International Civil Aviation Organization

MIDANPIRG Air Traffic Management Sub-Group

Eighth Meeting (ATM SG/8)
(Amman, Jordan, 7 – 10 November 2022)

Agenda Item 5: **MID Air Navigation Strategy**

MID AIR NAVIGATION STRATEGY PRIORITIES RELATED TO ATM/SAR

(Presented by the Secretariate)

SUMMARY
The objective of this working paper is to review and update the status of implementation of the priority 1 ASBU Threads/Elements relevant to ATM/SAR; as well as the MID Key Performance Indicators (KPIs 01, 02, 13 &14) at National level.
Action by the meeting is at paragraph 3.

REFERENCE(S)
- MID Doc 002: MID Region Air Navigation Strategy (edition Feb, 2021)
- MIDANPIRG/19 and RASG-MID/9 Meetings Report (Riyadh, Saudi Arabia, 14 - 17 February 2022)
- MID Air Navigation Report 2021

1. **INTRODUCTION**

1.1 The meeting may wish to recall MIDANPIRG Conclusions 18/11 and 18/12 related to ANS performance and Monitoring, and the revised MID Air Navigation Strategy including the initial list of MID Region Air navigation KPIs, respectively.

MIDANPIRG CONCLUSION 18/11: *ANS PERFORMANCE MONITORING*

That, in order to optimize allocation and use of resources in the modernization of the air navigation system, States:

a) be urged to:

> *i. embrace a performance based approach in line with the 6th Edition of the Global Air Navigation Plan and the six-step performance management process, as described in the Manual on Global Performance of the Air Navigation System (Doc 9883);*

> *ii. follow-up a phased approach in the performance monitoring of their air navigation system using as an initial phase the list of KPIs at Appendix 5.2C; and*

   iii. *provide ICAO with the results of the KPIs monitoring for the agreed period, as part of the data necessary for the development of the Annual Air Navigation Report, starting with the Report for 2021.*

  b) *be encouraged to start as soon as possible, on an experimental basis, to establish the necessary processes, procedures and systems for the collection of necessary data to measure the selected KPIs.*

  MIDANPIRG CONCLUSION 18/12:   *REVISED MID AIR NAVIGATION STRATEGY*

  That, the Revised MID Region Air Navigation Strategy (ICAO MID Doc 002) is endorsed and be published on the ICAO MID Office website.

1.2 The MIDANPIRG/19 meeting reviewed and endorsed the Web-based MID Air Navigation Report (2021) through the following Conclusion:

  MIDANPIRG CONCLUSION 19/5:   *WEB-BASED MID AIR NAVIGATION REPORT (2021)*

  That, the Web-based MID Air Navigation Report (2021) is endorsed.

1.3 The meeting may also wish to recall MIDANPIRG Conclusion 19/6 related to Air Navigation report 2022:

  MIDANPIRG CONCLUSION 19/6:   *WEB-BASED MID REGION AIR NAVIGATION REPORT (2022)*

  That,

  a) *States be urged to provide the ICAO MID Office with:*

   i) relevant data necessary for the development of the MID Region Air Navigation Report (2022) (Status of ASBU Implementation), by 1 December 2022;

   ii) the data necessary for the measurement of the KPIs (01, 02, 13 and 14) for the period June & July 2022, by the 1 October 2022; and

  b) *the MID Air Navigation Report (2022) be presented to the MIDANPIRG/20 for endorsement.*

2. DISCUSSION

ASBU THREAD/ELEMENTS

2.1 The MID Region Air Navigation Strategy edition Feb 2021 is available at: https://www.icao.int/MID/Doc002.

2.2 According to Air Navigation Report 2021, the status of implementation of the Priority 1 Thread/Elements related to ATM/SAR are reflected to **Appendix A**

2.3 As a follow-up to Conclusion 19/6, ICAO MID Office issued SL AN 1/7 – 22/116 dated 6 June 2022 and requested States to provide the necessary data for the measuring of KPIs (01, 02, 13 and 14) by the 1 October 2022.

2.4   ICAO MID Office analyzed the received data at **Appendix B**; the following is to be highlighted:

    a.   The total number of MID States that provided data is seven (3 out of 15), representing 20% (Bahrin, Saudi Arabia and UAE).

    b.   The data covered six (6) out of 57 aerodromes international aerodromes, representing 10.5% (OBBI, OEDF, OEJN, OEMA, OERK and OMDB).

    c.   _KPI 01 Regional Departure punctuality:_ The States' reports show the percentage of departure punctuality in Bahrain: 79.55%, Saudi Arabia: 82.69% and UAE: 67.64%.
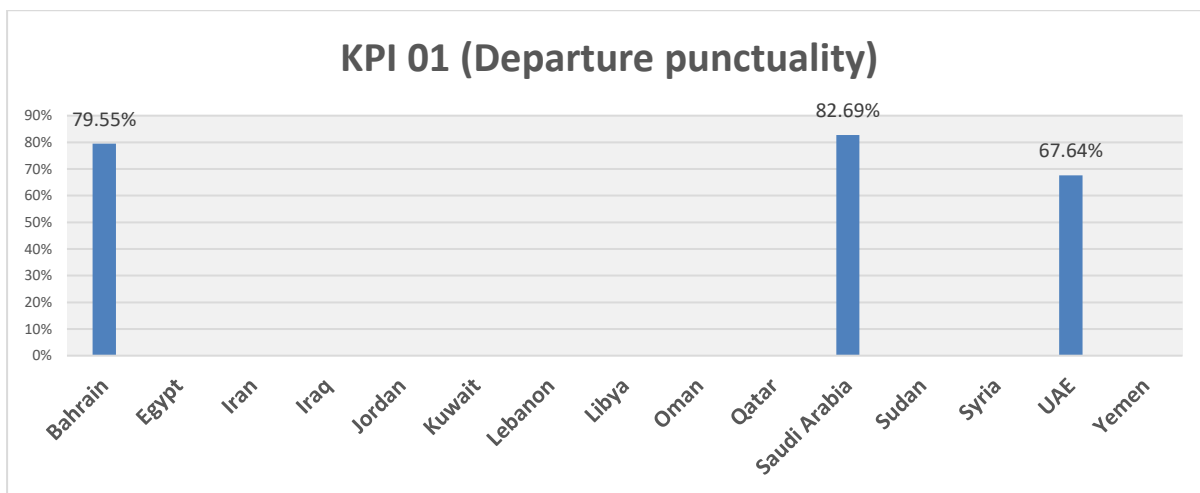
Graph 1 – MID States KPI 01- Departure Punctuality-National level

    d.   _KPI 14 Regional Arrival punctuality:_ the State's reports show the percentage of arrival punctuality in Bahrain: 46.51%, Saudi Arabia: 24.20% and UAE: 50.55%.
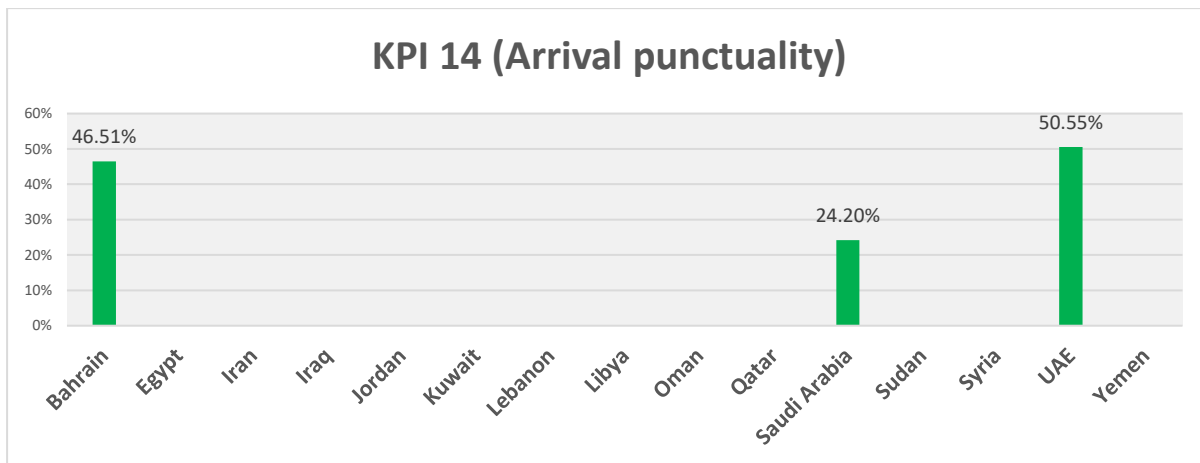
Graph 2 – MID States KPI 14- Arrival Punctuality-National level

    e.   _KPI 02 Regional Taxi-out Additional Time:_ the State's reports show the average Taxi-out Additional Time is in Bahrain: 1.01, Saudi Arabia: 12.78 and UAE: 2.66 minutes per flight.

KPI 02 (Taxi-out Additional Time)

Graph 3 – MID States KPI 02- Taxi-out Additional Time- National level

   f. *KPI 13 Regional Taxi-in Additional Time:* the State's reports show the average Taxi-in Additional Time is in Bahrain: 0.33, Saudi Arabia: 7.13 and UAE: 1.16 minutes per flight.

KPI 13 (Taxi-in Additional Time)

Graph 4 – MID States KPI 13 Taxi - in Additional Time-National level

2.5   Based on the above, the results of KPIs (01, 02, 13 & 14) at National level is summarized in the table below:

States	KPI 01 Dep punctuality		KPI 14 ARR punctuality		KPI 02 Taxi-out Additional Time		KPI 13 Taxi - in Additional Time	
	ICAO	State	ICAO	State	ICAO	State	ICAO	State
Bahrain	79.55%	79.55%	46.51%	46.51%	1.01	1.01	0.33	0.33
Egypt	-	-	-	-	-	-	-	-
Iran	-	-	-	-	-	-	-	-
Iraq	-	-	-	-	-	-	-	-
Jordan	-	-	-	-	-	-	-	-
Kuwait	-	-	-	-	-	-	-	-

Lebanon	-	-	-	-	-	-	-	-
Libya	-	-	-	-	-	-	-	-
Oman	-	-	-	-	-	-	-	-
Qatar	-	-	-	-	-	-	-	-
Saudi Arabia	82.69%	-	24.20%	-	12.78	-	7.13	-
Sudan	-	-	-	-	-	-	-	-
Syria	-	-	-	-	-	-	-	-
UAE	67.64%	67.64%	50.55%	50.55%	2.66	2.66	1.16	1.16
Yemen	-	-	-	-	-	-	-	-

3.   ACTION BY THE MEETING

3.1   The meeting is invited to:

a) review and update the status of implementation of the Priority 1 ASBU Threads/Elements relevant to ATM/SAR, in **Appendix A**;

b) urge States to provide the necessary data required for the development of the MID Air Navigation Report-2022, before **1 December 2022**;

c) review the status of the MID Key Performance Indicators (KPIs 01, 02, 13 & 14) at National level at **Appendix B**; and

d) urge States, that have not yet done so, to provide the MID Office with the required data related to the measurement of the KPIs 01, 02, 13 and 14, including the traffic figures related to the months of June and July 2022 (Departures and Arrivals).

MONITORING THE IMPLEMENTATION OF THE PRIORITY 1 ASBU RELATED ATM/SAR THREADS/ELEMENTS

100%	More than 50% but less than 100%	Less than 50%	Not applicable	No information

	Element	Applicability	Targets	Timelines	Status
APTA B0/1	PBN Approaches (with basic capabilities)	All RWYs ENDs at International Aerodromes	100%	Dec 2017	Bahrain (green); Egypt (yellow); Iran (yellow); Iraq (yellow); Jordan (light green); Kuwait (green); Lebanon (red); Libya (red); Oman (green); Qatar (green); Saudi Arabia (green); Sudan (green); Syria (yellow); UAE (green); Yemen (yellow); Below target (orange)
APTA B0/2	PBN SID and STAR procedures (with basic capabilities)	All RWYs ENDs at International Aerodromes	70%	Dec 2022	Bahrain (yellow); Egypt (yellow); Iran (yellow); Iraq (yellow); Jordan (green); Kuwait (green); Lebanon (light green); Libya (red); Oman (green); Qatar (green); Saudi Arabia (green); Sudan (light green); Syria (red); UAE (green); Yemen (yellow)
APTA B0/4	CDO (Basic)	OBBI, OIIE, OIKB, OIFM, OJAI, OLBA, OOMS, OTHH, OTBD, OEJN, OEMA, OEDF, OERK, HSSS, HSPN, OMAA, OMAL, OMAD, OMDW, OMDB, OMSJ, OMRK and OMFJ	100%	Dec 2021	Bahrain (green); Egypt (no info); Iran (red); Iraq (no info); Jordan (red); Kuwait (no info); Lebanon (red); Libya (no info); Oman (red); Qatar (green); Saudi Arabia (green); Sudan (no info); Syria (no info); UAE (green); Yemen (no info); Below target (orange)
APTA B0/5	CCO (Basic)	OBBI, OIIE, OIKB, OIFM,	100%	Dec 2021	Bahrain (green); Egypt (no info); Iran (red)

					Status by State
		OJAI, OLBA, OOMS, OTHH, OTBD, OEJN, OEMA, OEDF, OERK, HSSS, HSPN, OMAA, OMAL, OMAD, OMDW, OMDB, OMSJ, OMRK and OMFJ			Iraq; Jordan (red); Kuwait; Lebanon (red); Libya; Oman (red); Qatar (green); Saudi Arabia (green); Sudan; Syria; UAE (green); Yemen; Below target (orange)
APTA B0/7	Performance based aerodrome operating minima – Advanced aircraft	All States	50%	Dec 2021	Bahrain (green); Egypt (green); Iran (green); Iraq (red); Jordan (green); Kuwait (red); Lebanon (green); Libya (green); Oman (green); Qatar (green); Saudi Arabia (green); Sudan (red); Syria (red); UAE (green); Yemen (green); Above target
FRTO B0/2	Airspace planning and Flexible Use of Airspace (FUA)	Bahrain, Egypt, Jordan, Qatar, Saudi Arabia (2 ACCs), Sudan, UAE	50%	Dec 2022	Bahrain (green); Egypt (red); Iran (grey); Iraq (grey); Jordan (red); Kuwait (grey); Lebanon (grey); Libya (grey); Oman (grey); Qatar (green); Saudi Arabia (green); Sudan; Syria (grey); UAE (green); Yemen (grey)
FRTO B0/4	Basic conflict detection and conformance monitoring	Bahrain, Egypt, Iran, Iraq, Jordan, Kuwait, Lebanon, Oman, Qatar, Saudi Arabia (2 ACCs), Sudan, UAE	70%	Dec 2021	Bahrain (green); Egypt (green); Iran; Iraq; Jordan (green); Kuwait; Lebanon; Libya (grey); Oman (green); Qatar (green); Saudi Arabia (green); Sudan

					Syria
					UAE
					Yemen
NOPS B0/1	Initial integration of collaborative airspace management with air traffic flow management	Bahrain, Egypt, Iran, Iraq, Jordan, Kuwait, Lebanon, Oman, Qatar, Saudi Arabia, Sudan, UAE	50%	Dec 2022	Bahrain
					Egypt
					Iran
					Iraq
					Jordan
					Kuwait
					Lebanon
					Libya
					Oman
					Qatar
					Saudi Arabia
					Sudan
					Syria
					UAE
					Yemen
SNET B0/1	Short Term Conflict Alert (STCA)	Bahrain, Egypt, Iran, Iraq, Jordan, Kuwait, Lebanon, Oman, Qatar, Saudi Arabia, Sudan, UAE	80%	Dec 2018	Bahrain
					Egypt
					Iran
					Iraq
					Jordan
					Kuwait
					Lebanon
					Libya
					Oman
					Qatar
					Saudi Arabia
					Sudan
					Syria
					UAE
					Yemen
SNET B0/2	Minimum Safe Altitude Warning (MSAW)	Bahrain, Egypt, Iran, Iraq, Jordan, Kuwait, Lebanon, Oman, Qatar, Saudi Arabia, Sudan, Syria, UAE	80%	Dec 2018	Bahrain
					Egypt
					Iran
					Iraq
					Jordan
					Kuwait
					Lebanon
					Libya
					Oman
					Qatar
					Saudi Arabia
					Sudan
					Syria
					UAE
					Yemen
SNET B0/3	Area Proximity Warning (APW)	Bahrain, Egypt, Iran, Iraq, Kuwait, Jordan, Lebanon, Oman,	70%	Dec 2021	Bahrain
					Egypt
					Iran
					Iraq
					Jordan

		Qatar, Saudi Arabia, Sudan, UAE			Kuwait
					Lebanon
					Libya
					Oman
					Qatar
					Saudi Arabia
					Sudan
					Syria
					UAE
					Yemen
GADS B1/2	Contact directory service	All States	100%	Dec 2021	Bahrain
					Egypt
					Iran
					Iraq
					Jordan
					Kuwait
					Lebanon
					Libya
					Oman
					Qatar
					Saudi Arabia
					Sudan
					Syria
					UAE
					Yemen
					Below target
RSEQ B0/1	Arrival Management	OBBI, HECA, HEBA, HELX, HESN, HESH, OTBD, OTHH, OEJN, OEDF, OEMA, OERK OMDB, OMAA	80%	Dec 2022	Bahrain
					Egypt
					Iran
					Iraq
					Jordan
					Kuwait
					Lebanon
					Libya
					Oman
					Qatar
					Saudi Arabia
					Sudan
					Syria
					UAE
					Yemen
					Average 84%