



International Civil Aviation Organization

**MIDANPIRG Meteorology Sub-Group
Seventh Meeting (MET SG/7)**

(Cairo, Egypt, 14-16 November 2017)

Agenda Item 4.6: Review of the MET Provisions in the MID electronic Air Navigation Plan

REVIEW OF THE MID ELECTRONIC AIR NAVIGATION PLAN (MID eANP) – MET PART

(Presented by the Secretariat)

SUMMARY

This paper presents a status on the MID Air Navigation Plan (MID eANP). The meeting is expected to review the MET Part and where necessary, provide updates.

Action by the meeting is at paragraph 3.

1. INTRODUCTION

1.1 The 12th Air Navigation Conference (AN-Conf/12), through Recommendation 6/1 [Regional performance framework – planning methodologies and tools], agreed that the regional air navigation plans (ANP) be aligned with the Fourth Edition of the Global Air Navigation Plan (GANP) (Doc 9750).

1.2 The ICAO Council approved the new eANP Template (Volumes I, II and III) and corresponding procedure for amendment on 18 June 2014 (202nd session, fourth meeting).

1.3 Furthermore, MIDANPIRG/16 (Kuwait, 13 to 16 February 2017) approved the amendment to the MID eANP Volume III (MIDANPIRG Conclusion 16/4 refers). Notification of this amendment was issued by the ICAO Cairo Office on 18 June 2017.

2. DISCUSSION

2.1 The meeting may wish to recall that the MID MET SG Terms of Reference (ToRs) include the following: *develop proposals for updating the relevant ICAO documentation related to MET, including the amendment of relevant parts of the MID ANP, as deemed necessary*. Therefore, the meeting is invited to review the MET Part of the MID eANP, Volumes I, II and III as provided at **Appendices A, B and C**, and provide proposals, where necessary.

2.2 Furthermore, the meeting is invited to review the draft Table B0-AMET 3-5, SIGMET Availability, as provided at **Appendix D** for inclusion in Volume III of the MID eANP. This table is necessary in order to reflect the Key Performance Indicator (KPI) on SIGMET implementation. As such, the meeting is invited to consider endorsing the following Draft Conclusion:

DRAFT CONCLUSION 7/XX: MID eANP VOLUME III PART MET

*That the MID eANP Volume III Part MET be updated to include Table B0-AMET 3-5, SIGMET Availability, as provided at **Appendix D**.*

2.3 The meeting will also recall that proposed changes to Volume I and II as provided at **Appendices E** and **F** were endorsed by MIDANPIRG/16 (MIDANPIRG Conclusion 16/29 refers); however since these proposals impact the general MET part of Volumes I and II, approval is needed by the working group on the eANP as well as the Council. These changes are being considered by the eANP WG and once approved by the Council, will be reflected in the MID eANP. These proposed changes related to removing references to SADIS 2G; updating the SADIS acronym; providing clarity that MID is served by World Area Forecast Centre (WAFC) London; providing clarity on ROC functions; and providing criteria to consider in determining when to issue half-hourly METAR.

2.4 Note also that the MID eANP VOL I, II and III are available at:
<http://www.icao.int/MID/Pages/MIDeANP.aspx>

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) review and update, as deemed necessary, the MET Part of the MID eANP Volumes I, II and III at **Appendices A, B** and **C**, respectively; and
- b) endorse the draft Conclusion in paragraph 2.2.

MID AIR NAVIGATION PLAN

VOLUME I

MID ANP, VOLUME I

PART V – METEOROLOGY (MET)

1. INTRODUCTION

1.1 This part of the MID ANP constitutes the agreed regional requirements considered to be the minimum necessary for effective planning and implementation of aeronautical meteorology (MET) facilities and services in the MID Region and complements the provisions of the ICAO SARPs and PANS related to MET. It contains stable plan elements related to the assignment of responsibilities to States for the provision of MET facilities and services within the ICAO MID Region in accordance with Article 28 of the *Convention on International Civil Aviation* (Doc 7300) and mandatory requirements related to the MET facilities and services to be implemented by States in accordance with regional air navigation agreements.

1.2 The dynamic plan element related to the assignment of responsibilities to States for the provision of MET facilities and services and the mandatory requirements based on regional air navigation agreements related to MET are contained in the MID ANP Volume II, Part V - MET.

1.3 The MID ANP Volume III contains dynamic/flexible plan elements related to the implementation of air navigation systems and their modernization in line with the ICAO Aviation System Block Upgrades (ASBUs) methodology and associated technology roadmaps described in the Global Air Navigation Plan. The ASBU modules are aimed at increasing capacity and improving efficiency of the aviation system whilst maintaining or enhancing safety level, and achieving the necessary harmonization and interoperability at regional and global level. This includes the regionally agreed ASBU modules applicable to the specified ICAO region/sub-region and associated elements/enablers necessary for the monitoring of the status of implementation of these ASBU modules.

Standards and Recommended Practices and Procedures for Air Navigation Services

1.4 The SARPs and PANS and related guidance material applicable to the provision of MET are contained in:

- a) *Annex 3 — Meteorological Service for International Air Navigation*;
- b) *Regional Supplementary Procedures* (Doc 7030);
- c) *Handbook on the IAVW* (Doc 9766);
- d) *Manual on Volcanic Ash, Radioactive Material and Toxic Chemical Clouds* (Doc 9691); and
- e) *Manual of Aeronautical Meteorological Practice* (Doc 8896).

2. GENERAL REGIONAL REQUIREMENTS

World area forecast system (WAFS) and meteorological offices

2.1 In the MID Region, WAFIC London has been designated as the centre for the operation of the aeronautical fixed service satellite distribution system / WAFS Internet File Service (SADIS and/or WIFS) and the Internet-based Secure SADIS FTP service. The status of implementation of SADIS/WIFS by States in the MID Region is detailed in Volume III.

2.2 In the MID Region, WAFS products in digital form should be disseminated by WAFIC London using the SADIS 2G satellite broadcast and the Secure SADIS FTP service and/or WIFS.

Volcanic Ash

2.3 Volcanic ash advisory centres (VAACs) Toulouse has been designated to prepare volcanic ash advisory information for the MID Region, as indicated below. The status of implementation of volcanic ash advisory information is detailed in Volume III.

2.4 Selected State volcano observatories have been designated for notification of significant pre-eruption volcanic activity, a volcanic eruption and/or volcanic ash in the atmosphere for the MID Region to their corresponding ACC/FIC, MWO and VAAC, as indicated at **Table MET I-1**. The status of implementation of volcano observatory notice for aviation (VONA) is detailed in Volume III.

Note – States volcano observatories and associated Table MET I-1 are not applicable for the MID Region.

Tropical Cyclone

2.5 Tropical cyclone advisory centre (TCAC) New Delhi has been designated to prepare tropical cyclone advisory information for the MID Region, as indicated below. The status of implementation of tropical cyclone advisory information is detailed in Volume III.

3. SPECIFIC REGIONAL REQUIREMENTS

None.

TABLE MET I-1 - STATE VOLCANO OBSERVATORIES

Not Applicable in the MID Region

MID AIR NAVIGATION PLAN

VOLUME II

MID ANP, VOLUME II

PART V – METEOROLOGY (MET)

1. INTRODUCTION

1.1 This part of the MID ANP, Volume II, complements the provisions in the ICAO SARPs and PANS related to aeronautical meteorology (MET). It contains dynamic plan elements related to the assignment of responsibilities to States for the provision of MET facilities and services within a specified area in accordance with Article 28 of the *Convention on International Civil Aviation* (Doc 7300); and mandatory requirements related to the MET facilities and services to be implemented by States in accordance with regional air navigation agreements. Such agreement indicates a commitment on the part of the States concerned to implement the requirements specified.

2. GENERAL REGIONAL REQUIREMENTS

Meteorological offices

2.1 In the MID Region, meteorological watch offices (MWO) have been designated to maintain continuous watch on meteorological conditions affecting flight operations within their area(s) of responsibility, as indicated at **Table MET II-1**.

Meteorological observations and reports

2.2 In the MID Region, routine observations, issued as a METAR, should be made throughout the 24 hours of each day at intervals of one hour or, for RS and AS designated aerodromes¹, at intervals of one half-hour at aerodromes as indicated in **Table MET II-2**. For aerodromes included on the VHF VOLMET broadcast as indicated in **Table MET II-3**, routine observations, issued as METAR, should be made throughout the 24 hours of each day.

2.3 At aerodromes that are not operational throughout 24 hours, METAR should be issued at least 3 hours prior to the aerodrome resuming operations in the MID Region.

Forecasts

2.4 In the MID Region, an aerodrome forecast, issued as a TAF, should be for the aerodromes indicated in **Table MET II-2**.

2.5 In the MID Region, the period of validity of a routine TAF should be of 9-, 24-, or 30-hours to meet the requirements indicated in **Table MET II-2**.

2.6 In the MID Region, the forecast maximum and minimum temperatures expected to occur during the period of validity, together with their corresponding day and time of occurrence, should be included in TAF at aerodromes indicated in **Table MET II-2**.

¹ Refer to Table AOP II-1

2.7 In the MID Region, landing forecasts (prepared in the form of a trend forecast) should be provided at aerodromes indicated in **Table MET II-2**.

Requirements for and use of communications

2.8 Operational meteorological information prepared as METAR, SPECI and TAF for aerodromes indicated in **Table MET II-2**, and SIGMET messages prepared for flight information regions or control areas indicated in **Table MET II-1**, should be disseminated to the international OPMET databanks designated for the MID Region (namely Jeddah and Bahrain (backup) Regional OPMET Centres) and to the centre designated for the operation of the aeronautical fixed service satellite distribution system (SADIS) and the Internet-based service (Secure SADIS FTP) and/or WIFS in the MID Region.

2.9 SIGMET messages should be disseminated to other meteorological offices in the MID Region.

2.10 Special air-reports that do not warrant the issuance of a SIGMET should be disseminated to other meteorological offices in the MID Region.

2.11 In the MID Region, meteorological information for use by aircraft in flight should be supplied through VOLMET broadcasts.

2.12 In the MID Region, the aerodromes for which METAR and SPECI are to be included in VOLMET broadcasts, the sequence in which they are to be transmitted and the broadcast time, is indicated in **Table MET II-3**.

3. SPECIFIC REGIONAL REQUIREMENTS

3.1 In the MID Region, operational meteorological information during the Pilgrimage Season should be issued as indicated in **Table II-MID-1**.

TABLE MET II-1 - METEOROLOGICAL WATCH OFFICES

EXPLANATION OF THE TABLE

Column

- 1 Name of the State where meteorological service is required
- 2 Name of the flight information region (FIR) or control area (CTA) where meteorological service is required
Note: The name is extracted from the ICAO Location Indicators (Doc 7910) updated quarterly. If a State wishes to change the name appearing in Doc 7910 and this table, ICAO should be notified officially.
- 3 ICAO location indicator of the FIR or CTA
- 4 Name of the meteorological watch office (MWO) responsible for the provision of meteorological service for the FIR or CTA
Note: The name is extracted from the ICAO Location Indicators (Doc 7910) updated quarterly. If a State wishes to change the name appearing in Doc 7910 and this table, ICAO should be notified officially.
- 5 ICAO location indicator of the responsible MWO
- 6 Requirement for SIGMET information (excluding for volcanic ash and for tropical cyclones) to be provided by the MWO for the FIR or CTA concerned, where:
 - Y – Yes, required
 - N – No, not required
- 7 Requirement for SIGMET information for volcanic ash to be provided by the MWO for the FIR or CTA concerned, where:
 - Y – Yes, required
 - N – No, not required
- 8 Requirement for SIGMET information for tropical cyclone to be provided by the MWO for the FIR or CTA concerned, where:
 - Y – Yes, required
 - N – No, not required
- 9 Requirement for AIRMET information to be provided by the MWO for the FIR or CTA concerned, where:
 - Y – Yes, required
 - N – No, not required

State	FIR or CTA Where Meteorological Service is Required		Responsible Meteorological Watch Office		Meteorological Service To Be Provided			
	Name	ICAO Location Indicator	Name	ICAO Location Indicator	SIGMET (WS)	SIGMET (WV)	SIGMET (WC)	AIRMET (WA)
1	2	3	4	5	6	7	8	9
BAHRAIN	BAHRAIN FIR	OBBB	BAHRAIN INTL	OBBI	Y	Y	Y	
EGYPT	CAIRO FIR	HECC	CAIRO INTL	HECA	Y	Y		Y
IRAN (ISLAMIC REPUBLIC OF)	TEHRAN FIR	OIIX	TEHRAN/ MEHRABAD INTL	OIII	Y	Y	Y	
IRAQ	BAGHDAD FIR	ORBB	BAGHDAD INTL	ORBI	Y	Y		
JORDAN	AMMAN FIR	OJAC	AMMAN/QUEEN ALIA	OJAI	Y	Y		
KUWAIT	KUWAIT FIR	OKAC	KUWAIT INTL	OKBK	Y	Y	Y	
LEBANON	BEIRUT FIR	OLBB	BEIRUT/BEIRUT INTL	OLBA	Y	Y		
LIBYA	TRIPOLI FIR	HLLL*	TRIPOLI/TRIPOLI INTL	HLLT	Y	Y		
OMAN	MUSCAT FIR	OOMM	MUSCAT/MUSCAT INTL	OOMS	Y	Y	Y	
SAUDI ARABIA	JEDDAH FIR	OEJD	JEDDAH/KING ABDULAZIZ INTL	OEJN	Y	Y	Y	
SUDAN	KHARTOUM FIR	HSSS	KHARTOUM	HSSS	Y	Y		
SYRAIN ARAB REPUBLIC	DAMASCUS FIR	OSDI	DAMASCUS INTL	OSDI	Y	Y		
UNITED ARAB EMIRATES	EMIRATES FIR	OMAE	ABU DHABI INTL	OMAA	Y	Y	Y	
YEMEN	SANAA' FIR	OYSN	SANAA' INTL	OYSN	Y	Y	Y	

TABLE MET II-2 - AERODROME METEOROLOGICAL OFFICES

EXPLANATION OF THE TABLE

Column

- 1 Name of the State where meteorological service is required
- 2 Name of the AOP aerodrome where meteorological service is required
Note: The name is extracted from the ICAO Location Indicators (Doc 7910) updated quarterly. If a State wishes to change the name appearing in Doc 7910 and this table, ICAO should be notified officially.
- 3 ICAO location indicator of the AOP aerodrome
- 4 Designation of AOP aerodrome:
 - RG - international general aviation, regular use
 - 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
- 5 Name of the aerodrome meteorological office responsible for the provision of meteorological service
Note: The name is extracted from the ICAO Location Indicators (Doc 7910) updated quarterly. If a State wishes to change the name appearing in Doc 7910 and this table, ICAO should be notified officially.
- 6 ICAO location indicator of the responsible aerodrome meteorological office
- 7 Requirement for METAR/SPECI from the aerodrome concerned, where:
 - Y – Yes, required
 - N – No, not required
- 8 Requirement for information on the state of the runway provided by the appropriate airport authority to be included as supplementary information in METAR/SPECI from the aerodrome concerned, where:
 - Y – Yes, required
 - N – No, not required
- 9 Requirement for trend forecast to be appended to METAR/SPECI from the aerodrome concerned, where:
 - Y – Yes, required
 - N – No, not required
- 10 Requirement for TAF from the aerodrome concerned, where
 - C - Requirement for 9-hour validity aerodrome forecasts in TAF code (9H)
 - T - Requirement for 18/24-hour validity aerodrome forecasts in TAF code (18/24H)
 - X - Requirement for 30-hour validity aerodrome forecasts in TAF code (30H)
 - N – No, not required
- 11 Requirement for maximum and minimum temperature (expected to occur during the period of validity of the TAF) to be included in TAF from the aerodrome concerned, where:
 - Y – Yes, required
 - N – No, not required
- 12 Availability of METAR/SPECI and TAF from the aerodrome concerned, where:
 - F – Full availability : OPMET information as listed issued for the aerodrome all through the 24-hour period
 - P – Partial availability: OPMET information as listed not issued for the aerodrome for the entire 24-hour period

State	AOP Aerodrome where meteorological service is to be provided			Responsible aerodrome meteorological office		Observations and forecasts to be provided					METAR/SPECI and TAF availability
	Name	ICAO Location Indicator	Use	Name	ICAO Location Indicator	METAR/SPECI	State of the runway	Trend forecast	TAF	Temperature Tx/Tn	
1	2	3	4	5	6	7	8	9	10	11	12
BAHRAIN	BAHRAIN INTL	OBBI	RS	BAHRAIN INT'L	OBBI	Y	N	Y	X	N	F
EGYPT	ALEXANDRIA/B ORG EL-ARAB INTL	HEBA	RS	CAIRO INTL	HECA	Y		Y	X		F
	ASWAN INTL	HESN	RS	CAIRO INTL	HECA	Y		Y	X		F
	CAIRO INTL	HECA	RS	CAIRO INTL	HECA	Y		Y	X		F
	HURGHADA INTL	HEGN	RS	CAIRO INTL	HECA	Y		Y	X		F
	LUXOR INTL	HELX	RS	CAIRO INTL	HECA	Y		Y	X		F
	MARSA ALAM INTL	HEMA	RS	CAIRO INTL	HECA	Y		Y	X		F
	SHARM EL SHEIKH INTL	HESH	RS	CAIRO INTL	HECA	Y		Y	X		F
IRAN (ISLAMIC REPUBLIC OF)	BANDAR ABBASS INTL	OIKB	RS	TEHRAN/ MEHRABAD INTL	OIII	Y			T		F
	ESFAHAN / SHAHID BEHESHTI INTL	OIFM	RS	TEHRAN/ MEHRABAD INTL	OIII	Y			X		F
	MASHHAD/ SHAHID HASHEMI NEJAD INTL	OIMM	RS	TEHRAN/ MEHRABAD INTL	OIII	Y			T		F
	SHIRAZ/ SHAHID DASTGHAIB INTL	OISS	RS	SHIRAZ/ SHAHID DASTGHAIB INTL	OISS	Y		Y	X		F
	TABRIZ INTL	OITT	RNS	TABRIZ/ INTL	OITT	Y			X		F
	TEHRAN/ IMAM KHOMAINI INTL	OIIE	RS	TEHRAN/ MEHRABAD INTL	OIII	Y		Y	X		F
	TEHRAN/ MEHRABAD INTL	OIII	RS	TEHRAN/ MEHRABAD INTL	OIII	Y		Y	T		F
	YAZD/SHAHID SADOOGHI	OIYY	RS			Y					

	INTL*								
	ZAHEDAN INTL	OIZH	RS	TEHRAN/ MEHRABAD INTL	OIII	Y		T	F
IRAQ	AL NAJAF	ORNI	RNS			Y		T	F
	BAGHDAD INTL	ORBI	RS	BAGHDAD INTL	ORBI	Y	Y	T	F
	BASRAH INTL	ORMM	RS	BAGHDAD INTL	ORBI	Y	Y	T	F
	ERBIL INTL	ORER	RS			Y		T	F
	MOSUL INTL	ORBM	RS	BAGHDAD INTL	ORBI		Y	T	F
	SULAYMANIYAH INTL	ORSU	RS			Y		T	F
JORDAN	AMMAN/ MARKA	OJAM	AS	AMMAN/ MARKA	OJAM	Y	Y	T	F
	AMMAN/ QUEEN ALIA	OJAI	RS	AMMAN/ MARKA	OJAM	Y	Y	X	F
	AQABA/ KING HUSSEIN	OJAQ	RNS	AMMAN/ MARKA	OJAM	Y			F
KUWAIT	KUWAIT INTL	OKBK	RS	KUWAIT/ INTL	OKBK	Y	Y	X	F
LEBANON	BEIRUT/ BEIRUT INTL	OLBA	RS	BEIRUT/ BEIRUT INTL	OLBA	Y	Y	X	F
LIBYA	BENGHAZI / BENINA INTL	HLLB	RS	BENGHAZI / BENINA INTL	HLLB	Y	Y	T	F
	SEBHA / SEBHA INTL	HLLS	RS	BENGHAZI / BENINA INTL	HLLB	Y			F
	TRIPOLI / TRIPOLI INTL	HLLT	RS	TRIPOLI / TRIPOLI INTL	HLLT	Y	Y	T	F
OMAN	MUSCAT/ MUSCAT INTL.	OOMS	RS	MUSCAT/ MUSCAT INTL.	OOMS	Y	Y	X	F
	SALALAH	OOSA	AS	SALALAH	OOSA	Y		X	F
QATAR	DOHA INTL	OTBD	RS	DOHA INTL	OTBD	Y	Y	T	F
	HAMAD INTL	OTHH	RS	DOHA INTL	OTBD		Y	X	F
SAUDI ARABIA	DAMMAM/ KING FAHD INTL	OEDF	RS			Y		X	F
	JEDDAH/ KING ABDULAZIZ INTL	OEJN	RS	JEDDAH/ KING ABDULAZIZ INTL	OEJN	Y	Y	X	F
	MADINAH/ PRINCE MOHAMMAD BIN ABDULAZIZ	OEMA	RS	JEDDAH/ KING ABDULAZIZ INTL	OEJN	Y	Y	T	F

	INTL								
	RIYADH/ KING KHALED INTL	OERK	RS	JEDDAH/ KING ABDULAZIZ INTL	OEJN	Y	Y	X	F
SOUTH SUDAN	JUBA	HSSJ	RS	KHARTOUM	HSSS	Y	Y		F
SUDAN	EL OBEID/EL OBEID	HSOB	AS			Y			F
	KHARTOUM	HSSS	RS	KHARTOUM	HSSS	Y	Y	X	F
	NYALA/NYALA	HSNN	AS			Y			F
	PORT SUDAN	HSPN	RS	WADI HALFA	HSSW	Y		X	F
SYRIAN ARAB REPUBLIC	ALEPPO INTL	OSAP	RS	DAMASCUS INTL	OSDI	Y		T	F
	BASSEL AL- ASSAD INTL LATTAKIA	OSLK	RS	DAMASCUS INTL	OSDI	Y		T	F
	DAMASCUS INTL	OSDI	RS	DAMASCUS INTL	OSDI	Y	Y	X	F
UNITED ARAB EMIRATES	ABU DHABI INTL	OMAA	RS	ABU DHABI INTL	OMAA	Y	Y	X	F
	AL AIN INTL	OMAL	RS	ABU DHABI INTL	OMAA	Y	Y	X	F
	ABU DHABI/ AL BATEEN EXECUTIVE	OMAD	RS	ABU DHABI INTL	OMAA	Y	Y	X	F
	DUBAI INTL	OMDB	RS	DUBAI INTL	OMDB	Y	Y	X	F
	DUBAI/ AL MAKTOUM INTL	OMDW	RS	DUBAI INTL	OMDB	Y	Y	X	F
	FUJAIRAH INTL	OMFJ	RS	DUBAI INTL	OMDB	Y		X	F
	RAS AL KHAIMAH INTL	OMRK	RS	DUBAI INTL	OMDB	Y		X	F
	SHARJAH INTL	OMSJ	RS	DUBAI INTL	OMDB	Y		X	F
YEMEN	ADEN INTL	OYAA	RS	SANAA/ INTL	OYSN	Y	Y	X	F
	HODEIDAH INTL	OYHD	RS	SANAA/ INTL	OYSN	Y		T	F
	MUKALLA INTL	OYRN	RS	SANAA/ INTL	OYSN	Y		T	F
	SANAA INTL	OYSN	RS	SANAA/ INTL	OYSN	Y		T	F
	TAIZ INTL	OYTZ	RS	SANAA/ INTL	OYSN	Y		T	F

TABLE MET II-3 – VOLMET BROADCASTS

EXPLANATION OF THE TABLE

The transmitting station appears at the top of each block.

Names in lower case letters indicate aerodromes for which reports (routine or selected special) are required.

Names in upper-case letters indicate aerodromes for which forecasts are required.

Istanbul 25B30 55B60	Shiraz 20B25 50B55	Tehran 15B20 45B50
Istanbul Ankara Athinai Thessaloniki Roma Tehran ISTANBUL	Tehran Shiraz Isfahan Kuwait Bandar Abbass Bahrain Muscat Dubai SHIRAZ	Tehran Shiraz Mashhad Karachi Ashgabat Baku Yerevan Tashkent TEHRAN

TABLE MET II-MID-1 - EXCHANGE OF OPERATIONAL METEOROLOGICAL INFORMATION DURING THE PILGRIMAGE SEASON

EXPLANATION OF THE TABLE

Column

- 1 Name of the State in which the operational meteorological information should be available.
- 2 Location from which, or related to which, the operational meteorological information refers.
- 3 TF – Aerodrome forecasts X: Seasonal requirement
- 4 RF – Route forecasts

To be available in	From or related to	Information required	
		TF	RF
1	2	3	4
LIBYA	DHAHRAN	X	
	MADINAH	X	
	RIYADH	X	
	ALGER (Route CASABLANCA-TRIPOLI)		X
	CAIRO (Route TRIPOLI-JEDDAH)		X
SAUDI ARABIA	ABIDJAN	X	
	ACCRA	X	
	AKTYUBINSK	X	
	ALGER (Route CASABLANCA-TRIPOLI)		X
	ALMATY	X	
	ASKHABAT	X	
	BAMAKO	X	
	BANGUI	X	
	BRAZZAVILLE		X
	CAIRO (Route TRIPOLI-JEDDAH)	X	
	CONAKRY	X	
	COTONOU	X	
	DAKAR	X	
	DOUALA	X	
	DUSHANBE		X
	KHARTOUM (Route KHARTOUM-GENEINA)	X	
	KYIV	X	
	NOUADHIBOU	X	
	OUAGADOUGOU	X	
	SAL ISLAND	X	
	SAMARKAND	X	
TASHKENT			
SUDAN	BAMAKO	X	
	CONAKRY	X	

To be available in	From or related to	Information required	
		TF	RF
1	2	3	4
	DAKAR	X	
	NOUADHIBOU	X	
	OUAGADOUGOU	X	
	SAL ISLAND	X	
	JEDDAH (Route		X
	JEDDAH-		
	KHARTOUM)		

MID AIR NAVIGATION PLAN

VOLUME III

B0 – AMET: Meteorological information supporting enhanced operational efficiency and safety

Description and purpose

Global, regional and local meteorological information:

- a) forecasts provided by world area forecast centres (WAFC), volcanic ash advisory centres (VAAC) and tropical cyclone advisory centres (TCAC);
- b) aerodrome warnings to give concise information of meteorological conditions that could adversely affect all aircraft at an aerodrome including wind shear; and
- c) SIGMETs to provide information on occurrence or expected occurrence of specific en-route weather phenomena which may affect the safety of aircraft operations and other operational meteorological (OPMET) information, including METAR/SPECI and TAF, to provide routine and special observations and forecasts of meteorological conditions occurring or expected to occur at the aerodrome.

This module includes elements which should be viewed as a subset of all available meteorological information that can be used to support enhanced operational efficiency and safety.

Main performance impact:

KPA- 01 – Access and Equity	KPA-02 – Capacity	KPA-04 – Efficiency	KPA-05 – Environment	KPA-10 – Safety
N	Y	Y	Y	Y

Applicability consideration:

Applicable to traffic flow planning, and to all aircraft operations in all domains and flight phases, regardless of level of aircraft equipment.

<i>B0 – AMET: Meteorological information supporting enhanced operational efficiency and safety</i>			
<i>Elements</i>	<i>Applicability</i>	<i>Performance Indicators/Supporting Metrics</i>	<i>Targets</i>
SADIS FTP	All States	Indicator: % of States that have implemented SADIS FTP service Supporting Metric: Number of States that have implemented SADIS FTP service	100% by Dec. 2018
QMS	All States	Indicator: % of States having implemented QMS for MET Supporting metric: number of States having implemented QMS for MET	80% by Dec. 2018
SIGMET	All MWOs in MID Region	Indicator: % of FIRs in which SIGMET is implemented Supporting metric: number of FIRs SIGMET is implemented	100% by Dec. 2018

Table B0-AMET 3-1

SADIS FTP

EXPLANATION OF THE TABLE

Column

- 1 Name of the State
- 2 Status of implementation of SADIS FTP, where:
Y – Yes, implemented
N – No, not implemented

State	Status
1	2
BAHRAIN	Y
EGYPT	Y
IRAN (ISLAMIC REPUBLIC OF)	N
IRAQ	Y
JORDAN	Y
KUWAIT	Y
LEBANON	N
LIBYA	Y
OMAN	Y
QATAR	Y
SAUDI ARABIA	Y
SUDAN	Y
SYRIAN ARAB REPUBLIC	N
UNITED ARAB EMIRATES	Y
YEMEN	Y

Table B0-AMET 3-2

Volcanic Ash Advisory Centers

EXPLANATION OF THE TABLE

Column

- 1 Name of the State responsible for the provision of a volcanic ash advisory centre (VAAC)
- 2 Name of the VAAC
Note: The name is extracted from the ICAO Location Indicators (Doc 7910).
- 3 ICAO location indicator of the VAAC
- 4 Status of implementation of volcanic ash advisory information, where:
FC – Fully compliant
PC – Partially compliant
NC – Not compliant
- 5 Status of implementation of volcanic ash advisory information in graphical format, where:
FC – Fully compliant
PC – Partially compliant
NC – Not compliant

State	Volcanic Ash Advisory Centre (VAAC)	ICAO Location Indicator	Status of Implementation	
			VAA	VAG
1	2	3	4	5
FRANCE	Toulouse	LFPW	FC	FC

Table B0-AMET 3-3

Tropical Cyclone Advisory Centers

EXPLANATION OF THE TABLE

Column

- 1 Name of the State responsible for the provision of a tropical cyclone advisory centre (TCAC)
- 2 Name of the TCAC
Note: The name is extracted from the ICAO Location Indicators (Doc 7910).
- 3 ICAO location indicator of the TCAC
- 4 Status of implementation of tropical cyclone advisory information, where:
FC – Fully compliant
PC – Partially compliant
NC – Not compliant
- 5 Status of implementation of tropical cyclone advisory information in graphical format, where:
FC – Fully compliant
PC – Partially compliant
NC – Not compliant

State	Tropical Cyclone Advisory Centre (TCAC)	ICAO Location Indicator	Status of Implementation	
			TCA	TCG
1	2	3	4	5
INDIA	New Delhi	VIDP	FC	FC

Table B0-AMET 3-4

Quality Management System

EXPLANATION OF THE TABLE

Column

- 1 Name of the State
 2, 3, 4, Status of implementation of Quality Management System of meteorological information –
 5 QMS: not started/ planning, ongoing/ partially implemented, Implemented/ISO 9001 Certified, Date of Certification.
 6 Action Plan
 7 Remarks

State	Not started/ planning	Ongoing/ partially implemented	Implemented/ ISO 9001 Certified		Action Plan	Remarks
			Status	Date of Certification		
1	2	3	4	5	6	7
BAHARAIN			√	2008		
EGYPT			√	23 May 2012		
IRAN, ISLAMIC REPUBLIC OF			√	Oct 2015		
IRAQ	√				No Action Plan	
JORDAN			√	2 Apr 2014		
KUWAIT			√	23 Aug 2013		
LEBANON	√				No Action Plan	
LIBYA	√				No Action Plan	
OMAN		√			TBD	
QATAR			√	Dec 2011		
SAUDI ARABIA			√	Aug 2014		
SUDAN			√	5 June 2014		
SYRIAN ARAB REPUBLIC	√				No Action Plan	
UNITED ARAB EMIRATES			√	19 Dec 2012		
YEMEN	√				No Action Plan	

Draft Table B0-AMET 3-5

SIGMET Availability

EXPLANATION OF THE TABLE

Column

- 1 ICAO Doc 7910 Name of the FIR, CTA or UIR
- 2 Status of implementation of SIGMET, where:
Y – Yes, implemented (at least one SIGMET received within a 5 month monitoring period)
N – No, not implemented (no SIGMET received within a 5 month monitoring period)
- 3 Status of implementation of SIGMET format, where:
Y – Yes, implemented (at least 95% of received SIGMET messages reveal the correct format (TTAAii CCCC in accordance to the MID SIGMET Guide; ATSU, MWO, FIR and FIR name in accordance to ICAO Doc 7910) for the first two lines of SIGMET)
N – No, not implemented (less than 95% of received SIGMET messages reveal the correct format for the first two lines of SIGMET)
- 4 Remarks

FIR, CTA, UIR	Implementation		Remarks
	SIGMET	Format of SIGMET	
1	2	3	4
AMMAN (OJAC)	N	N	
BAGHDAD (ORBB)	Y	Y	Verify the header for Iraq is WSIQ01 ORBI for FIR ORBB – if so, update to MID Doc 009 needed
BAHRAIN (OBBB)	Y	Y	
BEIRUT (OLBB)	Y	Y	
CAIRO (HECC)	Y	Y	
DAMASCUS (OSTT)	N	N	
EMIRATES (OMAE)	Y	N	Guidance uses WMO codes for countries – UAE is ER; use header WSER31 OMAA (not WSAE20 OMAA)
JEDDAH (OEJD)	Y	Y	
KHARTOUM (HSSS)	Y	Y	
KUWAIT (OKAC)	Y	Y	
MUSCAT (OOMM)	Y	Y	
SANA A (OYSC)	N	N	
TEHRAN (OIIX)	Y	Y	
TRIPOLI (HLLL)	Y	N	FIR code to use not certain (HLMC in regional)

FIR, CTA, UIR	Implementation		Remarks
	SIGMET	Format of SIGMET	
1	2	3	4
			guidance; HLLL received in monitoring and on ICAO gallery; both are not in ICAO Doc 7910)

APPENDIX E

MID ANP Volume I (MET PART)

eANP proposed changes related to SADIS:

- update paragraph 2.1 of Volume I, Part V (MET) of eANP:
 - In the MID Region, WAFC London has been designated as the centre for the operation of the aeronautical fixed service ~~satellite distribution system / WAFS Internet File Service (SADIS and/or WIFS) and the Internet-based Secure SADIS FTP service~~ **Secure Aviation Data Information Service (SADIS)**. The status of implementation of SADIS/~~WIFS~~ by States in the MID Region is detailed in Volume III.

- update paragraph 2.2 of Volume I, Part V (MET) of eANP:
 - In the MID Region, WAFS products in digital form should be disseminated by WAFC London using the ~~SADIS 2G satellite broadcast and the Secure SADIS FTP service and/or WIFS~~ **Secure Aviation Data Information Service (SADIS)**.

APPENDIX F

MID ANP, VOLUME II (MET and CNS PARTS)

eANP proposed changes related to SADIS:

- update paragraph 2.1 b) of Volume II, Part III (CNS) of eANP:
 - meteorological operational circuits, networks and broadcast systems, including World Area Forecast System – Internet File Service (WIFS) and/or ~~Satellite Distribution System for Information Relating to Air Navigation~~ Secure Aviation Data Information Service (SADIS);

eANP proposed changes related to ROC:

- update paragraph 2.8 of Volume II, Part V (MET) of eANP:
 - Operational meteorological information prepared as METAR, SPECI and TAF for aerodromes indicated in [Table MET II-2](#), and SIGMET messages prepared for flight information regions or control areas indicated in [Table MET II-1](#), should be disseminated to the ~~international OPMET databanks~~ Regional OPMET Centres (ROC) designated for the MID Region (namely Jeddah and Bahrain (backup) Regional OPMET Centres), ~~and~~ The ROCs will take care of the further dissemination to the centre designated for the operation of the aeronautical fixed service ~~satellite distribution system (SADIS) and the Internet-based service (Secure SADIS-FTP)~~ Secure Aviation Data Information Service (SADIS) ~~and/or WIFS~~ in the MID Region. The data will be forwarded to other international databanks and to the WIFS Provider State in accordance with regional OPMET data exchange schemes.

eANP proposed changes related to half-hourly METAR requirements:

- update paragraph 2.2 of Volume II, Part V (MET) of eANP (reference **MSG Conclusion 5/12** which was derived and adapted from **MET SG Draft Conclusion 6/4**):
 - In the MID Region, routine observations, issued as a METAR ~~as indicated in Table MET II-2~~, should be made throughout the 24 hours of each day at intervals of one hour or, ~~for RS and AS designated aerodromes¹~~, at intervals of one half-hour ~~where warranted using criteria such as number of operations at an aerodrome, frequency of weather change and use of METAR in VOLMET~~ ~~at aerodromes as indicated in Table MET II-2~~. For aerodromes included on the VHF VOLMET broadcast as indicated in Table MET II-3, routine observations, issued as METAR, should be made throughout the 24 hours of each day.