. The Form (with examples) is shown in **Appendix 3C** to the Report on Agenda Item 3 with Explanatory Notes in **Appendix 3D** to the Report on Agenda Item 3.
- 3.7 The meeting noted that the revised form of FASID AOP1 table is expected to be available electronically on line in May 2012. Modification and suggestions are welcome for necessary adjustment before the 12th Air Navigation Conference (November 2012) when decision will be formulated on the official implementation of e-ANP.

AOP SG/8 Appendix 3A to the Report on Agenda Item 3

International Aerodromes Required in the MID Region

EXPLANATION OF THE LIST

CITY/AERODROME Name of the city and aerodrome, preceded by the location indicator.

DESIGNATION Designation of the aerodrome as:

RS — international scheduled air transport, regular use RNS — international non-scheduled air transport, regular use AS — international scheduled air transport, alternate use ANS — international non-scheduled air transport, alternate use

Note 1.— When an aerodrome is needed for more than one type of use, normally only the use highest on the above list is shown. An exception is that AS aerodromes are identified even when they are required for regular use by international non-scheduled air transport or international general aviation, as some specifications in Annex 14, Volume I place special requirements on these aerodromes.

Example.— An aerodrome required for both RS and AS use would only be shown as RS in the list. However, this table may still show specific requirements for AS use.

Note 2.—When the aerodrome is located on an island and no particular city or town is served by the aerodrome, the name of the island is included instead of the name of a city.

Designation

AS

AS

AS

City/Aerodrome

Location Indicator

HETB

HEAL

HEMK

DATIDATN		
BAHRAIN	DAVIDADADA I	P.C
OBBI	BAHRAIN/Bahrain	RS
EGYPT		
	A	DC
HEAX	ALEXANDRIA/Alexandria	RS
HEBA	ALEXANDRIA/Borg El-Arab	RS
HESN	ASWAN/Aswan	RS
HEAT	ASYUT/Asyut	RS
HECA	CAIRO/Cairo	RS
HEAR	EL ARISH/ El Arish	AS
HEGN	HURGHADA/Hurghada	RS
HELX	LUXOR/Luxor	RS
HEMA	MARSA ALAM/Marsa Alam	RNS
HEPS	PORT SAID/ Port Said	AS
HEOW	SHARK EL OWEINAT/Shark El Oweinat	AS
HESH	SHARM EL SHEIKH/Sharm El Sheikh	RS
HESC	ST. CATHERINE/St Catherine	AS

TABA/Taba

ALAMAIN/Alamain

SOHAG/Moubarak

Location Indicator	City/Aerodrome	Designation
IRAN, ISLAMIC REPU	BLIC OF	
OIKB	BANDAR ABBASS/Bandar Abbass	RS
OIFM	ESFAHAN/Shahid Beheshti	RS
OIMM	MASHHAD/Shahid Hashemi Nejad	RS
OISS	SHIRAZ/Shahid Dastghaib	RS
OITT	TABRIZ/Tabriz	RNS
OIIE	TEHRAN/Imam Khomaini	RS
OIII	TEHRAN/Mehrabad	RS
OIZH	ZAHEDAN/Zahedan	RS
IRAQ		
ORBI	BAGHDAD/Baghdad	RS
ORMM	BASRAH/Basrah	RS
ORER	ERBIL/Erbil	RS
ORSU	SULAYMANIYAH/Sulaymaniyah	RS
ORNI	AL NAJAF/Al Najaf	RNS
ORBM	MOSUL/Mosul	RS

Location Indicator	City/Aerodrome	Designation
JORDAN		
OJAM	AMMAN/Marka	AS
OJAI	AMMAN/Queen Alia	RS
OJAQ	AQABA/King Hussein	RS
KUWAIT		
OKBK	KUWAIT/Kuwait	RS
LEBANON		
OLBA	BEIRUT/ R. B. H - Beirut	RS
OMAN		
OOMS	MUSCAT/ Muscat	RS
OOSA	SALALAH/Salalah	AS
QATAR		
OTBD	DOHA/Doha	RS
ОТНН	DOHA/New Doha -(Dec. 12 th 2012))	RS
SAUDI ARABIA		
OEDF	DAMMAM/King Fahd	RS
OEJN	JEDDAH/King Abdulaziz	RS
OEMA	MADINAH/Prince Mohammad Bin Abdulaziz	RS
OERK	RIYADH/King Khalid	RS

City/Aerodrome	Designation
C	
ALEPPO/Aleppo	RS
LATTAKIA/Bassel Al-Assad,	RS
DAMASCUS/Damascus	RS
ES	
ABU DHABI/Abu Dhabi	RS
ABU DHABI/Al Bateen	RNS
AL AIN/Al Ain	RS
DUBAI/Dubai	RS
DUBAI–/ Dubai World Central - Al Maktoum	RS
FUJAIRAH/Fujairah	RS
RAS AL KHAIMAH/Ras Al Khaimah	RS
SHARJAH/Sharjah	RS
ADEN/Aden	RS
HODEIDAH/Hodeidah	RS
MUKALLA/Riyan	RS
SANA'A/Sana'a	RS
TAIZ/Ganad	RS
	ALEPPO/Aleppo LATTAKIA/Bassel Al-Assad, DAMASCUS/Damascus ES ABU DHABI/Abu Dhabi ABU DHABI/Al Bateen AL AIN/Al Ain DUBAI/Dubai DUBAI-/ Dubai World Central - Al Maktoum FUJAIRAH/Fujairah RAS AL KHAIMAH/Ras Al Khaimah SHARJAH/Sharjah ADEN/Aden HODEIDAH/Hodeidah MUKALLA/Riyan SANA'A/Sana'a

AOP SG/8 Appendix 3B to the Report on Agenda Item 3

MID FASID – AOP-1 3-AOP 1-1

TABLE FASID AOP 1 C PHYSICAL CHARACTERISTICS, RADIO AND VISUAL AIDS AT AERODROMES

Note - The names of aerodromes listed in column 1 of the following table derive from the list of international aerodromes required in the AOP Part of the Basic MID ANP.

EXPLANATION OF THE TABLE

General

Table AOP 1 shows the operational requirements for air traffic ser_vices, physical characteristics, radio navigation aids, visual aids and runway visual range (RVR) at each aerodrome.

Columns 6 to 9 show physical characteristics related to taxiways and runways. The physical characteristics of taxiways should be appropriate for the runways with which they are related.

Columns 5 and 10 to 13 show the requirements for air traffic services, radio and visual aids and RVR for the runway with which the entry is associated. These aids are generally indicated by AX@ and the AX@ indicates that the aid should be in accordance with the type of runway (column 7). If the aid is different from the type of runway, then a A1@, A2@ or A3@ is entered to indicate Category I, II or III, respectively.

Column

1 Name of the city and aerodrome, preceded by the location indicator.

Note.C When the aerodrome is located on an island and no particular city or town is served by the aerodrome, the name of the island is included instead of the name of a city.

Designation of the aerodrome as:

RS C international scheduled air transport, regular use

RNS C international non-scheduled air transport, regular use

AS C international scheduled air transport, alternate use

ANS C international non-scheduled air transport, alternate use

When an aerodrome is needed for more than one type of use, normally only the use highest on the above list is shown. An exception is that AS aerodromes are identified even when they are required for regular use by international non-scheduled air transport.

- Alternate aerodromes for the regular aerodromes listed in column 1, or if the aerodrome listed in column 1 serves only as an alternate, the regular aerodromes for which it is an alternate. The aerodrome is shown by listing the name of the city, preceded by the location indicator.
- Aerodrome reference code (RC) for aerodrome characteristics expressed in accordance with Annex 14, Volume I, Chapter 1.
- 4 Required rescue and fire fighting service (RFF). The required level of protection is expressed by means of an aerodrome RFF category number, in accordance with Annex 14, Volume I, Chapter 9, Section 9.2.
- 5 Air traffic services:

APP C Approach control service. An AR@ is shown it indicates that the service should be provided with radar.

TWR $\,$ C Aerodrome control tower. An AR $\,$ @ is shown it indicates that the service should be provided with an aerodrome surface movement radar.

ATIS C Automatic Terminal Information Service.

AFIS C Aerodrome Flight Information Service.

3-AOP 1-2 MID FASID – AOP-1

- 6 Runway designation numbers.
- 7 Type of each of the runways to be provided. The types of runways, as defined in Annex 14, Volume I, Chapter 1 are:

NINST C non-instrument runway

NPA C non-precision approach runway

PA1 C precision approach runway Category I

PA2 C precision approach runway Category II

PA3 C precision approach runway Category III

- 8 Taxiway (TWY) to be provided to threshold of associated runway.
- 9 Required runway length expressed in terms of a balanced field length. In planning, account is taken of local conditions. If the requirement for alternate use is more critical, the aircraft type and runway length required are also indicated below the abbreviation AAS@.

Critical aircraft for pavement strength and required pavement strength expressed as the all-up mass in thousands of kilograms. The operational mass of an aircraft, such as B747 and DC10, which may have a bearing on the design of culverts, cable ducts, bridge overpasses, etc., is also shown. If the aircraft requiring the aerodrome for alternate use is more critical, the aircraft type and pavement strength required are also indicated below the abbreviation AAS@.

Note 1.C A specific aircraft model based on the best available sources of information should be selected for planning runway length as this requirement is particularly affected by aircraft model differences. Aircraft models should thus be reviewed carefully to see that the correct one is used in determining the aerodrome characteristics. ICAO's Air Navigation Commission has directed that RAN meetings provide in the plan as realistic figures as possible on runway length and pavement strength requirements at individual aerodromes.

Note 2.C For international general aviation aerodromes, when there is no requirement for the runway to be paved, the pavement strength may be shown as "UNPAV".

Note 3.C Should a requirement for more than one runway be indicated for an aerodrome, the lengths of the secondary runways. A specification concerning the lengths of such runways can be found in Annex 14, Volume I, Chapter 3, Section 3.1.7.

Note 4.C When the length or pavement strength is not a current requirement, the year in which it will be required is entered

Radio navigation aids (approach and landing)

10 PA-Precision Approach Aid, shown against the runway to be served and indicated by an AX@.

NPAC Non Precision Approach Aid. An AX@ indicates that the aid should be provided.

T CTerminal Navigation Aid. An AX@ indicates that one of the aids should be provided.

Note: Refer to Table CNS 3 for details. The appropriate radio navigation aid and the requirement of aligning DME with ILS/VOR are shown in this Table CNS 3.

Lighting aids

11 PA C precision approach lighting system, Category I, II or III shown by an AX@ if the aid is the same category as the runway type (column 7) or, if it is different, by the numeral 1, 2 or 3 against the runway to be served, to indicate the type of system required.

SA C simple approach lighting system, shown by an AX@ against the runway to be served.

VA C visual approach slope indicator system, shown by an AL@ or an AS@ against the runway to be served. The letter AL@ indicates that the system should be PAPI or T-VASIS (AT-VASIS) and the letter AS@ indicates that the system should be PAPI/(APAPI).

RWY C runway edge, threshold and runway end lighting. An AX@ indicates that these aids should be provided.

- CLL C runway centre line lighting, shown by an AX@ against the runway to be served.
- TDZ C runway touchdown zone lighting, shown by an AX@ against the runway to be served.
- TE C taxiway edge lighting. An AX@ indicates that the aid should be provided. This requirement pertains to the entire aerodrome and only one entry is made when planning requirements for more than one runway are shown.
- $TC \subset taxiway$ centre line lighting. An AX@ indicates that this should be provided for the particular runway with which the entry is associated.
- STB C stop bars. An AX@ indicates that stop bars should be provided for the runway with which the entry is associated.
- B $\mathbb C$ aerodrome or identification beacon. An AX \otimes indicates that the aid should be provided. This requirement pertains to the entire aerodrome and only one entry is made when planning requirements for more than one runway are shown.

Marking aids

- 12 DES C runway designation marking, shown by an AX@ against the runway to be served.
 - CLM C runway centre line marking. An AX@ indicates that the aid should be provided.
 - THR C runway threshold marking, shown by an AX@ against the runway to be served.
 - TDZ C runway touchdown zone marking, shown by an AX@ against the runway to be served.
 - SST C runway side stripe marking. An AX@ indicates that the aid should be provided.
 - AMG C aiming point marking, shown by an AX@ against the runway to be served.
 - TWY C taxiway centre line and, where required, edge marking. An AX@ indicates that the aid should be provided.
 - HLD C taxiway holding position marking, shown by an AX@ against the runway to be served. The pattern of the marking should conform to the provisions of Annex 14, Volume I, Section 5.2.9.
- 13 Runway visual range (RVR).
 - TDZ C observations should be provided representative of the touchdown zone.
 - MID C observations should be provided representative of the middle of the runway.
 - END C observations should be provided representative of the stop end portion of the runway.

CITY/AERODROME/USE VILLE/AERODROME/EMPLOI CIUDAD/AERODROMO/USO	AEROD AERODR DEGAG AERODR	RNATE DROMES ROMES DE GEMENT ROMOS DE		AERC AERC					C/	PHYSICAL CHARACTERISTIC	PHYSIQUES	AIE	ADIO AII DES RAI	OIO		LIGHTING A DES LUMINE JDAS LUMIN		MARKING AIDS MARQUES SEÑALAMIENTO									
			RC	RC RFF ATS F A T A A P P W T F P R I I S S 3 4 5						RWY TYPE TYPE DE PISTE TIPO DE PISTA	T W Y	RWY LENGTH LONG. DE PISTE LONG. DE PISTA PAV. STRENGTH RESISTANCE RESIST. PAVIM.	PA	NPA	Т	P S		R C T W L D Y L Z			E	C T L H M R	D	S A S M T G	T H	-	T MEDINZDD
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EGYPT																											
HEAX ALEXANDRIA/Alexandria Int'I RS	LTAC LGAT OLBA HEBA HECA LCLK HELX	ANKARA ATHINAI BEIRUT BORG EL- ARAB CAIRO LCLK LUXOR	4C	7	×	×		×	04 22 18 36	NPA NPA NPA NPA	×	2201 B737-200 48 1801 48		x	×	x x	L	x x x	x x	×	x x x	x x x x x x	x x	x :	x x x x x	Х	X

CITY/AERODROME/USE VILLE/AERODROME/EMPLOI CIUDAD/AERODROMO/USO	ALTERNATE AERODROMES DE DEGAGEMENT AERODROMOS DE ALTERNATIVA			ODROM ODROM				CA	PHYSICAL CHA RACTERISTIC CARACTERÍS	QUESI	PHYSIQUES	AIC	ADIO AII DES RAI DIOAYUI	DIO		Al	LIGHTI DES LU UDAS L	IMINE	USES			ı	ARKIN MARQ ÑALAM	UES				RVR
	, a. Live vi i vi	RC	RFF	A P	T W R	A T I S	A I	RWY NO PISTE NO PISTA NO	RWY TYPE TYPE DE PISTE TIPO DE PISTA	W	RWY LENGTH LONG. DE PISTE LONG. DE PISTA PAV. STRENGTH RESISTANCE RESIST. PAVIM.	PA	NPA	Т	P \$. D		В	E L	T H	D	S		T W Y		T MEDINZDD
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HEBA ALEXANDRIA / Borg EI Arab Int'I RS	HECA CAIRO LGAT ATHINAI OLBA BEIRUTB LCLK Larnaka HELX LUXOR	4E	8		X			14 32	PA1NPA NPAPA1	X	3400 A300-600 55	x			×	L	x x		X	х	x x	×	X X	x	X X	х	x x	
HESN ASWAN/Aswan Int'I	HELX LUXOR	4E	9	R	х		х	17 35	NPA PA1	x x	3402 A300-600 60	х	Х		x x	L	x x		Х	х	x x	x x		x		x x	x x	Х

CITY/AERODROME/USE VILLE/AERODROME/EMPLOI CIUDAD/AERODROMO/USO	AERODR AERODR DEGAC AERODR	RNATE DROMES ROMES DE GEMENT ROMOS DE			DDROI DDROI				C/	PHYSICAL CHA RACTERISTIC CARACTERÍS	QUESI	PHYSIQUES	AID	ADIO AII DES RAI	OIO		AID	LIGHTING A	EUSES			MARKIN MARQ SEÑALAN	UES		RVR
			RC	RFF	A P P	T W R	A T I S	A F - 0	RWY NO PISTE NO PISTA NO	RWY TYPE TYPE DE PISTE TIPO DE PISTA	T W Y	RWY LENGTH LONG. DE PISTE LONG. DE PISTA PAV. STRENGTH RESISTANCE RESIST. PAVIM.	PA	NPA	Т	P S			S T TT E CB		D C E L S M	H D	S A S M T G	T H W L Y D	T MEDINZDD
1		2	3	4		5	5		6	7	8	9		10				11				12	!		13
HEAT ASYUT/Asyut Int'I RS HEAZ CAIRO/Almaza Int'I ANS	HECA HEAX HECA HELX	CAIRO LUXOR ALEXAND RIA CAIRO LUXOR	4C 3C	7		×			13 31 48 36 95 23	PA2NPA PA2PA1 PA1 PA1 NINST	×	3019 B767 PCN 45 2050 27 1240 27		x x x		x x	L	x x	х	x	x x x		x x		
<u>HEAL ALAMAIN</u>	<u>HEBA</u>	Borg	<u>4C</u>	<u>7</u>		<u>X</u>			<u>13</u>	<u>NPA</u>		3500			X	X	L	X	X	<u>X</u>	<u>X X</u>	<u> </u>	<u>x x</u>	<u>X X</u>	
Alamain Int'l		<u>AL Arab</u>							<u>31</u>	<u>NPA</u>		PCN 72				X	L	X	X		<u>x x</u>	<u>x x</u>	<u>x x</u>	<u>x x</u>	
AS	HECA	Cairo																							
HEMK SOHAG	HELX	Luxor	<u>4C</u>	<u>7</u>		X			<u>15</u>	<u>NPA</u>		3000		X	<u>X</u>	X	L	×	X	X	<u>x x</u>	<u>x x</u>	<u>x x</u>	<u>x x</u>	
Moubarak Int'l	<u>HEAT</u>	<u>ASUT</u>							<u>33</u>	<u>NPA</u>		PCN		<u>X</u>		X	L	×	×		<u>x x</u>	<u>x x</u>	<u>x x</u>	<u>x x</u>	
AS												49													

CITY/AERODROME/USE VILLE/AERODROME/EMPLOI CIUDAD/AERODROMO/USO	AERODA DEGAC AERODA	RNATE DROMES ROMES DE GEMENT ROMOS DE			ODROI				CA	PHYSICAL CH. RACTERISTIC CARACTERÍS	QUESI	PHYSIQUES	AID	ADIO AI DES RAI DIOAYU	DIO	AIDES LUMINEUSES S AYUDAS LUMINOSAS								MARKING AIDS MARQUES SEÑALAMIENTO								
			RC	RFF	A P	T W R	A T I S	A F I S	RWY NO PISTE NO PISTA NO	RWY TYPE TYPE DE PISTE TIPO DE PISTA	T W Y	RWY LENGTH LONG. DE PISTE LONG. DE PISTA PAV. STRENGTH RESISTANCE RESIST. PAVIM.	PA	NPA	Т		S VA A	w	L D	T TEC	Т		D C E L S M	н	D :	S A S M T G	W	H / L D	D	M E I N D D		
1		2	3	4			5		6	7	8	9		10					11	,					12					13		
HECA CAIRO/Cairo Int'l	LTAC	ANKARA	4E	9	х	х	Х	Х	05L	PA2	Х	3300	Х	х	Х	х	L	х	х х	хх	x	х	х х	х	x	х	x x	x x	х	Х		
RS	LGAT	ATHINAI							23R	PA2		B707-300C 153	Х			х	L	Х	х х	хх	х		х х	х	х	Х	x	X >	x	Х		
	OLBA	BEIRUT										B747 320						_											_			
	HELX	LUXOR	4F		-				05C	PA2		4000	x			х	L	Х	хх	х х	Х		х х	Х	Х	x x		x x	Х	хх		
	LCNC	NICOSIA	4E						23C	PA2		B747 320	x			х	L	Х	ХХ	хх	Х		х х	Х	Х	x x	(Χ	Х	хх		
	LCLK	Larnaka							05R	PA2		4000	Х		х	Х	L	Х	х х	хх	Х		х х	Х	Х	Х	x x	х х	Х	хх		
	LGRP	RODOS							23L	PA2		B747 320	Х		_ x	Х	L	Х	х х	хх			х х	Х		X	х	>	X	хх		
			4D								Х	0470		Х																		
									16	NINST		3178 B707-300C 153	Х	Х	х			Х					Χ	Х		Х	x >	K				
									34	NINST		B/07-300C 153	х				x	_ X					X	Х		Х	х					
HEAR EL-ARISH/El-Arish Int'l	HESH	SHARM EL-	4C	7	x				16	NPA	х	3019		х		>	K L	x		х		х	хх	х	x	Х	x x	K				
AS	НЕТВ	SHEIKH TABA							34	NPA		B767 PCN 55		х		>	K L	X					х х	х	Х		X	;	<			
HEGN HURGADA/Hurghada	HELX	LUXOR	4E	9	Х	х		Х	16	NPA	Х	4000		х	х	:	X L	х		х		х	x x	x	x		x x	x x				
RS	HESH	SHARM EL SHEIK							34	PA2	х	B747 70	х			х	L	х		x			х х	х	X	Х	X	x x				

CITY/AERODROME/USE VILLE/AERODROME/EMPLOI CIUDAD/AERODROMO/USO	AEROI AERODF DEGAG AERODF	RNATE DROMES ROMES DE GEMENT ROMOS DE			ODRO ODRO				CA	PHYSICAL CHA RACTERISTIC CARACTERÍS	QUES	PHYSIQUES		AIDE	DIO AID S RAD DAYUD	OIO			AIDE	GHTIN S LUM AS LU	IINEL	JSES					ARKIN MARC ÑALA	QUES	3			RV	R
			RC	RFF	A P P	T W R	A T I S	A F I S	RWY NO PISTE NO PISTA NO	RWY TYPE TYPE DE PISTE TIPO DE PISTA	T W Y	RWY LENGT LONG. DE PISTE LONG DE PISTA PAV. STRENGTH RESISTANCE RESIST. PAVIM.		PA	NPA	Т			A۱		D	T T	т		Е	C T L H M R		S S T	A M G	T W Y		T I	N
1		2	3	4			5		6	7	8	9			10	ı			ı	11	1						1:	2				1:	3
																														$oldsymbol{\perp}$			
HELX LUXOR/Luxor	HESN	ASWAN	4E	9	R	х		х	02	NPA	Х	300	10		Х	х		х	L >	X		X		х	X >	x x	>	κ x	×		Х		
RS	HECA HEGN HSSS	CAIRO HRUGHA DA KHARTOU							20	PA1	X	A300-600 7	X				X		L >	×		х			X	X	>	X	×	X	X	X	
	HEGN	M HRUGHA			X																												
HEMA MARSA ALAM/Marsa Alam Int'I RNS	HELX HECA HESN	DA LUXOR CAIRO ASWAN	4C	7					15 33	NPA NPA	X	300 B767 5		X)	X				x x x x			x >						x x		
HEPS PORT-SAID/ Port-Said	HECA	CAIRO	4C	6		x			10	NPA		23	.9		x			x	L)	X				Х	X	x x	Х	x	×	×	X		
Int'l AS	HELX	LUXOR	7.5						28	NPA			5		X				L)						X								
HEOW SHARK EL OWEINAT/ Shark El Oweinat Int'l AS	HECA HEGN HELX HESN	CAIRO HRUGHA DA LUXOR ASWAN	4C	5		X			01 19	NPA NINST		3500 B767 6			X										X X >		x x	X	×				

CITY/AERODROME/USE VILLE/AERODROME/EMPLOI CIUDAD/AERODROMO/USO	AERODR AERODR DEGAG AERODR	RNATE DROMES ROMES DE GEMENT ROMOS DE			DDROI DDROI			C	PHYSICAL CH ARACTERISTI CARACTERÍS	QUES I	PHYSIQUES	AID	ADIO AID DES RAD DIOAYUD	OIO		AII	LIGHTING A	EUSES			MA	ARQU	AIDS JES JENTO			RVR
	7.2.2		RC	RFF	A P	T W R	A A I	NO PISTA NO	TIPO DE	T W Y	RWY LENGTH LONG. DE PISTE LONG. DE PISTA PAV. STRENGTH RESISTANCE RESIST. PAVIM.	PA	NPA	Т	P S			S T T T E C B		D CELS M	н	D	S A S M T G	T H W H Y [L	T ME D I N Z D D
1		2	3	4		5		6	7	8	9		10				11					12				13
HESH SHARM EL-SHEIKH/ Sharm El Sheik Int'l RS	HECA HEGN HELX	CAIRO HURGHA DA LUXOR	4E	9	R	х	>	04L 22R 04R 22L	PA1 NPA NPA NPA	x x x	3080 A300-600 65 3081 B747 65	x	х	x	x x x		x x x	x x x	x	x x x x x x		x x x	x x x	x x x x x x x x	x x x	х
HESC ST. CATHERINES/St. Catherine Int'I AS HETB TABA/Taba Int'I	HECA HESH HEGN HESH	CAIRO SHARM EL- SHEIKH HURGHA DA SHARM	3C 4E	7	R	x		17 35	NPA NINST	x	2115 F27 40			x	x x	L	x	x	x	x x x x x	x x	x x	х	x x	x	
AS		EL SHEIKH						22	NINST		B747 70				Х	L	x	х		x x	X	X	x x	x	X	

CITY/AERODROME/USE VILLE/AERODROME/EMPLOI CIUDAD/AERODROMO/USO	AERODR AERODR DEGAC AERODR	RNATE DROMES COMES DE GEMENT COMOS DE			DDROI DDROI				CA	PHYSICAL CHA RACTERISTIC CARACTERÍS	QUESI	PHYSIQUES	AI	ADIO A DES RA DIOAYI	ADIO			AIDES	GHTING A S LUMINE AS LUMIN	USES				ARKINO MARQ ÑALAN	UES				RVR
	ALILI	NATIVA	RC	RFF	A P	T W R	A T I S	A F I S	RWY NO PISTE NO PISTA NO	RWY TYPE TYPE DE PISTE TIPO DE PISTA	T W Y	RWY LENGT LONG. DE PISTE LONG DE PISTA PAV. STRENGTH RESISTANCI RESIST. PAVIM.		NPA	Т			A v	R C T V L D ′ L Z	S T T T E C B		D C		D	S	М	T H W L Y C	-	T MEDINZDD
1		2	3	4		5	5		6	7	8	9		10	1				11					12	!				13
IRAN, ISLAMIC REPUBLIC OF OIKB BANDAR ABBAS/Bandar Abbas RS	OMAA OBBI OTBD OMDB OISS	Abu Dhabi Bahrain Doha Dubai Shiraz	4D 3G	8	×	x	×		03R 21L 03L 21R	NPA PA1 NINST NINST	×	34	90 X	x	×			L X		x	×	х	Х	х		Х	x	х	
OIFM ESFAHAN/Shahid Beheshti RS	OISS	Shiraz Tehran	4E	9	X	x	X		08L 26R 08R 26L	NPA PA1 NPA NPA	x x	44 B747 29 44 B747 2	0 X	x x x	x	x	x	L X		x	X	X X X X X	Х	x	x	х	x		
OIMM MASHHAD/Shahid Hashemi Nejad Intl RS	OIII	Tehran	4D	89	х	×	Х		13L 31R 13R 31L	NPA PA1 NPA NPA		38	90 X	x	x	×	x	L X L X L X	(x	X	х	х	x x x		Х	x	х	

VIL	CITY/AERODROME/USE LE/AERODROME/EMPLOI JDAD/AERODROMO/USO	AERO AERODI DEGA AERODI	ERNATE DROMES ROMES DE GEMENT ROMOS DE RNATIVA			DDROI DDROI				CA	PHYSICAL CHA RACTERISTIC CARACTERÍS	QUES	PHYSIQL	JES	AID	ADIO AII ES RAI	OIO			IDES	ITING A LUMINE S LUMII				ı	ARKIN MARQ ÑALAM	UES				RVR
		ALIE	KIVA	RC	RFF	A P	T W R	A T I S	A F I S	RWY NO PISTE NO PISTA NO	RWY TYPE TYPE DE PISTE TIPO DE PISTA	T W Y	RWY L LONG. PISTE DE PIS PAV. STREN RESIST RESIST	LONG. TA IGTH TANCE T.	PA	NPA	Т		S V A A	W	C T L D L Z	ттт		D C	. Н	D		М	T H W L Y D	,	T MEDINZDD
	1		2	3	4		Ę	5		6	7	8		9		10					11					12	2				13
OISS	RS	OBBI OIFM	Bahrain Esfahan Tehran	4D 4D	89	×	×	×		11R 29L 11L 29R	NINST PA1 NINST NPA NPA	x x	B747	4259 290 4342 290 3604	x	x x x	x	×	X L L X L			×	x	x x x x x x x x	x x x	x x x	x	Х	x	x x	
OUE	RNS	OIFM	Esfahan	4E	9	\ \ \		X		30R 12R 30L	PA1 NINST NINST	X	B747	290 3517 20	X	x	X	:	X L X L		~ ~			X X X	Х	x x		X	x :	×	
OIIE	TEHRAN/Emam Khomaini Intl RS	OISS OIFM OMDB OKBK OMSJ OIII OBBI	Shiraz Esfahan Dubai Kuwait Sharjah Tehran Bahrain	4E	9	X	X	X		11L 29R	NPA PA2	Х	B747	4200 365	X	X		х	X L		x x x x	X	X	××	X		X	X X	, x)		Х

VILI	EITY/AERODROME/USE LE/AERODROME/EMPLOI JDAD/AERODROMO/USO	AERODA DEGAG AERODA	RNATE DROMES ROMES DE GEMENT ROMOS DE			ODROI ODROI				CA	PHYSICAL CHA ARACTERISTIC CARACTERÍS	UES	PHYSIQU	JES	AIE	ADIO AI DES RAI DIOAYU	DIO		AI	DES L	TING A UMINE					ı	ARKIN MARQ ÑALAM	UES				RVR
		7.2.2.		RC	RFF	A P P	T W R	A T I S	A F I S	RWY NO PISTE NO PISTA NO	RWY TYPE TYPE DE PISTE TIPO DE PISTA	T W Y	LONG. PISTE DE PIS PAV. STREN	LONG. STA NGTH TANCE T.	PA	NPA	Т	P \$	S V A A	w		T TEC			D C	. Н		S	М	T H W L Y D		T ME D I N Z D D
	1		2	3	4		5	5		6	7	8		9		10					11	I	1				12	<u>:</u>				13
OIII	TEHRAN/Mehrabad Intl	OMDB OIFM OKBK OMSJ OISS OBBI	Dubai Esfahan Kuwait Sharjah Shiraz Bahrain	4E	9	R	x	X		11R 29L 11L 29R	NPA PA1 NPA NPA	x	B747	4070 290 3992 265	x	x x x	×	×	Ι.	x x x		x		х	x x x x x x x x x x x x x x x x x x x	x		×	x x x	x	: (x
OIZH	ZAHEDAN/Zahedan Intl RS IRAQ	OIKB	Bandar Abbas Mashhad	4D	8	x	х	x		17 35	NPA NINST NPA-PA1	Х	A300	4250 142	x	x *	x	; ×	K L	x x		х			x x x	x x		х	x x	x x	(
ORBI	BAGHDAD/Baghdad Int'l RS	ORMM	Basrah	4E	98	R	х	X		15R 33L	PAI PA2 NINST PA1	x x	B747	3300 340	х	х	х	x	K L	x x	хх	x	x		x x x		Х	х	x x	x x		x

CITY/AERODROME/USE VILLE/AERODROME/EMPLOI CIUDAD/AERODROMO/USO	AERODA DEGAC AERODA	RNATE DROMES ROMES DE GEMENT ROMOS DE			DDROI DDROI				CA	PHYSICAL CH/ RACTERISTIC CARACTERÍS	QUESI	PHYSIQL	IES	AID	DIO AIE ES RAE IOAYUE	OIO			DES L		IDS TUSES IOSAS				MARKI MAF SEÑAL	QUE	S			RVR
	,,,,,		RC	RFF	A P P	T W R	A T I S	A F	RWY NO PISTE NO PISTA NO	RWY TYPE TYPE DE PISTE TIPO DE PISTA	T W Y	RWY L LONG. PISTE DE PIS PAV. STREN RESIST RESIST PAVIM.	DE LONG. TA IGTH FANCE	PA	NPA			S V A A	w		T TEC		D E S	L	T TH DR Z	s		T W Y	L	T MEDIN
1		2	3	4		5	5		6	7	8		9		10					11	Г					12				13
ORMM BASRAH/Basrah Intl RS ORER ERBIL/Erbil Int'l RS	ORBI ORSU ORBI OSDI	Baghdad Sulymaniy ah BaGhdad Damescus	4E 4C	98	x	x			15L 33R 14 32 15	PA21 NINST PA1 -NPA/ NINST NINST PA1 NINST PA2	x	B747	3300 340 4000 340 2800	x x x	xx		× :	L		x x x x x x x x x x x x x x x x x x x	×	<i>*</i>	x x		x	(x	x	x	x x x

CITY/AERODROME/USE VILLE/AERODROME/EMPLOI CIUDAD/AERODROMO/USO	AERODA DEGAC AERODA	RNATE DROMES ROMES DE GEMENT ROMOS DE			ODRON					PHYSICAL CH ARACTERISTI CARACTERÍS	QUES	PHYSIQI	JES	AID	ADIO AII DES RAI	OIO			DESI	TING A LUMINE S LUMIN	USES				MARKIN MARC EÑALAI	UES				RVR
			RC	RFF	A P P	T W R	A T I S	A F I S	RWY NO PISTE NO PISTA NO	RWY TYPE TYPE DE PISTE TIPO DE PISTA	T W Y	LONG. PISTE DE PIS PAV. STREN	LONG. STA NGTH TANCE T.	PA	NPA	Т	P \$	S V A A	w	C T L D L Z		В	D (H D	S S T	М	T H W L Y C		T MEDIN
1		2	3	4		5	5		6	7	8		9		10					11					12	2				13
ORSU SULYMANIYAH/ Sulaymaniyah Int'l RS ORNI Al Najaf/Al Najaf Int'l	ORBI ORER	Baghdad Erbil Baghdad	4E 4D	9		x	х	Х	31 13	PA1 PA1 NP1		B747	3500 340 3000	x x	X	x x	x x	s s	X	x x	х	Х		x x	x x x x	x x	x x	Х	x x	
RNS ORBM MOSUL/Mosul Inti'l RS	ORER	Erbil	4D			X	x		10 15 33	PA1			2650	х				L	x x x				X							

CITY/AERODROME/USE VILLE/AERODROME/EMPLOI CIUDAD/AERODROMO/USO	AEROI AERODE DEGA AERODE	RNATE DROMES ROMES DE GEMENT ROMOS DE RNATIVA			ODROI ODROI				CA	PHYSICAL CHA RACTERISTIC CARACTERÍS	UES F	PHYSIQUE		AID	IDIO AIE ES RAE	OIO		Al	DES L	TING A UMINE LUMIN					ARKINI MARQ ÑALAM	UES				RVR
			RC	RFF	A P	T W R	A T I S	A F I S	RWY NO PISTE NO PISTA NO	RWY TYPE TYPE DE PISTE TIPO DE PISTA	T W Y	RWY LEN LONG. D PISTE LC DE PISTA PAV. STRENG RESISTA RESIST. PAVIM.	E DNG. A TH	PA	NPA	Т	P \$		w		S T T T E C B		Е	C T L H M R	D	S S T	М	T H W L Y D		T MEDINZDD
1		2	3	4		5	5	1	6	7	8		9		10			1	1	11	ı	1			12	2		ı		13
JORDAN OJAM AMMAN/Marka Intil AS	OJAI OSDI	Amman/ Queen Alia	4 E 4D	9	×	×	×	×	06 24	PA1	×	- 3275 B747	285	×	x	x	×	L	×		x	×	x x		× ×	×	× ×	x >		xxx
OJAI AMMAN/Queen Alia RS	OJAM	Amman/ Maraka	4E	9	х	x	Х	×	08R 26L 08L	NPA PA1 PA2 NPA PA1 2	x x	B747	3660 317 3660	x	X	x	×	L		x x x x x	x	X	х	Х	x x x	x	X	x x		x x x
OJAQ AQABA/ King Hussein RS	IALO MALO	Amman/ Queen Alia Amman/ Marka	4 D 4E	7 9	х	Х	х	х	26R 02 01 20 19	PA1 NPA	X	B747	317 3000 150	×	X	X	×	L	x x x	x x * x	x x	x	x x x	x x x	x	х	x x x	x	Х	x x x

CITY/AERODROME/USE VILLE/AERODROME/EMPLOI CIUDAD/AERODROMO/USO	AERODA DEGAC AERODA	RNATE DROMES ROMES DE GEMENT ROMOS DE			DDROM				CA	PHYSICAL CHARACTERISTIC	QUESI	PHYSIQUES	S	AID	DIO AID ES RAD IOAYUD	OIO		AII	DES LI	ING AI					N	RKING IARQI ALAM	UES				RVR
			RC	RFF	A P P	T W R	A T I S	A F I S	RWY NO PISTE NO PISTA NO	RWY TYPE TYPE DE PISTE TIPO DE PISTA	T W Y	RWY LEN LONG. DE PISTE LOI DE PISTA PAV. STRENGT RESISTAN RESIST. PAVIM.	: NG. ⁻ H	PA	NPA	Т	P S		w		T T E C	т	B [E L	T H R	D		М	T H W L Y D	-	T ME D I N Z D D
1		2	3	4		5	i		6	7	8	g)		10	1				11					1	12					13
																													<u> </u>		
KUWAIT OKBK KUWAIT/Kuwait Intl RS LEBANON	ORBS OBBI ORMM OEDF OERK	Baghdad Bahrain Basrah Dammam Riyadh	4E	9	R	X	X	x	15R 33L 15L 33R	PA2 PA2 PA2 PA2	x x x	B747	3400 350 3500 3500	x x x		Х	х	L	x :		x x : x x : x x : x x : x	×		< x < x < x < x < x < x < x < x	x x	x	x x x	X X	x x x x x x	× ×	x x x x x x
OLBA BEIRUT/R. B. H - Beirut Intl RS	HECA OSDI LCLK	Cairo Damascus Larnaka	4E	9	R	x	X	x	03 21 16 34	PA1 PA1 NINST PA1 NINST	Х	B747	3800 320 3395 320 3250 3250	x x x x x x	*	x x x	x x x	L		x x x x	x x x x x x x x x x	x x	x ,	< x	x x x	X X X	x	x x x	x x	x x x	x x x x x x x x

CITY/AERODROME/USE VILLE/AERODROME/EMPLOI CIUDAD/AERODROMO/USO	AEROI AERODE DEGAG AERODE	RNATE DROMES ROMES DE GEMENT ROMOS DE			ODROI				CA	HYSICAL CHA RACTERISTIC CARACTERÍS	UES I	PHYSIQUES	AIE	ADIO AII DES RAI DIOAYUI	OIO		AII	LIGHTIN DES LUM UDAS LU	IINEL	JSES				ARKINO MARQ ÑALAM	UES			RVR
			RC	RFF	A P	T W R	A T I	A P	RWY NO PISTE NO PISTA NO	RWY TYPE TYPE DE PISTE TIPO DE PISTA	T W Y	RWY LENGTH LONG. DE PISTE LONG. DE PISTA PAV. STRENGTH RESISTANCE RESIST. PAVIM.	PA	NPA	Т	P S		R C W L Y L	D	S T T T E C B		E L	C T - H // R	D	S S T	М	T H W L Y D	T M E D I N Z D D
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OMAN OOMS MUSCAT/Muscat Intl RS	OMAA OMAL OMDB OPKC OMRK OOSA OMSJ	Abu Dhabi Al-Ain Dubai Karachi Ras al Khaimah Salalah Sharjah	4E	9	x	×			08 26	PAI PA1	××	<u>3584</u> 3589 B747 350	××		××	x x	L	x x x x		x		x > x :		x x	x x		× × × >	x x
OOSA SALALAH/Salalah AS	OOMS	Muscat	4E	9	X	X			07 25	NPA <u>PA1</u> PA1	х <u>х</u>	3340 B747 320	× x	X	x <u>x</u>	X 2	L	x x x x		x x x x	X	X X		x x	x x		<u>X</u> - <u>X</u>	<u>x x</u> x x
QATAR OTBD DOHA/Doha Intl	OBBI OEDF OMSJ	Bahrain Dammam Sharjah	4E	9	х	х			16 34	NPA PA1	х	3400 B747 340	x	х		x	L	x x		X	х	x x		Х	x	x x	x x	x

CITY/AERODROME/USE VILLE/AERODROME/EMPLOI CIUDAD/AERODROMO/USO	AEROI AERODE DEGA	RNATE DROMES ROMES DE GEMENT ROMOS DE			DDROM				CA	PHYSICAL CHA RACTERISTIC CARACTERÍS	QUES	PHYSIQU	ES	AID	ADIO AII DES RAI	DIO			AIDES	SHTING S LUMII AS LUM	NEUS	ES				MARKII MAR EÑALA	QUES	3			RVR
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OTHH DOHA/New Doha Int'l (Future -2013) RS (No available Data) SAUDI ARABIA OEDF DAMMAM/King Fahad Intl RS OEJN JEDDAH/King Abdulaziz Intl RS	OBBI OEMA OEJN OKBK OERK OMSJ HECA OEDF HELX OEMA OERK	Bahrain Madinah Jeddah Kuwait Riyadh Sharjah Cairo Dammam Luxor Madinah Riyadh	4E	9	R *R	x	x		16L 34R 16R 34L 16C 34C 16L 34R	PA1 2 PA1 2 PA1 2 PA1 2 PA2 PA2 PA2 PA2 PA2 PA2 PA1 PA1	x x x x x x x	B 747 B747 B747 B747 B747	4000 390 4000 390 3800 350 3300 350 00 4000 350	x x x x x x x x x x x x x x x x x x x		x	x x x x x x x x x x x x x x x x x x x	1			x x x x x x x x x x x x x x x x x x x	x x x x x x	x x x x	x x x x x x	x	< х	× × × × × ×	X X X	x x x x x x x x	x x x x x x	x x x x x x x x x x x x x x x x x x x

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OEMA MADINAH/Prince Mohammad Bin Abdulaziz AS	OEJN	Jeddah	3D	8	х	Х	Х		17 35	PA1 PA1		3850		x x		x	X X	L		x x x x		х	x					XXX	Х	x x	X
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OERK RIYADH/King Khalid Intl	OBBI OEDF OEJN	Bahrain Dammam Jeddah	4E	9	¥ R	Х	X		15L 33R	PA1 PA1	Х		340	X X		X	X X	L	×		X	X	X		x x x x		x x		X X	X	
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SYRIAN ARAB REPUBLIC																															
OSAP ALEPPO/Aleppo Intl	OSDI	Damascus	4D	7	х	х			09 27	PA2 PA2			900 160	x x		×	x	L L	x x		х	х	x x	x z	x x		x x		Х		
OSLK LATTAKIA /Bassel AL- Assad RS	OSDI OSAP	Damascus Aleppo	4D	5					17 35	NPA NPA			800 160		X X	x x	×	L L	_				x x	x z	x x		X X		Х		

CITY/AERODROME/USE VILLE/AERODROME/EMPLOI CIUDAD/AERODROMO/USO	ALTE AERODE DEGAG AERODE ALTEE	AERODROME AERODROME						PHYSICAL CHARACTERISTICS CARACTERISTIQUES PHYSIQUES CARACTERÍSTICAS FÍSICAS						RADIO AIDS AIDES RADIO RADIOAYUDAS			LIGHTING AIDS AIDES LUMINEUSES AYUDAS LUMINOSAS						MARKING AIDS MARQUES SEÑALAMIENTO						RVR		
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OSDI DAMASCUS/Damascus Intl RS UNITED ARAB EMIRATES	OSAP OSLK	Aleppo Bassel El-Assad	4E	-8	x	x	x		05L 23R 05R 23L	PA2 PA2 PA2 PA2	x	B 747	3600 360 3600 360	x x x	×	x x x	Х	X L L L L L L L L L L L L L L L L L L L	x x x		x		X	× × × ×	Х	X	x	x x x	x ::		×
OMAA ABU DHABI/Abu Dhabi Intl RS	OBBI OMAL OTBD OMDB OMSJ OOMS OMFGOM FJ OMDW	Bahrain Al Ain Doha Dubai Sharjah Muscat FUJAIRAE ujairah Dubai	(will be upgraded to 4F 2010)	10 9	<u>*R</u>	<u>*R</u>	×		13 R 31 L 13 L 31 R	PA1 PA3 PA 3 PA4 3	x x x	B747	4100 390 4100 560	x x x		x			X		хх	Χ		x x x x x x x x	× ×	Х	x	X	x .	X X	x x x x x x x x x

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			RC	RFF	A P P	T W R	A T I S	A F I S	RWY NO PISTE NO PISTA NO	RWY TYPE TYPE DE PISTE TIPO DE PISTA	T W Y	RWY LENGTH LONG. DE PISTE LONG. DE PISTA PAV. STRENGTH RESISTANCE RESIST. PAVIM.	PA	NPA	Т	P S		R C W L Y L		S T T C B	D (CE)	H D	s	М	T H W L Y D	T MEDIN
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OMDB DUBAI/Dubai Intl RS	OMAA OMAL OBBI OTBD OOMS OOSA OMSJ	Abu Dhabi Al Ain Bahrain Doha Muscat Salalah Sharjah Dubai	4 E F	10	¥R	<u>*R</u>	x		12L 30R 12R 30L	PA3 PA3 PA2 1 PA2 1	x x	4000 A380 560 40004447 A380 560	x x x		×	x x	73 73	x x :	x x	x x x x	x	x x x	x	x x	x x x x x x x	x x x x x x x x x x x x x x x x x x x

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OMFJ FUJAIRAH/Fujairah Intl RS	OMAA OMAL OMDB OMSJ OOMS OMRK	Abu Dhabi Al Ain Dubai Sharjah Muscat Ras Al Khaimah	4E	9	x	х	X		11 29	NPA PA1		3749 3750 B 747 390 AS A380 560	х	х	х	x	L <u>S</u>			x > x >	κ κ			x x x x				x x	x x x x x x
OMRK RAS AL KHAIMAH/Ras Al Khaimah Intl RS	OMAA OMAL OTBD OMDB OMSJ OMDW	Abu Dhabi Al Ain Doha Dubai Sharjah <u>Dubai</u> Fujairah	4E	9	×	×	X		16 34	NPA PA1	×	37593760 B 747 390	x	x	×	x	L <u>S</u>				×	X		x x x x				x x	

CITY/AERODROME/USE VILLE/AERODROME/EMPLOI CIUDAD/AERODROMO/USO	AEROD AERODR DEGAG	RNATE PROMES OMES DE GEMENT OMOS DE			DDROI				CA	PHYSICAL CHA RACTERISTIC CARACTERÍS	QUESI	PHYSIQUES	AIE	ADIO AII DES RAI DIOAYUI	OIO		Α	LIGHTING DES LUM 'UDAS LUI	NEUSES			N	//ARQI	G AIDS UES IIENTO			RVR
	ALIEN	NOTIVO	RC	RFF	A P P	T W R	A T I S	A F I S	RWY NO PISTE NO PISTA	RWY TYPE TYPE DE PISTE TIPO DE PISTA	W	RWY LENGTH LONG. DE PISTE LONG. DE PISTA PAV. STRENGTH RESISTANCE RESIST. PAVIM.	PA	NPA	Т	P S		W L			E L	T H R		S A S M T C	л \	T H W L Y D	T M E
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OMSJ SHARJAH/Sharjah Intl RS	OMAA OMAL OBBI OTBD OMDB OOMS	Abu Dhabi AL Ain Bahrain Doha Dubai Muscat Ras al Khaimah	4E	9	x	X <u>R</u>	X		12 30	PA1 PA2	×	40604063 B747 390	x x		x	x x	<u> </u>		x x x x x x x x x x x x x x x x x x x	х						x x x x x	x x x x x x x x

CITY/AERODROME/USE VILLE/AERODROME/EMPLOI CIUDAD/AERODROMO/USO	AERODR AERODR DEGAC AERODR	RNATE DROMES COMES DE GEMENT COMOS DE			ODRO				CA	PHYSICAL CHA ARACTERISTIC CARACTERÍS	QUES I	PHYSIQI	JES	AID	ADIO AII PES RAI	OIO				UMINE	IIDS EUSES NOSAS			MARI MA SEÑA	RQU	IES		RVR
			RC	RFF	A P P	T W R	A T I S	A F I S	RWY NO PISTE NO PISTA NO	RWY TYPE TYPE DE PISTE TIPO DE PISTA	T W Y	LONG. PISTE DE PIS PAV. STREN	LONG. STA NGTH TANCE T.	PA	NPA	Т		S V A A		L D	S T T T E C B		D C E L S M	Н	D	S A S M T G	T H W L Y D	T MEDIN
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OMJA-DWOMDW DUBI, dUBAL JABEL ALIDUBAI/Jabel Ali-DWC-Al	OMDB OMAA	Dubai Abu Dhabi	4F	10	<u> </u>	X <u>R</u>	х		12L	PA3	Х	A380	4500 560	x			Х	<u>LS</u>		x x	x x x	х	x x			x x	хх	x x x
Maktoum Intil (Future 2009 - 2012)	OMAL OMSJ	Al Ain Sharjah							30R	PA3	Х	A380	4500 560	X		X	X	L <u>S</u>	X X	Χ	XXX		ХХ	X	X	хх	X X	x x x
RS	OMRK	Ras al Khaimah		10	X	x	Х		12R	PA3	Х	A380	4500 560	Х			х	L <u>S</u>		x x	x x x		х х			х х	хх	x x x
	OTBD OOMS OBBI OMFJ	Doha Muscat Bahrain Fujairah							30L	PA3	X	A380	4500 560	X		X	X	<u>LS</u>	××	X	XXX		X X	X	X	X X	X X	x x x
OMAD ABU DHABI/AI Bateen RNS	OBBI OMAL OTBD OMDB OMDW OMSJ OOMS OMFJ OMRK	Bahrain Al Ain Doha Dubai Dubai Shariah Muscat Fujairah Ras Al Khaimah	<u>4C</u>	Z	R	×			13 31	NPA PA1	×	B767-2	200 3202 143	×	×	XXX	×	ol ol	×		×		<u>x x</u> x x	X :	<u>x</u>	<u>x x</u> x x	<u>x x</u> x	x x x x x x

CITY/AERODROME/USE VILLE/AERODROME/EMPLOI CIUDAD/AERODROMO/USO	AERODR AERODR DEGAC AERODR	RNATE DROMES COMES DE GEMENT COMOS DE			DDROM				CA	PHYSICAL CHA RACTERISTIC CARACTERÍS	QUESI	PHYSIQUES	A	RADIO / NIDES R ADIOAY	ADIO			AIDE	IGHTING ES LUM DAS LU	INEL	JSES				ARKINI MARQ ÑALAN	UES				RVR
	7.61.61		RC	RFF	A P	T W R	A T I S	A F I S	RWY NO PISTE NO PISTA NO	RWY TYPE TYPE DE PISTE TIPO DE PISTA	T W Y	RWY LENGTH LONG. DE PISTE LONG. DE PISTA PAV. STRENGTH RESISTANCE RESIST. PAVIM.	Pr	A NP/	Т	PA	SA	Α	W L		S T T T E C B	В	E I	C T L H M R	D		М	T H W L Y D		T MEDINZDD
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YEMEN OYAA ADEN/Aden Intl RS	HHAS HFFF OYHD OYRN OYSN	Asmara Djibouti Hodeidah Mukalla (Riyan) Sana'a	4E	9	×	x			08 26	NPA PA1	х	3100 B747 35		×	×	X	×		x x		х	х	x x		х	x	×	x x		х
OYHD HODEIDAH/Hodeidah RS OYRN MUKALLA/Riyan	OYA'A OYSN OYTZ	Aden Sana'a Taiz	4E 4E	9	X	x			03 21	NPA NPA NPA	X	3000 B747 260		x x			X	L	x x		x	X	x	x x x			X	x x		
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CITY/AERODROME/USE VILLE/AERODROME/EMPLOI CIUDAD/AERODROMO/USO	AERODA DEGAC AERODA	RNATE DROMES COMES DE GEMENT COMOS DE			ODRO ODRO				CA	PHYSICAL CHA RACTERISTIC CARACTERÍS	QUES F	PHYSIQUES		AID	DIO AIE ES RAE IOAYUE	OIO		All		UMINE	IDS USES IOSAS			ı	//ARQ	AIDS JES IIENTO			RV	'R
			RC	RFF	A P P	T W R	S A T I S	A F I S	RWY NO PISTE NO PISTA NO	RWY TYPE TYPE DE PISTE TIPO DE PISTA	T W Y	RWY LENG LONG. DE PISTE LONG DE PISTA PAV. STRENGTH RESISTANC RESIST. PAVIM.	G.	PA	NPA	Т	P S		w		S T T T E C B	В	E L	T H	D	S A S M T G	1 V	· н V L ′ D	T ! D ! Z !	I N
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OYSN SANA'A/Sana'a Inti RS OYTZ TAIZ/Ganad RS	OYAA OYHD OEJN OYTZ OYAA HFFF OYHD OYSN	Aden Hodeidah Jeddah Taiz Aden Djibouti Hodeidah Sana'a	4E 4E	9	x	x			18 36 01 19	PA1 NPA NPA NPA	x	B747 2	600 290 000 290	X	X X X	x	×				x		x x x	X	X		×	x x	x	

CITY/AERODROME/USE VILLE/AERODROME/EMPLOI CIUDAD/AERODROMO/USO	ALTERNATE AERODROMES AERODROMES DE DEGAGEMENT AERODROMOS DE ALTERNATIVA			DROM			(PHYSICAL CH CARACTERISTIO CARACTERÍS	QUES	PHYSIQUES	AID	ADIO AIE DES RAE DIOAYUE	OIO	Α	IDES	HTING A LUMINE AS LUMIN	EUSES			MARKIN MARC SEÑALAI	UES			R	VR
		RC	RFF	Р	W R	A A A T F I I S S	NO PISTA NO	TYPE DE PISTE TIPO DE	w	RWY LENGTH LONG. DE PISTE LONG. DE PISTA PAV. STRENGTH RESISTANCE RESIST. PAVIM.	PA	NPA	Т	S V A A	W		T T E C	Е	L	T T H D R Z	s M	мΙ	Г Н W L Y D	D	M E I N D D
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$\label{eq:AOPSG/8} AOP\ SG/8$ Appendix 3C to the Report on Agenda Item 3

Revised ANP FASID AOP1 TABLE - February 2012

				,	Aerodrome	es Charact	eristics								Altern	ate Aerodromes	
	Aerodrome	Aerodro	ome Refer (ARC)	rence Code		RFF Cate	gory			Runway cha	nracteristics			Remark		Aerodrome	Aerodrome Reference Code
Location indicator- name of City and Aerodrome,	Certification- Implemented/ in									Runway Typ	е				Location Indicator/Name of	Certification- Implemented/In	
Designation	progress/Target date for implementation	Current	Planned	Target Date	Current	Planned	Target Date	Runway No.	current	Planned	Target Date	Runway Length	RVR		City & aerodrome	progress/ Target date	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Bhutan																	
VQPR Paro/Paro intl RS	certified	3C	4D	Dec-14	5	8	Dec-14	15/ 33	NPA/NPA	PA I/NPA	2013	1800m	Thresholds	A 319 115	VECC Kolkotta, NSCB Intl VGZR Dhaka, Zia Intl	certified	4E
Brunei darussalam					·												
WBSB brunei/brunei Intl	In progress/ 2014	4E	4F	2018	9	10	2018	03 21	NPA/PAI	PAI/PAI	2017	3600	Mid	B 747-400	WBKK Kota kinabalu	certifed	4E

AOP SG/8 Appendix 3D to the Report on Agenda Item 3

III-AOP 1-1

DRAFT

Table AOP 1

AIRPORT PLANNING CHARACTERISTICS FOR FACILITIES AND SERVICES

EXPLANATION OF THE TABLE

Table AOP 1 shows the operational requirements for physical characteristics at each aerodrome to be considered in planning the facilities for safe and efficient aircraft operations.

The physical characteristics of the aerodrome relate to the Aerodrome Reference Code (ARC), which is selected for aerodrome planning purposes and determined in accordance with the characteristics of the critical design aircraft for which an aerodrome facility is intended. The ARC provides a simple method for inter-relating the numerous specifications concerning the characteristics of aerodromes so as to provide a series of aerodrome facilities that are suitable for the aeroplanes that are intended to operate at the aerodrome. The code is not intended to be used for determining runway length or pavement strength requirements. The physical characteristics of taxiways and aprons should be appropriate for the runways with which they are related.

The granting of an aerodrome certificate signifies to aircraft operators and other organization operating on the aerodrome that at the time of certification, the aerodrome meets the specifications regarding the facility and its operation and that it has, according to the certifying authority, the capability to maintain these specifications for the period of validity of the certificate. The visual aids for navigation, including markings, lighting and signs, etc., at an aerodrome will be provided in accordance with Annex 14, Volume I specifications.

The requirements for alternate aerodromes should be satisfied by regular aerodromes used for international aircraft operations to the greatest practicable extent.

Column

1 Name of the city and aerodrome, preceded by the location indicator.

Note. — When the aerodrome is located on an island and no particular city or town is served by the aerodrome, the name of the island is included instead of a city.

Designation of the aerodrome as:

RS — international scheduled air transport, regular use;

RNS — international non-scheduled air transport, regular use;

AS — international scheduled air transport, alternate use; and

ANS — international non-scheduled air transport, alternate use.

III-AOP 1-2 ASIA/PAC FASID

When an aerodrome is needed for more than one type of use, normally the type which is highest on the above list is shown. An exception is that AS aerodromes are identified even when they are required for regular use by international non-scheduled air transport.

- Aerodromes used for international operations shall be certified in accordance with the specifications contained in Annex 14, Volume I as well as other relevant ICAO specifications. This column show the current status on certification, whether fully implemented or in progress and target date for completion if in progress.
- Aerodrome reference code (ARC) for aerodrome physical characteristics expressed in accordance with Annex 14, Volume I, Chapter 1. The code letter or number within an element selected for design purposes is related to the critical aero-plane characteristics for which the facilities are provided. Column 3 shows the current ARC based on which the existing aerodrome facilities are provided and column 4 the planned ARC based on which the existing aerodrome facilities will be upgraded.
- 5 Target Date: Expected date of implementation of planned ARC
- Required Rescue and firefighting service (RFF). The required level of protection expressed by means of an aerodrome RFF category number, in accordance with Annex 14, Volume I. Column 6 shows the current RFF category based on which the RFF facilities are provided. Column 7 shows the planned RFF category based on which the existing RFF facilities available will be upgraded.
- 8 Target Date- Expected Date of Implementation of planned RFF category
- 9 Runway designation numbers
- 10 & 11 Runway Type:

Column 10 shows the Type of each of the runway provided. The types of runways, as defined in Annex 14, Volume I, Chapter 1, 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

Column 11 shows the planned runway type to be provided.

- 12 Target date- Expected Date of Implementation of planned runway type
- Runway Length:

Required runway length expressed in terms of a balanced field length which should be adequate to meet the operational requirements of the aeroplanes for which the runway is intended. In planning, account is taken of local conditions (elevation, temperature, runway slope, humidity and runway surface characteristic). If the requirement for alternate use is more critical, the aircraft type and runway length requirements are also indicated below the abbreviation 'AS'.

Critical aircraft for pavement strength and required pavement strength are expressed as the allup mass in thousands of kilograms. If the aircraft requiring the aerodrome for alternate use is more critical, the aircraft type and runway strength required are also indicated below the abbreviation 'AS'.

Note — A specific aircraft model based on the best available sources of information should be selected for planning runway length as this requirement is particularly affected by aircraft model differences. Aircraft models should thus be reviewed carefully to see that the correct one is used in determining the aerodrome characteristics.

- 14 Runway Visual Range (RVR)
 - TDZ Observations should be provided representative of the touchdown zone.
 - MID Observations should be provided representative of the middle of the runway.
 - END Observations should be provided representative of the end portion of the runway.
- Remarks: This column is for showing other information including critical design aircraft selected for determining ARC, critical aircraft selected for determining the RFF category and critical aircraft for pavement strength. Only one critical aircraft type is shown if it is used to determine all the above three elements; otherwise different critical aircraft types need to be shown for different elements.
- 16, 17 & 18 Alternate aerodromes for the regular aerodromes listed in Column 1. The aerodrome is shown by listing the name of city, airport name and location indicator. Column 17 shows the status of certification and column 18 shows the aerodrome reference code. Where more than one alternate aerodrome is available, the requirements should be based on the types of aircraft each is intended to serve.

(Version dated 2 February 2012)

REPORT ON AGENDA ITEM 4: IMPLEMENTATION OF CERTIFICATION OF AERODROMES IN THE MID REGION

- 4.1 Under this Agenda Item the meeting was reminded with the obligation of States with respect to the provision of Safe Airport Operations and the status of Implementation of Certification of Aerodromes requirements in the MID Region.
- 4.2 The meeting recognized that methods of ownership, operation and surveillance of aerodromes differ among States. Most of MID States have created aerodrome authorities/companies or other governmental entities or private corporations to manage and operate their aerodromes, however the role of States to ensure safety remains unchanged in accordance with Article 28 of the Chicago Convention and ICAO SARPs.
- 4.3 The meeting recalled that MIDANPIRG/12 meeting was of the view that there is a need to provide detailed information on the status of Implementation of Certification of Aerodromes and Safety Management System at each State's International Aerodrome listed in the MID Basic Air Navigation Plan (Doc 9708) and that a regular follow-up of the status of implementation is to be carried out.
- 4.4 The meeting recalled also that MIDANPIRG/12 meeting has noted with concern that the level of Implementation of Certification requirements in the MID Region is still beyond expectations and was of the view that implementation of a plan of actions would improve and foster the implementation of ICAO requirements. The meeting also recalled that a template/guidance on the content of an actions plan as provided at **Appendix 4A** to the Report on Agenda Item 4, was developed by ICAO MID Regional Office to assist States who have not yet certified their aerodromes to develop their national plans and expedite the timely implementation and to identify if assistance would be required.
- 4.5 The meeting recalled the Decision 12/5 (Establishment of The Aerodrome Certification Implementation Task Force) from MIDANPIRG /12 to create an Implementation of Aerodrome Certification Task Force and urged MID States to participate Actively in the Task Force.
- 4.6 The meeting agreed to reiterate on a proposal to create an Implementation of Aerodrome Certification Task Force with the agreed Terms of Reference and Work Programme. UAE confirmed participation in the Task Force and ICAO MID is to issue a letter for members nomination.
- 4.7 Accordingly, the meeting agreed to the following Draft Conclusion:

DRAFT CONCLUSION 8/2: AERODROMES CERTIFICATION IMPLEMENTATION AND ACTION PLAN

That, in accordance with Annex 14 provisions, States, that have not yet done so, be urged to take necessary measures to start/complete the Implementation of the Aerodromes Certification Programme in an expeditious manner and provide the MID Regional Office with the following information, not later than, 20 March 2012:

- a) status of implementation of ICAO requirements in accordance with Annex 14 Volume I including a detailed action plan for each International Aerodrome;
- b) update of table 01 and 02 as shown in **Appendix 4A** to the Report on Agenda Item 4; and
- c) advise if ICAO assistance is needed.

AOP SG/8 Appendix 4A to the Report on Agenda Item 4

IMPLEMENTATION OF AERODROME CERTIFICATION IN THE STATES OF THE MID REGION AERODROMES INCLUDED IN THE REGIONAL AIR NAVIGATION PLAN (ANP - Doc 9708)

Table 01 – Progress of the basic documentation for aerodrome certification (MID Region)

			Responsible Agency	Finished	Und	erway	Plan	ned
St	ate/Aerodrom			Date of	Da	ntes:	Dat	es:
State	Number of Aerodromes Open for Inter. Use	Name of Aerodrome		publication	Beginning	Scheduled publication	Beginning	End
Bahrain	1			yes				
Egypt	15 <u>16</u>		Egyptian Civil Aviation Authority (ECAA)	yes 4				
Iran	8							
Iraq	5		Iraq Civil Aviation Authority	yes	<u>5</u>			
Jordan	4 <u>3</u>		Jordan Civil Aviation Regulatory Commission (JCARC)	<u>Yes3</u>				
Kuwait	1			1				
Lebanon	1							
Oman	2			1	1			
Qatar	1			1				
Saudi Arabia	4		General Authority of Civil Aviation (GACA), Saudi Arabia	yes 4				
Syria	3							
ŮAE	<u>68</u>			8				
Yemen	5							
Total	61 58							
MID States (not member of MIDANPIRG)								
Libya								
Sudan								

 $Table\ 02-Aerodrome\ certification\ implementation\ (ANP\ -\ Doc\ 9708/FASID)$

					Certification	implementatio	n	
				Finished	Underv		Planne	d
	State/Aerodrom	e	Responsible Agency	Date of publication	Dates		Dates:	
State	Number of Aerodromes Open for Inter. Use	Name of Aerodrome			Beginning	Scheduled publication	Beginning	End
Bahrain	1			-	1	-	-	•
Egypt	15 16			2 4	13 12	Nov. 2010	1	
Iran	8			-				
Iraq	5				5			
Jordan	4-33			2 3	1			
Kuwait	1			1				
Lebanon	1							
Oman	2			1	1			
Qatar	1			<u>1</u>				
Saudi Arabia	4			4	Recertification 4	Sep 2010		
Syria	3							
UAE	<u>68</u>			<u>8</u>				
Yemen	5							
Total	61 58							
MID States (not member of MIDANPIRG)								
Libya								
Sudan								

REPORT ON AGENDA ITEM 5: IMPLEMENTATION OF SMS AT AERODROMES IN THE MID REGION

Status of Implementation of Safety Management System (SMS) Aerodromes in the MID Region

- The meeting was reminded with the obligation of States with respect to Safety Management of Airport Operations and the status of Implementation of Safety Management System (SMS) requirements at International Aerodromes in the MID Region in accordance with the specifications contained in Annex 14 Volume I.
- 5.2 The meeting recalled that ICAO Safety Management Provisions require States to establish a State Safety Programme in order to achieve an Acceptable Level of Safety (ALoS) in Civil Aviation. In addition, States shall require, as part of their State Safety Programme (SSP), the Certified Aerodrome Operator to implement a Safety Management System (SMS).
- 5.3 The meeting recalled that AOP SG/7 meeting has noted with concern the low level of Implementation of Safety Management requirements for Aerodrome Operations in the MID Region.
- 5.4 The meeting noted that service providers' SMS cannot work in isolation. In order for service providers to be fully successful in the implementation of their SMS programmes, they require an enabler on the part of the State to properly implement their activities.
- 5.5 The meeting recognized that implementation of an effective SSP on the part of States may be challenging and will require a concentrated, structured, and specific plan in order to be effective. In this regard, ICAO has developed an SSP framework made up of four components and eleven elements to assist States in the implementation of the SSP.
- 5.6 Accordingly, the meeting agreed to the following Draft Conclusion:

DRAFT CONCLUSION 8/3: IMPLEMENTATION OF STATE SAFETY PROGRAMME
AND AERODROMES SAFETY MANAGEMENT SYSTEM

That, States that have not yet done so, be urged to:

- a) take necessary measures to develop and implement State Safety Programme (SSP) according to ICAO SARP's and Guidance materials;
- b) ensure implementation of Safety Management System (SMS) in Aerodromes as part of Certification requirements; and
- c) update the ICAO MID Regional Office on status of Implementation

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REPORT ON AGENDA ITEM 6: ENHANCEMENT OF RUNWAY OPERATION SAFETY AND EFFICIENCY AT MID AERODROMES

- 6.1 The meeting recognized that Runway Safety is a collective responsibility. This responsibility extends to Organizations (aerodrome operators, the air navigation' service provider, and the aircraft operator) as well as to individuals (e.g. controller, pilot, vehicle operator).
- 6.2 The meeting also recognized that, airport operators need to maintain their efforts to reduce runway operations incidence and that range of factors contribute to runway incursions, including aerodrome design, technology, procedures, training, regulations and human error.
- The meeting reiterated the ICAO requirements for reporting accident/incidents with regard to Aviation Safety in accordance with Annex 14 Volume I, which contains requirements pertaining to Runway Safety and Efficiency (minimum separation distances, visual aids, RESA, periodic measurements of the friction characteristics of a runway surface, establishment and implementation of a pavement and visual aids maintenance programme, etc.).
- Based on the Runway Safety Initiatives emanating from the Global Runway Safety Symposium (GRSS) convened in May 2011 by ICAO Headquarters and according to MIDANPIRG/12 meeting Conclusion 12/7 on Runway Safety, ICAO is organizing a Regional Runway Safety Seminar for the MID Region (MID-RRSS) in partnership with IATA. The Seminar is scheduled to be held on 14-16 May 2012 in Amman, Jordan. The outcomes of the GRSS are attached at **Appendix 6A** to the Report on Agenda Item 6.
- The meeting was apprised that over the past six years, ICAO has conducted audits of Member States Implementation of ICAO SARPs and related guidance material under the Universal Safety Oversight Audit Programme (USOAP). The data from these audits related to Runway Safety initiatives could be utilized by the MIDANPIRG to determine the priorities on the development and implementation of safety enhancements. **Appendix 6B** attached to the Report on Agenda Item 6 outlines the Lack of Effective Implementation of ICAO SARPs.
- Qatar indicated that in the aerodrome airside environment, many different people conducting support services such as Wildlife Hazard Control, Safety Inspectors, RFFS or Maintenance organisations are required to cross taxiways or runways. It is essential that these people can communicate clearly in English, particularly with ATC. It is important that clearances to enter taxiways or to cross runways are understood and the read back is clear and intelligible to ATC. The problem becomes critical between non-native English speakers.
- Based on the above, the meeting noted that ATC personnel and pilots are required to achieve an ICAO level 4 English Language Proficiency (ELP) that includes not only understanding of the language, but clear pronunciation [articulation] as well. It is suggested that ICAO consider requirements for ELP for people providing support services. It is further emphasised by the meeting that the issue of ELP for personnel involved in support services be considered by RASG-MID group.
- 6.8 UAE indicated that Runway End Safety Area (RESA) requirement of 240m has been enforced as a standard in some MID States and suggested that similar action be taken by other MID States. The suggestion was supported by the meeting.

6.9 Accordingly, the meeting agreed to the following Draft Conclusion:

DRAFT CONCLUSION 8/4: AMENDMENT OF RUNWAY END SAFETY AREA REQUIREMENT

That, States be urged to take necessary measures to amend Runway End Safety Area (RESA) requirement for the relevant code runway in line with ICAO Annex 14 Recommendation in order to reduce the safety risk of Runway Excursion.

AOP SG/8 Appendix 6A to the Report on Agenda Item 6

Outcomes of the ICAO Global Runway Safety Symposium 24-26 May 2011

- → One size does not fit all
 - Solutions need to account for local conditions yet be standardized and harmonized to ensure interoperability.
 - Runway incursions and excursions are the main issues but other aspects such as Bird Strike, FOD should not be overlooked.
- → Collaborating at multiple levels
 - International organizations have committed to work together to compile and promote proven solutions and endorse best practices.
 - Runway Safety Teams should be established locally and hosted by the airports.
- → Improve Standardization / Harmonization
 - Develop guidance to define and launch Runway Safety Teams.
 - Harmonize "Runway Safety" definitions, taxonomies and reporting of runway conditions and other safety indicators.
 - Standardize and improve communication procedures.
 - ICAO to ensure that Standards and Guidance material are fit for purpose.
 - Implementation of ICAO Standards monitored through the Continuous Monitoring Approach.
- → Promote and encourage implementation of solutions, such as:
 - Training & collaboration.
 - Runway & taxiway markings & signage.
 - Runway End Safety Areas.
 - PBN approach implementation.
 - Arresting Systems.
 - EFBs, on-board awareness and alerting systems.
 - All partners have committed to increasing the exchange of runway safety information.
- → ICAO Dedicated Runway Safety page
 - Library of downloadable toolkits and documents.
 - Contributions from partner organizations.
 - Links to Skybrary and other runway safety partner sites.
- → Regional Runway Safety Seminars
 - All Runway Safety Programme Partners have committed to deliver Regional Runway Safety Seminars.
 - RRSS events will result in action plans to create runway safety teams and provide support to those already in place.
 - Progress will be monitored with updates provided to all partners through RASGs and other appropriate means.
 - Reduction of risks will be monitored on a regular basis, with follow-up actions taken as required.
 - Communication and outreach plans are being established.

AOP SG/8 Appendix 6B to the Report on Agenda Item 6

USOAP Results Related to Runway Safety

Note: The following USOAP protocol questions have linkages to Runway Safety. Included at the end of the question is the Lack of Effective Implementation (LEI) in %. The number represents the average LEI based on the audit results of 170 States.

Air Traffic Management

- 7.033 Has the State established and implemented a safety oversight system for ensuring the effective implementation of safety-related policy and procedures in the air navigation fields? ANS Doc 9734, Part A, C2-LEI 66.
- 7.169 Does the State ensure that the ATS provider implemented a safety management system acceptable to the State? ANS STD A11, 2.26 LEI 74
- 7.189 Has the State promulgated a regulation to require the establishment and implementation of a runway safety programme? ANS PANS Doc 4444, 2.5.2 LEI 68

Aerodromes

- 8.083 Has the State established a process for the certification of aerodromes? AGA CC Art.15; STD A14, Vol.I, 1.4.1 & 1.4.3; RP A14, Vol. I, 1.4.2; Doc 9774, 3B.3.2 LEI 56
- 8.099 Does the State's aerodrome certification process include procedures for accepting a non-compliance with the established requirements, including a risk assessment mechanism and notification procedure? AGA Doc 9734, Part A, 3.3.7; Doc 9774, App. 3 LEI 65
- 8.147 Does the State ensure that aerodrome operators have a process for determining and providing relevant information that a runway, or part of, may be slippery when wet, including the minimum friction level for reporting of slippery runway conditions and the type of friction measuring device used? AGA STD A14, Vol. I, 2.9.5, 2.9.6, 2.9.7 & 10.2.3, RP, 2.9.8 LEI 68
- 8.163 Has the State promulgated a regulation for the provision of runway end safety areas (RESA) at aerodromes? AGA STD A14, Vol. I, 3.5.1, 3.5.2 & 3.5.4, RP A14, Vol. I, 3.5.3 & 3.5.5 LEI 50
- 8.165 If the requirements for RESAs have not been implemented at all aerodromes open to public use, how does the State satisfy itself that the runway surroundings are safe for use by aircraft in the event of an aircraft overrunning or undershooting the runway? AGA STD A14, Vol. I, 3.5.1, 3.5.2 & 3.5.4; RP A14, Vol. I, 3.5.3 & 3.5.5 LEI 68
- 8.205 Has the State established a process to ensure that an aerodrome operator's plan for lighting, signs and markings is integrated as a whole into the aerodrome's runway incursion and collision avoidance strategy, taking account of different traffic intensities and visibility conditions? AGA Doc 9734, Part A, 2.4.7 & 3.9.4; Doc 9476, C2 LEI 63
- 8.221 Does the State ensure that an aerodrome's SMGCS is designed to prevent inadvertent incursions of aircraft and vehicles onto an active runway or taxiway, taking into account the elements listed in Annex 14, Vol. I? AGA STD & RP A14, Vol. I, 7.1.7 & 9.8; Doc 9734, Part A, 2.4.7 b) iv); Doc 9476; Doc 9380; Doc 9157, Part 4 LEI 54

- 8.363 Has the requirement for certified aerodromes to have a SMS in operation been implemented for all aerodromes receiving international flights? AGA SARPs A14, Vol. I, 1.4.4, 1.4.5 & 1.4.6; Doc 9774, 1.2.3, C3, 3B.3.2 e) & 3D.4 LEI 80
- 8.369 Has the State developed and issued guidance for aerodrome operators and regulatory staff on the use of aeronautical studies/risk assessments and their evaluation? AGA Doc 9774, C3, Sect. E, App. 3; Doc 9734, Part A, 3.3.7 & 3.6 LEI 79
- 8.371 Is the regulatory technical staff trained in the development, use and evaluation of SMS, including aeronautical studies and risk assessments? AGA Doc 9774, C 3, Sect. E, 4.4.3 & App. 3; Doc 9734 Part A, 3.5 -LEI 65

8.407 How does the State ensure that, as part of their SMS, aerodrome operators monitor and analyse accident and incident occurrences and trends and take appropriate action? AGA Doc 9734, 3.9.8; Doc 9774, Part 5 f) –LEI 66

REPORT ON AGENDA ITEM 7: AERODROME EMERGENCY PLANNING

- 7.1 The meeting recalled that MIDANPIRG/12 Meeting was of the view that there is a need to provide more detailed information on the status of Implementation of Aerodromes Emergency Planning and Safety Management System at each State's International Aerodrome listed in the MID Basic Air Navigation Plan (Doc 9708) and that a regular follow up of the status of implementation is to be carried out.
- 7.2 The meeting recalled that MIDANPIRG/12 Meeting agreed on Action Plan template as at **Appendix 7A** to the Report on Agenda Item 7 and agreed on the following Decision:

DECISION 12/6: SURVEY ON AERODROME EMERGENCY PLAN AND EMERGENCY OPERATION CENTRE

That,

- a) a survey on Aerodrome Emergency Plan and Emergency Operation Centre be conducted in the MID Region; and
- b) the result of the survey be analyzed by ICAO MID Regional Office and presented to AOP SG/8 for further course of actions as appropriate.
- 7.3 In reply to the MID Regional Office State Letter Ref. ME 3/56.4 11/275 dated 02 November 2011 on State actions to implement MIDANPIRG/12 Conclusions relevant to Aerodrome Operations; only four States (Jordan, Qatar, Saudi Arabia and UAE) have provided responses.
- 7.4 The responses received indicated that the Implementation of Aerodromes Emergency Planning for Aerodrome Operation Requirements has been carried out or in its final stage. However, this cannot be used as an indication for the Regional Level of Implementation as the responses received represent about 30% of total number of MID States.
- 7.5 The meeting was of the view that States should complete the survey using the form at **Appendix 7A** to the Report on Agenda Item 7 and send to ICAO MID Office for further course of actions as appropriate.

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AOP SG/8 Appendix 7A to the Report on Agenda Item 7

AERODROME EMERGENCY PLAN (AEI	P) AND EMERGENCY OPERATION CENT	TRES (EOC) SURVEY
STATE:		

AERODROMES INCLUDED IN THE AOP 1 TABLE; DOC 9807 – AIR NAVIGATION PLAN FOR THE MIDDLE EAST REGION, VOLUME II, FASID

Please fill in the columns from 1 to 10 according to the following indications:

1 = Is there an Emergency Plan (YES or NO)
6 = Dates of the next complete exercise
7 = Dates of the next partial everying

2 = Preparation date 7 = Dates of the next partial exercise

3 = Date of the last update 8 = Is there an Emergency Operation Centre – EOC (YES or NO)

4 = Date of the last full-scale exercise 9 = Date of installation 5 = Date of the last partial exercise 10 = Date of the last training

AEDODDOME			EME	RGENCY P	LANS				EOC	
AERODROME	1	2	3	4	5	6	7	8	9	10
OBSERVATIONS:	•			•	•	•		•	•	•

REPORT ON AGENDA ITEM 8: REVIEW OF AIR NAVIGATION DEFICIENCIES IN THE AOP FIELD

- 8.1 The meeting recalled that MIDANPIRG/12 noted with concern that many deficiencies continue to persist for a number of years.
- 8.2 It was further recalled that MIDANPIRG/12 underlined the lack of sufficient number of qualified technical staff is the highest contributing factor for the non-elimination of the safety deficiencies in the MID Region (both air navigation deficiencies and USOAP findings).
- 8.3 The meeting recalled that MIDANPIRG/12 through Conclusion 12/47 agreed that the "Percentage of air navigation deficiencies priority "U" eliminated", should be used as one Metric (MID Metric 6) for performance monitoring of the air navigation systems in the MID Region. In this respect, the meeting agreed to the set the performance target value of 15% for the elimination of air navigation deficiencies with priority U.
- The meeting noted that the DGCA-MID/1 meeting (Abu Dhabi, UAE, 22-24 March 2011) noted the concerns expressed by the various ICAO organs including the Council, the Air Navigation Commission (ANC) and MIDANPIRG on the serious impact the long standing deficiencies have on safety.
- 8.5 The meeting noted that the DGCA-MID/1 meeting was of the view that a number of deficiencies were common to many States and accordingly encouraged States to work cooperatively towards the elimination of such deficiencies, in particular with a joint effort for the training of technical staff. It was also highlighted that the Regional Safety Oversight Organizations (RSOOs) once established could play an important and effective role in this respect.
- 8.6 In connection with the above, the meeting urged States to take the necessary follow-up actions to the following MIDANPIRG/12 Conclusion 12/75 and the DGCA-MID/1 Conclusion 1/2:

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

That, MID States be urged to:

- a) review their respective lists of identified deficiencies, define their root causes and forward an action plan for rectification of outstanding deficiencies to the ICAO MID Regional Office prior to 31 March 2011;
- b) use the online facility offered by the ICAO MID Air Navigation Deficiency Database (MANDD) for submitting online requests for addition, update, and elimination of air navigation deficiencies;
- c) accord high priority to eliminate all air navigation deficiencies with emphasis on those with priority "U"; in particular by allocating the necessary budget to ensure that their Civil Aviation Authorities have and retain a sufficient number of qualified technical personnel, who are provided with appropriate initial, on-the-job and recurrent training; and
- d) seek support from regional and international organizations (i.e. ACAC, GCC, etc.) for the elimination of identified air navigation deficiencies.

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

That, States:

- a) accord high priority to the elimination of air navigation deficiencies; in particular by allocating the necessary budget to ensure that their Civil Aviation Authorities have and retain a sufficient number of qualified technical personnel, and provide appropriate initial, on-the-job and recurrent training;
- b) work cooperatively towards the elimination of common deficiencies; and
- c) consider the use of the Regional Safety Oversight Organizations (RSOOs) as an efficient mechanism for, inter-alia, the provision of appropriate training to technical staff and elimination of common deficiencies.
- 8.7 The meeting reviewed and updated the List of Deficiencies in the AOP field as at **Appendix 8A** to the Report on Agenda Item 8, respectively, and urged States to use the MANDD for the online update of their deficiencies

AOP SG/8 Appendix 8A to the Report on Agenda Item 8

MIDANPIRG/12 Appendix 6.1A to the Report on Agenda Item 6.1

Deficiencies in the AOP Field

BAHRAIN

Item No	Identif	fication	I	Deficiencies			Corrective Action				
	Requirement	Facilities/ Services	Description	Date First Reported	Remarks/ Rationale Non-elimination		Description	Executing Body	Date of Completion	Priority for Action	
1	Annex 14 Vol. 1.4.1, 1.4.4	Bahrain Intl Airport	Implementation of Certification of Aerodromes used for international operations.	Nov, 2006	Updated Information on Feb. 2009: Aerodrome Manual for Bahrain Int'l Airport is ready awaiting the completion of legislations.	Н	Need to approve the developed Aerodrome Manual for the international aerodrome and insure it includes a Safety management system prior to granting the aerodrome certificate.	BCAA	Dec, 2011	U	

EGYPT

Item No	Identif	fication	Г	Deficiencies			Co	orrective Action		
	Requirement	Facilities/ Services	Description	Date First Reported	Remarks/ Rationale Non-elimination		Description	Executing Body	Date of Completion	Priority for Action
1	MID Basic ANP & FASID (Doc 9708)	Alexandria Int`l Airport	Runway is short and current distance is 7221 FT with runway all up weight maximum 68000kgs	Jul, 2004	Cannot be served as an alternate	F O	This restriction require runway upgrade and length extensionCAA has no plans, at the time being, to upgrade the said runway as it is not possible, from the engineering point of view, to upgrade these runways. However, Borg el Arab Airport runway can be used. List of alternate airports for Cairo FIR is to be revised. (PFA of MID FASID AOP1-Tables) Plan to extend Runway	ECAA	January 2013 Dec, 2011	A

Item No	Identif	ication	I	Deficiencies			Co	orrective Action		
	Requirement	Facilities/ Services	Description	Date First Reported	Remarks/ Rationale Non-elimination		Description	Executing Body	Date of Completion	Priority for Action
2	Annex 14 Vol. 1.5.1, 1.5.2, 1.5.3 & 1.5.4	Luxor, Aswan, Borg El Arab, Alexandria, ALamainTaba, El-Arish, Shark El Owenat, Port Said, St. Cathrine Intl. Airports	Implementation of Aerodrome Operations Safety Management	Nov, 2006		FH	Need to establish a State safety programme and implement an SMS in order to achieve an acceptable level of safety in Aerodrome Operations. State: Implemented for 4 Airports .Cairo, Sharm El Sheikh,, Hurghada, Maersa Alam In Progress ASWAN, LuXer, Borg El-Arab, Taba, The rest is planned for Nov.2011 Nov2014	ECAA	Nov 2014 Nov, 2011	ם

Item No	Identi	fication	I	Deficiencies			Co	orrective Action		
110	Requirement	Facilities/ Services	Description	Date First Reported	Remarks/ Rationale Non-elimination		Description	Executing Body	Date of Completion	Priority for Action
3	Annex 14 Vol. 1.4.1, 1.4.4	Luxor, Aswan, Borg El Arab, Alexandria, Almaza, Taba, Alamain, El- Arish, Shark El Owenat, Port Said, St. Cathrine Intl. Airports	Implementation of Certification of Aerodromes used for international operations	Nov, 2006		F H	Need to develop an Aerodrome Manual for each listed international aerodrome and insure it includes a safety management system prior to granting the aerodrome certificate. State: implemented: Cairo, Sharm El-Sheikh, Hurghada, Mersa Alam, In Progress: Luxor, Aswan Borg Al-Arab, Taba The rest is planned for Nov 2012 Nov 2014	ECAA	Nov 20142013 Nov, 2012	U
4	Annex 14 Vol. IFASID Table AOP-1MID/3 Rec. 1/3	Alexandria Int`l Airport	No runway demarcation lines available on RWY 18/36, to identify the entry position to RWY 04/22	May, 2007	-	F	need to have a visual cues to define a safe holding position prior to the intersection point of RWYs 18/36 and 04/22 and not to be lift to the pilot judgment to decide where to hold and how far from the RWY edge. Runway is closed for extension and upgrade	EAC	January 2013 Nov, 2011	U

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

Item No	Identif	fication	I	Deficiencies			Co	orrective Action		
	Requirement Facilities/ Services Annex 14 Cairo Int`l		Description	Date First Reported			Description	Executing Body	Date of Completion	Priority for Action
5	Annex 14 Volume I, Chapter 5	Cairo Int`l Airport	Taxiway marking to Stands are confusing as old markings are not removed.Problem exacerbated at night and when wet. Stop markings at new Terminal 2 difficult to interpret	Jan, 2008	-	F H O	Remove old markings	CAC	Dec, 2011 Closed	A
6	Annex 14 Volume I, Chapter 5	Aswan Int`l Airport	First 200m RWY 35 unusable. No displaced threshold markers	Jan, 2008	-	F H	Markers required Main runway is now open. RWY 35 is now TXY	EAC	Nov, 2012 Closed	A

IRAN

Item No	Identi	fication	I	Deficiencies			Co	orrective Action		
	Requirement	Facilities/ Services	Description	Date First Reported	Remarks/ Rationale Non-elimination		Description	Executing Body	Date of Completion	Priority for Action
1	Annex 14 Vol. 1.5.1, 1.5.2, 1.5.3 & 1.5.4	Emam Khomaini, Mehrabad, Esfhan, Shahid Hashmi Nejad, Shiraz, Tabriz and Zahedan Intl. Airports	Implementation of Aerodrome Operations Safety Management	Nov, 2006	-	F H	Need to establish a State safety programme and implement an SMS in order to achieve an acceptable level of safety in Aerodrome Operations	CAO & IAC	Dec, 2011	U
2	Annex 14 Vol. 1.4.1, 1.4.3, 1.4.4	Emam Khomaini, Mehrabad, Esfhan, Shahid Hashmi Nejad, Shiraz, Tabriz and Zahedan Intl. Airport,	Implementation of Certification of Aerodromes used for international operations	Nov, 2006	-	F H	Need to establish an appropriate regulatory framework. Need to establish a criteria for the certification of aerodromes. Need to develop an Aerodrome Manual for each international aerodrome and insure it includes a safety management system prior to granting Certification of Aerodrome.	CAO & IAC	Dec, 2011	U

IRAQ

Item No	Identif	ication	Г	Deficiencies			Co	orrective Action		
	Requirement	Facilities/ Services	Description	Date First Reported	Remarks/ Rationale Non-elimination	for	Description	Executing Body	Date of Completion	Priority for Action
1	Annex 14 Vol. 1.5.1, 1.5.2, 1.5.3 & 1.5.4	Baghdad /Basrah/Erbil /Sulaymaniyah/ Al Najaf Int`l. Airports <u>.</u>	Implementation of Aerodrome Operations Safety Management Implementation of Certification of Aerodromes used for international operations	Nov, 2006	-	F H O	Need to establish a State safety programme and implement an SMS in order to achieve an acceptable level of safety in Aerodrome OperationsDec, Sulymaniah & Erbil completed State: Dec 2010 except for Baghdad & Najaf June 2011	ICAA	January 2014 Dec, 2011	U
2	Annex 14 Vol. 1.4.1, 1.4.3, 1.4.4	Baghdad/ Basrah/ Erbil /Sulaymaniyah / Al Najaf Intl. Airports	Implementation of Certification of Aerodromes used for international operations	Nov, 2006	-	F H O	Need to establish an appropriate regulatory framework. Need to establish a criteria for the certification of aerodromes. Need to develop an Aerodrome Manual for each international aerodrome and insure it includes a safety management system prior to granting certification of aerodrome. State: Dec, 2010 except for Baghdad & Najaf June 2011 Sulymaniah & Erbil completed	ICAA	January 2014 Dec, 2011	U

JORDAN

Item No	Identii	fication	I	Deficiencies			Corrective Action				
	Requirement	Facilities/ Services	Description	Date First Reported	Remarks/ Rationale Non-elimination		Description	Executing Body	Date of Completion	Priority for Action	
1	Annex 14 Vol. 1.5.1, 1.5.2, 1.5.3 & 1.5.4	Amman/Queen Alia, Amman/Marka, King Hussien/Aqaba Intl. Airports	Implementation of Aerodrome Operations Safety Management	Nov, 2006	State Safety Programme has been established, SMS is implemented at King Hussein Int.l Aerodrome only.	S	Need to ensure implementation of SMS for aerodrome operations at Queen Alia, and Marka Int'l Aerodromes in order to achieve an acceptable level of safety Queen Alia and Aqaba airport completed	Jordan CARC	September 2013 Sep, 2011	U	

KUWAIT

Item No	Identif	ication	I	Deficiencies		Co	orrective Action		
	Requirement	Facilities/ Services	Description	Date First Reported	Remarks/ Rationale for Non-elimination	Description	Executing Body	Date of Completion	Priority for Action

No Deficiencies Reported

LEBANON

Item No	Identif	ïcation	Г	Deficiencies			Co	orrective Action		
	Requirement	Facilities/ Services	Description	Date First Reported	Remarks/ Rationale Non-elimination		Description	Executing Body	Date of Completion	Priority for Action
1	Annex 14 Vol. 1.4.1, 1.4.4	R.B.H. Beirut Intl. Airport	Implementation of Certification of Aerodromes used for international operations	Nov, 2006	-	F H	Need to develop an Aerodrome Manual for each international aerodrome and insure it includes a safety management system prior to granting the aerodrome certificate	LCAA	Dec, 2011	U
2	Annex 14 Vol. 1.5.1, 1.5.2, 1.5.3 & 1.5.4	R.B.H. Beirut Intl. Airport	Implementation of Aerodrome Operations Safety Management	Nov, 2006	-	F H	Need to establish a State safety programme and implement an SMS in order to achieve an acceptable level of safety in Aerodrome Operations	LCAA	Dec, 2011	U

OMAN

Item No	Identi	fication	I	Deficiencies			Corrective Action				
	Requirement	Facilities/ Services	Description	Date First Reported	Remarks/ Rationale Non-elimination		Description	Executing Body	Date of Completion	Priority for Action	
1	Annex 14 Vol. 1.4.1, 1.4.4	Muscat/ Salalah Intl. Airports	Implementation of Certification of Aerodromes used for international operations	Nov, 2006	-	F H	Need to devlope an Aerodrome Manual for each international aerodrome and insure it includes a safety management system prior to granting the aerodrome certificate Slalah started	DGCAM Civil Aviation Affairs -Oman	Dec 2013 Dec, 2011	U	
2	Annex 14 Vol. 1.5.1, 1.5.2, 1.5.3 & 1.5.4	Muscat/ Salalah Intl. Airports	Implementation of Aerodrome Operations Safety Management	Nov, 2006	-	F H	Need to establish a State safety programme and implement an SMS in order to achieve an acceptable level of safety in Aerodrome Operations	DGCAM	Dec 2013 Dec, 2011	U	

QATAR

Item No	Identii	fication	I	Deficiencies			Co	orrective Action		
	Requirement	Facilities/ Services	Description	Date First Reported	Remarks/ Rationale Non-elimination		Description	Executing Body	Date of Completion	Priority for Action
1	Annex 14 Vol. 1.5.1, 1.5.2, 1.5.3 & 1.5.4	Doha Intl. Airport	Implementation of Aerodrome Operations Safety Management	Nov, 2006	-	Н	Need to establish a State safety programme and implement an SMS in order to achieve an acceptable level of safety in Aerodrome Operations Closed	CAA	Closed Dec, 2011	U
2	Annex 14 Vol. 1.4.1, 1.4.3, 1.4.4	Doha Intl. Airport	Implementation of Certification of Aerodromes used for international operations	Nov, 2006	-	Н	Need to establish an appropriate regulatory framework. Need to establish a criteria for the certification of aerodromes. Need to devlope an Aerodrome Manual for each international aerodrome and insure it includes a safety management system prior to granti completed	CAA	Closed Dec, 2011	U

SAUDI ARABIA

Item No			I	Deficiencies		Corrective Action			
	Requirement	Facilities/ Services	Description	Date First Reported	Remarks/ Rationale for Non-elimination	Description	Executing Body	Date of Completion	Priority for Action

No Deficiencies Reported

SYRIA

Item No	Identification		I	Deficiencies			Co	orrective Action		
	Requirement	Facilities/ Services	Description	Date First Reported	Remarks/ Rationale Non-elimination		Description	Executing Body	Date of Completion	Priority for Action
1	Annex 14 Vol. IFASID Table AOP-1MID/3 Rec. 1/3	Damascus int`l Airport	Apron lighting inadequate	Sep, 2003	-	F H	Apron lighting is to be improved	CAA	Dec, 2011	U
2	Annex 14 Vol. IFASID Table AOP-1MID/3 Rec. 1/3	Damascus int`l Airport	Runway surface rough and damaged. Runway markings unsatisfactory	Sep, 2003	-	F H	RWY Surface to be repaired and refurbished, Markings are to be improved	CAA	Dec, 2011	A
3	Annex 14 Vol. IFASID Table AOP-1MID/3 Rec. 1/3	Damascus int`l Airport	DAM/DVOR 116 MHZ Out of Service	Jun, 2004	-	F	The VOR/DME to be replaced	CAA	Dec, 2011	A
4	Annex 14 Vol. 1.4.1, 1.4.4	Damascus, Aleppo, Bassel Al-Assad Int`l. Airports	Implementation of Certification of Aerodromes used for international operations	Nov, 2006	-	F H	Need to devlope an Aerodrome Manual for each international aerodrome and insure it includes a safety management system prior to granting the aerodrome certificate	CAA	Dec, 2011	U
5	Annex 14 Vol. 1.5.1, 1.5.2, 1.5.3 & 1.5.4	Damascus, Aleppo, Bassel Al-Assad Intl. Airports	Implementation of Aerodrome Operations Safety Management	Nov, 2006	-	F H	Need to establish a State safety programme and implement an SMS in order to achieve an acceptable level of safety in Aerodrome Operations	CAA	Dec, 2011	U

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

UAE

Item No			I	Deficiencies		Corrective Action			
	Requirement	Facilities/ Services	Description	Date First Reported	Remarks/ Rationale for Non-elimination	Description	Executing Body	Date of Completion	Priority for Action

No Deficiencies Reported

YEMEN

Item No	Identification		I	Deficiencies			Corrective Action			
	Requirement	Facilities/ Services	Description	Date First Reported	Remarks/ Rationale Non-elimination		Description	Executing Body	Date of Completion	Priority for Action
1	Annex 14 Vol. 1.5.1, 1.5.2, 1.5.3 & 1.5.4	Sanaa, Aden, Hodeibah, Taiz Intl. Airports	Implementation of Aerodrome Operations Safety Management	Nov, 2006	-	F H	Need to establish a State safety programme and implement an SMS in order to achieve an acceptable level of safety in Aerodrome Operations	DGCA	Dec, 2011	U
2	Annex 14 Vol. 1.4.1, 1.4.3, 1.4.4	Sanaa, Aden, Hodeibah, Taiz Intl. Airports	Implementation of Certification of Aerodromes used for international operations	Nov, 2006	-	F H	Need to establish an appropriate regulatory framework. Need to establish a criteria for the certification of aerodromes. Need to devlope an Aerodrome Manual for each international aerodrome and insure it includes a safety management system prior to granti	GCAA	Dec, 2011	U

REPORT ON AGENDA ITEM 9: MID REGION AERODROMES PERFORMANCE OBJECTIVES

- The meeting recalled that the Performance-Based Approach (PBA) adheres to strong focus on results through adoption of performance objectives and targets; collaborative decision making driven by the results; and reliance on facts and data for decision making. The assessment of achievements is periodically checked through a performance review, which in turn requires adequate performance measurement and data collection capabilities. In this regard, one of the key aspects of the performance based approach to air navigation planning is the development of performance objectives with related measurable indicators and metrics. It is to be noted that the metrics are challenging and expensive to collect; therefore it is important to keep them "SMART" (Specific, Measurable, Achievable, Realistic & Time-bound) and easy to measure.
- 9.2 In connection with the above, the meeting noted that MIDANPIRG/12 adopted Conclusion 12/47: MID Region Performance Metrics related to performance monitoring of the Air Navigation Systems in the MID Region and tasked the MIDANPIRG subsidiary bodies to monitor the Metrics related to their work programmes; and develop associated performance targets and provide feed-back to MIDANPIRG.
- 9.3 The meeting was of the view that there is need to have a clearly defined common approach to performance monitoring and measurement and agreed on the following uniform set of metrics for the Aerodrome Operational Planning (AOP) SG:

a) MID AOP Metric 1: Number of certified international aerodromes;

b) MID AOP Metric 2: Number of Runway incursions and excursions per

year; and

c) MID AOP Metric 3: Number of air navigation deficiencies in the

aerodrome area of priority "U" eliminated.

9.4 Based on the above, the meeting reviewed and updated the Regional AOP Performance Framework Forms (PFF) and suggested minor changes as at **Appendix 9A** to the Report on Agenda Item 9 and urged those States that have not yet done so to develop their National Performance Framework Forms. Accordingly, the meeting agreed to the following Draft Conclusion:

DRAFT CONCLUSION 8/5: NATIONAL PERFORMANCE FRAMEWORK

That, MID States to adopt a National Performance Framework in the aerodrome area on the basis of ICAO guidance material and ensure their alignment with the regional performance objectives for aerodromes and the global ATM operational concept.

MID REGIONAL PERFORMANCE

FRAMEWORK FORM IN THE AERODROME FIELD (Updated)

PERFORMANCE FRAMEWORK FORM - EXPLANATORY NOTES

- 1. **Performance framework form:** This form is an output and management form which is applicable to both regional and national planning and includes references to the Global Plan. Other formats may be appropriate but should contain as a minimum the elements described below.
- **2. Performance objective:** Regional /national performance objectives should be developed using a performance based approach that best reflects the necessary activities needed to support regional/national ATM systems. During their life cycle, performance objectives may change depending on the ATM system's evolution; therefore, throughout the implementation process, these should be coordinated with and be available to all interested parties within the ATM Community. The establishment of collaborative decision making processes ensures that all stakeholders are involved in and concur with the requirements, tasks and timelines.
- **3. Regional performance objective:** Regional performance objectives are the improvements required to the air navigation system in support of the global performance objectives, and are related to the operating environments and priorities applicable at the regional level.
- **4. National performance objective:** National performance objectives are the improvements required to the air navigation system in support of the regional performance objectives, and are related to the operating environments and priorities applicable at the State level.
- **5. Benefits:** The regional/national performance objectives should meet the expectations of the ATM community as described in the operational concept and should lead to benefits for stakeholders and be achieved through operational and technical activities aligned with each performance objective.
- **6. Strategy:** ATM evolution requires a clearly defined progressive strategy including tasks and activities which best represent the national and regional planning processes in accordance with the global planning framework. The goal is to achieve a harmonized implementation process evolving toward a seamless global ATM system. For this reason, it is necessary to develop short (1 to 5 years) and medium term (6 to 10 years) work programmes, focusing on improvements to the system indicating a clear work commitment for the parties involved.
- **7. ATM operational concept components:** Each strategy or set of tasks should be linked with associated components of the ATM operational concept. The designators for ATM components are as follows:

AOM – Airspace organization and management
 DCB – Demand and capacity management

AO – Aerodrome operations
 TS – Traffic synchronization
 CM – Conflict management
 AUO – Airspace user operations

• ATM SDM – ATM service delivery management

8. Tasks: The regional/ national work programmes, using these PFF templates, should define tasks in order to achieve the said performance objective and at the same time maintain a direct relation with ATM system components. The following principles should be considered when developing work programme:

- The work should be organized using project management techniques and performance-based objectives in alignment with the strategic objectives of ICAO.
- All tasks involved in meeting the performance objectives should be developed using strategies, concepts, action plans and roadmaps which can be shared among parties with the fundamental objective of achieving seamlessness through interoperability and harmonization.
- The planning of tasks should include optimizing human resources as well as encouraging dynamic use of electronic communication between parties such as the Internet, videoconferences, teleconferences, e-mail, telephone and facsimile. Additionally, resources should be efficiently used, avoiding any duplication or unnecessary work.
- The work process and methods should ensure that performance objectives can be measured against timelines and the national and regional progress achieved can be easily reported to PIRGs and ICAO Headquarters respectively.
- **9. Timeframe:** Indicates start and end time period of that particular task(s).
- **10. Responsibility:** Indicates the organization/entity/person accountable for the execution or management of the related tasks.
- 11. Status: The status is mainly focused on monitoring the progress of the implementation of that task(s) as it progresses toward the completion date.
- 12. Linkage to global plan initiatives (GPIs): The 23 GPIs, as described in the Global Plan (Doc 9750), provide a global strategic framework for planning for air navigation systems and are designed to contribute to achieving the regional/national performance objectives. Each performance objective should be mapped to the corresponding GPIs. The goal is to ensure that the evolutionary work process at the State and regional levels will be integrated into the global planning framework.

MID REGIONAL PERFORMANCE OBJECTIVES AERODROMES PERFORMANCE OBJECTIVES

	AERODROME CERTIFICATION					
	Benefits					
Safety	• Improved safety of aerodromes operation • Reduced number of incident/accident. • Safety level improved					
Environment	• Reduced emissions through effective aerodrome operation.					
Capacity	Increased capacity through better planning and operation					
Efficiency	Improved aerodrome capacity and level of service.					
	Performance Measurement					
Performance Metrics:	 Number of States having fully implemented certification of aerodromes. Number of certified aerodromes Number of deficiency related to the aerodromes field Number of States having implemented QMS Number of runway incursion/excursion. Number for adequate aerodromes for NLA operation. 					

	Strategy							
ATM Operational Concept Components	Projects/Tasks	Linkage to ASBU Module	Timeframe Start/End	Responsibility	Status			
AO (Aerodrome operations),	Establish a regulatory framework specifying the requirement for aerodrome Certification.	B0-65	2013	States	valid			
CM (Conflict	Establish a regulatory authority	B0-65	2014	States	valid			
management) DCB (Demand and capacity	Develop and maintain aerodrome certification regulations & standards	B0-65	ongoing	States	valid			
balancing) AUO (Airspace user operation)	Facilitate the implementation of aerodrome certification by conducting courses and technical support.	B0-30	2013	ICAO & AOP	valid			
	monitor the implementation of aerodrome certification by all MID States	B0-80	Ongoing	ICAO & AOP	valid			
	review and update the deficiencies in the aerodrome field and provide necessary guidance for their elimination	B0-80	Ongoing	ICAO & AOP	valid			

	S	trategy			
ATM Operational Concept Components	Projects/Tasks	Linkage to ASBU Module	Timeframe Start/End	Responsibility	Status
	ensure promulgation of information on status of certification of aerodromes in the State AIP	B0-30	Ongoing	States	valid
	SMS AT CERTIFIED AERODROMES				
	Facilitate the implementation of SMS by conduct of courses and guidance materials.	B0-75	Ongoing	ICAO & AOP	valid
	establishment of a requirement for SMS to be part of aerodrome certification	B0-75	2013	States	valid
	implementation of SMS	B0-75 B1-80	Ongoing	States	valid
	Develop action plan on safety targets and hazard reporting	B0-75	2011-2016	States	valid
	Surveillance, internal audit and Safety Oversight Programmes	B0-75	Ongoing	ICAO & States	valid
	implementation of digital data exchange with originators	В0-30	2013-2018	States	valid
	foster the integrated improvement of AIS/AIM through proper training and qualification of the AIS/AIM personnel in the MID Region and certification of the AIM Services	B0-30	2011-2016	ICAO & AIM TF & States	valid

	S	trategy			
ATM Operational Concept Components	Projects/Tasks	Linkage to ASBU Module	Timeframe Start/End	Responsibility	Status
	AERODROME EMERGENCY PLANNING				
	conduct a survey to assess the level of implementation on aerodrome emergency planning	B0-80	2011-2012	ICAO	valid
	Establish a requirement of aerodrome emergency planning development of aerodrome	B0-80	2013	States	valid
	development of aerodrome emergency planning document	B0-80	2013	States	valid
	Conduct full scale aerodrome emergency exercise at intervals not exceeding two years	B0-75 B0-80	Ongoing	States	valid
	Conduct partial emergency exercise in the intervening year to ensure that deficiencies found during the full scale exercise have been corrected.	B0-75 B0-80	Ongoing	States	valid
	Facilitate the implementation of aerodrome emergency planning by conduct of courses and guidance materials	B0-80	2012-2016	ICAO & AOP SG	valid
	GPI-5: Performance-based navigation				
inkage to PIs	GPI-13: Aerodrome design and manager GPI-14: Runway operations GPI-18: Aeronautical Information	ment			

MID REGIONAL PERFORMANCE OBJECTIVES AERODROMES PERFORMANCE OBJECTIVES

	RUNWAY SAFETY PROGRAMME					
	Benefits					
Safety						
Environment	Reduced emissions through effective aerodrome operation.					
Capacity	Increased capacity through better planning and operation					
Efficiency	Improved aerodrome capacity and level of service.					
	Performance Measurement					
Performance Metrics:	 Number of runway incursions per year. Number of runway excursions per year. Number of accident per 100,00 departures. 					

	S	trategy			
ATM Operational Concept Components	Projects/Tasks	Linkage to ASBU Module	Timeframe Start/End	Responsibility	Status
AO (Aerodrome operations),	Facilitate the implementation of runway safety programme by conducting seminars and workshops	B0-75	2013	ICAO & Partners	valid
(Conflict management) DCB (Demand and capacity	Establish a Runway safety Team	B0-75	2014	Sates	valid
balancing)	Runway Incursion Prevention				valid
AUO (Airspace user operation)	establish Runway Incursion Prevention programme, identify its goals as part of the national Runway Safety programme and monitor implementation plan	B0-75	2014	Sates	valid
	implement, where warranted, precise surface movement guidance to and from a runway to improve capacity, safety and efficiency	B0-75	2015	States	valid
	develop, at aerodromes a positioning system for all vehicles and aircrafts operating on the movement area on a cost-benefit basis	B0-75	2013 – 2016	States & AOP SG	valid

	s	Strategy			
ATM Operational Concept Components	Projects/Tasks	Linkage to ASBU Module	Timeframe Start/End	Responsibility	Status
	implement procedures and technologies to enhance the performance of runway operations and optimize runway capacity	B0-75	2013 – 2016	States & AOP SG	valid
	Runway Excursion Prevention				
	establish collaborative bodies with ATM, aircraft operators and aerodrome operators for implementing plans aimed at prevention of runway excursions	B0-75	2012 – 2016	States	valid
	harmonize, coordinate and support the Runway Excursion Prevention measures and implementation activities on a regional basis	B0-75	2012 – 2017	ICAO, States & AOP SG	valid
	develop and implement an integrated maintenance programme at aerodromes that includes pavement and visual aids	B0-75	2010-2016	States & AOP SG	valid
	implement and monitor Runway End Safety Area (RESA) requirements at aerodromes	B0-75	Ongoing	ICAO, States & AOP SG	valid
	monitor and ensure meeting Runway strip characteristics.	B0-75	Ongoing	States & AOP SG	valid
	develop measures and ensure inspection of the movement area including control of Foreign Object Debris (FOD)	B0-75	Ongoing	States & AOP SG	valid
	provision of enhanced visual aids and markings on runway and movement area.	B0-75	2014	States	valid
	monitor and ensure meeting Runway strip frangibility requirements	B0-75	Ongoing	States & AOP SG	valid

	Strategy							
ATM Operational Concept Components	Projects/Tasks	Linkage to ASBU Module	Timeframe Start/End	Responsibility	Status			
	Runway Pavement Maintenance							
	• promote the awareness about the requirements for the provision of Pavement Maintenance in the movement area	B0-75	ongoing	ICAO & AOP SG	valid			
	develop and implement a runway maintenance programme	B0-75	2012-2014	States & AOP SG	valid			
	harmonize, coordinate and support the Runway pavement maintenance guidance for implementation activities on a regional basis	B0-75	201-2015	ICAO & AOP SG	valid			
	Seminar on runway surface friction measurement	В0-75	2014	ICAO	valid			
	• measurement and reporting of friction characteristics of wet paved runways.	B0-75	201-2015	Sates	valid			
	Availability of a friction measurement equipment	B0-75	2012-2014	States	valid			
	establishment of maintenance friction level below which corrective action should be initiated.	B0-75	2012-2014	States & AOP SG	valid			
	• identify minimum friction level below which information that a runway may be slippery when wet should be made available	B0-75	2012-2014	States & AOP SG	valid			
	monitor the removal of runway contaminants in particular; rubber deposits and accumulated sand	B0-75	Ongoing	States & AOP SG	valid			
	monitor implementation of the requirements for measurement and reporting of the friction characteristics and carrying out appropriate corrective maintenance in accordance with defined maintenance performance level	B0-75	Ongoing	ICAO, States & AOP SG	valid			
Linkage to GPIs	GPI/6 Air traffic flow management GPI/9 Situational awareness GPI/13 Aerodrome design and management GPI/14 Runway operations GPI/15 Match IMC and VMC operating capacity GPI/18 Aeronautical information							

MID REGIONAL PERFORMANCE OBJECTIVES AERODROMES PERFORMANCE OBJECTIVES

AERODROME SAFETY				
	Benefits			
Safety	 Improved safety of aerodromes operation Reduced number of incident/accident. Safety level improved 			
Environment	 Reduced emissions through effective aerodrome operation. Reduced aircraft noise impact on residential and commercial areas around the aerodrome 			
Capacity	Increased capacity through better planning and operation			
Efficiency	Improved aerodrome capacity and level of service.			
	Performance Measurement			
Performance Metrics:	 Number of obstacles penetrating obstacle limitation surface. Number of certified aerodromes Number of deficiency related to the aerodromes field Number of runway incursion/excursion. 			

Strategy					
ATM Operational Concept Components	Projects/Tasks	Linkage to ASBU Module	Timeframe Start/End	Responsibility	Status
AO	OBSTACLE LIMILTATION				
(Aerodrome operations), CM (Conflict management) DCB (Demand and capacity	Establish a regulatory framework on Obstacle Limitation Surfaces (OLS) around the aerodrome	B0-65	2014	States	valid
	Monitor the height of buildings or structures within the boundaries of OLS	B0-65	ongoing	States	valid
balancing) AUO	WILDLIFE HAZARD CONTROL				
(Airspace user operation)	survey and collect information on state's practice with respect to airport wild life control	B0-80	2013	ICAO	valid
	establishment of national bird control committee.	B0-80	2013	States	valid
	organize a seminar on wildlife hazard reporting, assessment and reduction.	B0-80	2013	ICAO & AOP	valid
	landuse management inside and in the vicinity of aerodrome.	B0-30	Ongoing	States	valid

Strategy					
ATM Operational Concept Components	Projects/Tasks	Linkage to ASBU Module	Timeframe Start/End	Responsibility	Status
	establishment of a national procedure for recording and reporting wildlife strikes to aircraft.	B0-75	2013	States	valid
	collect wildlife strike reports and forward to ICAO for inclusion in the ICAO IBIS database.	B0-75	Ongoing	States	valid
Linkage to GPIs	GPI-5: Performance-based navigation GPI-13: Aerodrome design and management GPI-14: Runway operations GPI-18: Aeronautical Information				

REPORT ON AGENDA ITEM 10: AIR NAVIGATION GLOBAL DEVELOPMENTS

- 10.1 The meeting noted that the Twelfth Air Navigation Conference (AN-Conf/12) will be held in Montreal from 19 to 30 November 2012. The meeting was apprised of the Provisional Agenda of the AN-Conf/12.
- The Conference will consider proposed Aviation System Block Upgrades (ASBUs) and would also provide stakeholders with an opportunity to set priorities and refine the way forward based on lessons learned. Special consideration would be given to utilization of existing capacity of enabling systems and planning for their expansion, taking into consideration user requirements.
- 10.3 It was highlighted that ICAO is addressing the challenge of the integration, interoperability and harmonization of the systems leading to the concept of "One Sky" which if the theme of AN-Conf/12. The One Sky concept revolves around conceiving the notion globally, developing the implementation plans regionally, and implementing the infrastructure locally. It addresses International traffic flows from end to end with the purpose of increasing overall capacity, efficiency and improving safety, while also reducing the impact on the environment.
- The AN-Conf/12 will allow to work together toward establishment of a global strategy for air navigation planning and implementation. Furthermore, it would set priorities, review major operational objectives. This is to bring the Global Aviation Community into agreement on an agenda to drive the next ten years of air navigation planning and implementation. It would allow ICAO to plan work programmes of Panels and Planning and Implementation Regional Groups (PIRGs) toward finalization of operational improvements objectives and provide a stimulus to air navigation planning and implementation.
- 10.5 The meeting strongly encouraged States and International Organizations to actively participate in the AN-Conf/12.
- 10.6 The meeting recalled that ICAO hosted the Global Air Navigation Industry Symposium (GANIS) from 20 to 23 September 2011. The event was considered a great success, with over 500 participants from Industry, States and International Organizations in attendance.
- 10.7 The meeting noted with appreciation that ICAO MID Office, in coordination with Headquarters, conducted a Seminar for High Level Briefing on Aviation System Block Upgrade (ASBU) on 30 January 2012 in Cairo. The seminar was attended by representatives from MID States and International Organizations.
- 10.8 The meeting noted that "ASBU Working Document" contains detailed explanations of the Block Upgrades concept and its components, was unveiled to industry. Following the GANIS, ICAO collected feedback from industry and States on the Working Document. This feedback was reviewed and used to develop an updated version of the ASBU Working Document.

10.9 The ASBUs concept will be included into the revision of the GANP and presented to the AN-Conf/12. The latest version of the ASBU Working Document, containing the detailed explanations of the blocks, can be found at the ICAO website at: www.icao.int/anconf12/asbu. The meeting urged MID States to provide feedback to ICAO on the ASBU Working Document.

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Report on Agenda Item 11: Future Work Programme

- 11.1 The meeting noted that the Terms of Reference of the AOP Sub-Group has been updated and was of the view that it is valid for the current and near future work programme of the Sub-Group. Accordingly, the meeting agreed to maintain the same TOR without changes.
- 11.2 The meeting noted that MIDANPIRG/13 Meeting is scheduled for April 2012 and MIDANPIRG/14 tentatively scheduled for the second half of 2013. Accordingly, the meeting agreed that the AOP SG/9 meeting be held in the first half of 2013. The venue will be Cairo, unless a State is willing to host the meeting.

REPORT ON AGENDA ITEM 12: ANY OTHER BUSINESS

Qatar made a reference to the "Safety Meeting" to be held in Dubai towards the end of April 2012. One of the subjects under discussion will be "Safety Management Systems". It has been suggested that Aerodrome Regulators attend in order to ensure the SMS of Aerodromes is put into the perspective of that coordinating the various SMS that will be in place by other Organizations e.g. Airlines or ANSPs.

AOP SG/8 Attachment A to the Report

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