



International Civil Aviation Organization

**Aerodrome Operational Planning
Sub-Group (AOP SG)**

**Eighth Meeting
(Cairo, 13– 15 February 2012)**

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

**REVIEW OF PART III - AERODROMES OF THE MID REGION AIR NAVIGATION PLAN
(BASIC ANP & FASID)**

DOC 9708 VOLUMES I & II – AOP1 TABLES

(Presented by the Secretariat)

SUMMARY

The aim of this working paper is to inform the meeting about the progress made in finalization, approval and publication of the MID Basic ANP and FASID (Doc 9708) and presents the last amended AOP-1 tables based on additional information received from Provider States.

Action by the meeting is at paragraph 3.

REFERENCES

- MID Basic ANP/FASID (Doc 9708)
- MIDANPIRG/12 Report

1. INTRODUCTION

1.1 The Basic ANP would contain stable plan material and the FASID would set forth the dynamic material from the plan constituted by the facilities and services required for international air navigation within the specified area. The FASID would also include appropriate additional guidance, particularly with regard to implementation, to complement the material contained in the MID Basic ANP.

1.2 Basic ANP and FASID is a planning document and need not necessarily reflect the existing facilities and services. The facilities and services shown in the documents represent those, which will be needed for a reasonable planning. Therefore, these documents are not to be used for operational purposes. The existing facilities and services should be shown in the AIPs published by States.

1.3 The MID Basic ANP/FASID first edition has been approved by ICAO HQ after review by ANC and approval by ICAO Council. The First Edition (2010) contains the MID International Aerodromes list and relevant charts.

2. DISCUSSION

2.1 The Basic ANP Table AOP gives the list of Aerodromes as agreed and published by the States for International Scheduled Air Transport, Regular Use (RS), International Non-scheduled Air Transport, Regular Use (RNS) while the FASID Table AOP gives the Facilities and Services to be provided at these aerodromes. The Physical Characteristics of the Runway, Taxiway and Apron are decided based on the Traffic Forecasts and the largest aircraft normally expected to use the aerodrome, and Facilities and Services should conform to the ICAO SARPs included in the Annexes supported by other related documents such as ICAO Manuals etc. In addition, AOP Tables in FASID includes list of International Scheduled Air Transport, Alternate Use (AS) and International Non-schedule Air Transport, Alternate Use (ANS).

2.2 It is highlighted that Regional Plans shall be revised when it becomes apparent that they are no longer consistent with current and foreseen requirements of International Civil Aviation and that, when the nature of a required change permits, the associated amendment of the Regional Plan shall be undertaken by correspondence between the Organization and the Contracting States and International Organizations concerned.

2.3 The meeting is invited to note that the amended list of International Aerodromes required for Air Navigation in the MID Region AOP 1 Tables Doc 9708 was recognized by MIDANPIRG 12 Meeting. And accordingly agreed that subsequent updates to the MID FASID in the AOP, AIS, CNS and MET parts are to be processed in consultation with users, provider States and with the assistance of the ICAO MID Regional Office.

2.4 The meeting is invited to note that the accreditation area of responsibilities of the MID Regional Office has been modified, Israel is no longer accredited to the MID Regional Office and was transferred to the ICAO EURO/NAT Regional Office, its ANP also transferred to ICAO EURO/NAT Regional Office in January 2011.

2.5 The last amended Draft of MID Basic-AOP-1 tables is attached as **Appendix A** to this working paper. The meeting is invited to note the content of the **Appendix A** to this working paper and suggest any modifications/amendments for further incorporation of the AOP parts in accordance with established procedures.

2.6 The meeting is invited to note that there is a consequent need to reflect changes that were made to MID **FASID** – AOP1 and to agree on a Proposal for Amendment to the AOP Table of the MID **FASID** – AOP1 as contained at **Appendix B** to this working paper.

2.7 The meeting is invited to note 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 C** to this working paper with Explanation Notes in **Appendix D** to this working paper.

2.8 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.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) review, update and agree on the Proposed Amendment to MID **Basic** ANP – AOP tables contained in **Appendix A** to this working paper for processing by the MID Regional Office and further request for approval by the Council before incorporation in the MID BASIC ANP Doc 9708;
- b) further review and update the amended MID **FASID** – AOP1 Table contained at **Appendix B** to this working paper, and suggest/propose any further necessary amendments if required;
- c) note the new form of FASID-AOP, table and explanation notes as shown in **Appendices C and D** to this working paper; and
- d) agree on the Proposed Amendments to MID ANP Document and the following Draft Conclusions:

DRAFT CONCLUSION 8/X: ADOPTION OF NEW FORMAT OF FASID-AOP1

That, a Proposal for adoption of new format of FASID-AOP1 contained at Appendix C to this working paper based on explanation notes in Appendix D to this working paper.

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

That, a Proposal for an Amendment to MID Basic ANP and FASID-AOP-1 Tables contained at Appendices A & B to this working paper be prepared by MID Office for approval according to established procedures.

APPENDIX A

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.

Location Indicator	City/Aerodrome	Designation
BAHRAIN		
OBBI	BAHRAIN/Bahrain	RS
EGYPT		
HEAX	ALEXANDRIA/Alexandria	RS
HEBA	ALEXANDRIA/Borg El Arab	RS
HESN	ASWAN/Aswan	RS
HEAT	ASYUT/Asyut	RS
HEAZ	CAIRO/Almaza	ANS
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
HETB	TABA/Taba	AS

Location Indicator	City/Aerodrome	Designation
IRAN, ISLAMIC REPUBLIC 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 Khomani	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

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
OOMS	MUSCAT/ Muscat	RS
OOSA	SALALAH/Salalah	AS
QATAR		
OTBD	DOHA/Doha	RS
OTHH	DOHA/New Doha -(Future – 2010)	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

Location Indicator	City/Aerodrome	Designation
SYRIAN ARAB REPUBLIC		
OSAP	ALEPPO/Aleppo	RS
OSLB	LATTAKIA/Bassel Al-Assad,	RS
OSDI	DAMASCUS/Damascus	RS
UNITED ARAB EMIRATES		
OMAA	ABU DHABI/Abu Dhabi	RS
OMAL	AL AIN/Al Ain	RS
OMDB	DUBAI/Dubai	RS
OMFJ	FUJAIRAH/Fujairah	RS
OMRK	RAS AL KHAIMAH/Ras Al Khaimah	RS
OMSJ	SHARJAH/Sharjah	RS
OMDW	DUBI -/Al Maktoum (Future, 2010 -2012)	RS
YEMEN		
OYAA	ADEN/Aden	RS
OYHD	HODEIDAH/Hodeidah	RS
OYRN	MUKALLA/Riyan	RS
OYSN	SANA'A/Sana'a	RS
OYTZ	TAIZ/Ganad	RS

APPENDIX B

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 services, 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.

- 2 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.
- 3 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.

- 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 C Terminal 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 C 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 C aerodrome or identification beacon. 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.

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.

TABLE AOP 1

CITY/AERODROME/USE VILLE/AERODROME/EMPLOI CIUDAD/AERODROMO/USO	ALTERNATE AERODROMES AERODROMOS DE DEGAGEMENT AERODROMOS DE ALTERNATIVA	AERODROME AERODROME						PHYSICAL CHARACTERISTICS CARACTERISTIQUES PHYSIQUES CARACTERÍSTICAS FÍSICAS				RADIO AIDS AIDES RADIO RADIOAYUDAS			LIGHTING AIDS AIDES LUMINEUSES AYUDAS LUMINOSAS						MARKING AIDS MARQUES SEÑALAMIENTO				RVR																
		RC	RFF	ATS				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	T	P A	S A	V A	R W Y L Z E	C L D T T E C B	S T T S B	D E S	C L M	T R Z	T D S T G		A M W Y D	T H L D Y	T M E D I N Z D D													
				A P P	T W R	A T I S	A A F I S																																		
1	2	3	4	5				6	7	8	9	10			11						12				13																
AFGHANISTAN																																									
OAKB - KABUL/Kabul Int'l RS	VIAR VIDP OPRN OAKN OPKG OPPS UTTT	Amritsar Delhi Islamabad Kandahar Karachi Peshawar Tashkent	4D	8	X	X			11 29	NPA PA1	X			X	X	X	L L	X X		X	X X	X X	X X	X X	X X	X X	X X	X X	X X												
OAKN - KANDAHAR/Kandahar Int'l AS	OAKB	Kabul	4D	8					06 23	NPA NPA	X			X	X	X	L L	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	ALTERNATE AERODROMES AERODROMES DE DEGAGEMENT AERODROMOS DE ALTERNATIVA	AERODROME AERODROME				PHYSICAL CHARACTERISTICS CARACTERISTIQUES PHYSIQUES CARACTERÍSTICAS FÍSICAS				RADIO AIDS AIDES RADIO RADIOAYUDAS			LIGHTING AIDS AIDES LUMINEUSES AYUDAS LUMINOSAS					MARKING AIDS MARQUES SEÑALAMIENTO				RVR																
		RC	RFF	ATS				RWY NO	RWY TYPE TYPE DE	T	RWY LENGTH LONG. DE	PA	NPA	T	P A	S A	V A	R W	C L	T D	S T	B	D E	C L	T H	T D	S M	A Z	T Y	H D	M G	A Y	T W	M L	E D	I N		
1	2	3	4	5				6	7	8	9		10			11					12				13													
BAHRAIN																																						
OBBI BAHRAIN/Bahrain Intl RS	OMAA Abu Dhabi OMAL Al Ain OEDF Dammam OTBD Doha OMDB Dubai OKBK Kuwait OERK Riyadh OMSJ Sharjah	4E	9 10	X	X	X	X	12 R 30 L	NPA NPA	X X	2600 290		X X	X X	L L	X X			X X	X X	X X	X X	X X	X X						X X	X X							
					X	X	X	12 L 30 R	PA 2 PA 2	X X	4000 365	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

CITY/AERODROME/USE VILLE/AERODROME/EMPLOI CIUDAD/AERODROMO/USO	ALTERNATE AERODROMES AERODROMES DE DEGAGEMENT AERODROMOS DE ALTERNATIVA	AERODROME AERODROME				PHYSICAL CHARACTERISTICS CARACTERISTIQUES PHYSIQUES CARACTERÍSTICAS FÍSICAS				RADIO AIDS AIDES RADIO RADIOAYUDAS			LIGHTING AIDS AIDES LUMINEUSES AYUDAS LUMINOSAS						MARKING AIDS MARQUES SEÑALAMIENTO				RVR						
		RC	RFF	ATS				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	T	P A	S A	V A	R W Y L Z	C L D E C B	T T T T	S B	D E S M		C L H R	T H D Z	S M T G	A S M Y	T W L Y	H D D
A	T			A	A	P	W																T						
1	2	3	4	5				6	7	8	9	10			11						12				13				
HECA CAIRO/Cairo Int'l	LTAC ANKARA	4E	9	X	X	X	X	05L	PA2	X	3300	X	X	X	X	L	X	X	X	X	X	X	X	X	X	X	X	X	X
RS	LGAT ATHINAI							23R	PA2		B707-300C 153	X			X	L	X	X	X	X	X	X	X	X	X	X	X	X	X
	OLBA BEIRUT										B747 320																		
	HELX LUXOR	4F						05C	PA2		4000	X			X	L	X	X	X	X	X	X	X	X	X	X	X	X	X
	LCNC NICOSIA	4E						23C	PA2		B747 320	X			X	L	X	X	X	X	X	X	X	X	X	X	X	X	X
	LCLK Larnaka							05R	PA2		4000	X			X	X	L	X	X	X	X	X	X	X	X	X	X	X	X
	LGRP RODOS							23L	PA2		B747 320	X			X	X	L	X	X	X	X	X	X	X	X	X	X	X	X
		4D								X																			
								16	NINST		3178	X			X								X	X	X	X	X	X	X
								34	NINST		B707-300C 153	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		AERODROME AERODROME				PHYSICAL CHARACTERISTICS CARACTERISTIQUES PHYSIQUES CARACTERÍSTICAS FÍSICAS				RADIO AIDS AIDES RADIO RADIOAYUDAS			LIGHTING AIDS AIDES LUMINEUSES AYUDAS LUMINOSAS						MARKING AIDS MARQUES SEÑALAMIENTO				RVR												
			RC	RFF	ATS				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	T	P A	S A	V A	R W Y	C L Z	T D E	S T T C B	B		D E S	C L M	T H R	T D Z	S M Z	A D T	T S T G	H M Y	D D	T Z	M D	E I N D D
1	2		3	4	5				6	7	8	9			10			11						12				13								
OYTZ TAIZ/Ganad RS	OYAA HFFF OYHD OYSN	Aden Djibouti Hodeidah Sana'a	4E	9	X	X					01 19	NPA NPA	X			3000 B747 290	X X	X X	X L	L L	X		X				X X	X X	X X			X X	X X			

APPENDIX C

Revised ANP FASID AOP1 TABLE - February 2012

Aerodromes Characteristics														Remark	Alternate Aerodromes		
Location indicator- name of City and Aerodrome, Designation	Aerodrome Certification- Implemented/ in progress/Target date for implementation	Aerodrome Reference Code (ARC)			RFF Category			Runway characteristics							Location Indicator/Name of City & aerodrome	Aerodrome Certification- Implemented/In progress/ Target date	Aerodrome Reference Code
		Current	Planned	Target Date	Current	Planned	Target Date	Runway No.	Runway Type			Runway Length	RVR				
									current	Planned	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	certified	4E

APPENDIX D

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.

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.

- 2 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.
- 3 & 4 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
- 6 & 7 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
- 13 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 all-up mass in thousands of kilograms. If the aircraft requiring the aerodrome for alternate use is
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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.

15 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)

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