International Civil Aviation Organization

MIDANPIRG Air Traffic Management Sub-Group

Ninth Meeting (ATM SG/9)
(Sharm El Sheikh, Egypt, 14 – 16 November 2023)

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

MID AIR NAVIGATION STRATEGY PRIORITIES AND TARGETS
RELATED TO ATM/SAR

(Presented by the Secretariat)

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.
Action by the meeting is at paragraph 3.
REFERENCE(S)
- MID Doc 002: MID Region Air Navigation Strategy - MID ANP Volume III - MIDANPIRG/20 & RASG-MID/10 report (Muscat, Oman, 14 – 17 May 2023) - MID Air Navigation Report 2022 - GANP & NANP workshop (Cairo, Egypt, 5-8 March 2023)

1. **INTRODUCTION**

1.1 The Global Air Navigation Plan (Doc 9750) is the ICAO's highest air navigation strategic document and the plan to drive the evolution of the global air navigation system, in line with the Global Air Traffic Management Operational Concept (GATMOC, Doc 9854) and the Manual on Air Traffic Management System Requirements (Doc 9882). Developed in collaboration with and for the benefit of stakeholders, the GANP is a key contributor to the achievement of ICAO's Strategic Objectives and has an important role to play in supporting the United Nations 2030 Agenda for Sustainable Development.

1.2 MID Air Navigation Plan, Volume III contains dynamic/flexible plan elements related to the application of a performance-based approach for a cost-effective and benefit-driven modernization of the air navigation system in line with the Global Air Navigation Plan (GANP).

1.3 ICAO introduced the Aviation System Block Upgrades (ASBU) framework as a systemic manner to achieve a harmonized implementation of the air navigation services. An ASBU designates a set of improvements that can be implemented globally from a defined point in time to enhance the performance of the ATM system.

1.4　　　　In accordance, with the Resolutions of the 40th Session of the ICAO Assembly, particularly Resolution A40-1 "ICAO global planning for safety and air navigation", the ICAO Assembly urged States and PIRGs to utilize the guidance provided in the GANP for planning and implementation activities which establish priorities, targets and indicators consistent with globally harmonized objectives, taking into account operational needs. In response to this, the MID Region developed the MID Region Air Navigation Strategy – Part 1, which is aligned with the GANP 7th Edition and ASBU Framework.

1.5　　　　The meeting may wish to recall MIDANPIRG/18 meeting 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.

1.6　　　　The meeting may also wish to recall MIDANPIRG/19 meeting 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

GANP – NANP WORKSHOP AND OUTCOMES

2.1　　　　The meeting may wish to note that the ICAO MID Workshop on the Global Air Navigation Plan and National Air Navigation Plan (GANP & NANP) was successfully held in the ICAO Middle East Office in Cairo, Egypt, 5 – 8 March 2023. The meeting was provided with the highlights of the seventh edition of the GANP 7th edition which encompassed minor updates. Also, this workshop reviewed and updated the MID ANP Volume III and MID Region Air Navigation Strategy (ICAO MID Doc 002).

2.2　　　　Accordingly, the MIDANPIRG/20 meeting was apprised of the revised version of the MID Region ANP Volume III and MID Air Navigation Strategy (ICAO MID Doc 002) and agreed to the following MIDANPIRG Conclusions:

> *MIDANPIRG CONCLUSION 20/7:*　　*REVISED MID AIR NAVIGATION STRATEGY*
>
> *That, the Revised MID Air Navigation Strategy (Doc 002) is endorsed and be published by the ICAO MID Office.*
>
> *MIDANPIRG CONCLUSION 20/8:*　　*REVISED MID ANP VOL III*
>
> *That, the Revised MID ANP Vol III is endorsed and be published by the ICAO MID Office.*

2.3   The MID Region Air Navigation Strategy edition March 2023 is available at: MID Doc 002 - MID Air Navigation Strategy - March 23.pdf (icao.int).

2.4   Also, the MID Region Air Navigation plan new update is available at: MID eANP VOL III.pdf (icao.int).

DEVELOPMENT OF MID STATES NATIONAL AIR NAVIGATION PLAN

2.5   The MIDANPIRG/20 meeting urged States to expedite implementation of the performance-based approach and develop their National Air Navigation Plan (NANP). Accordingly, the meeting had agreed to the following MIDANPIRG Conclusion:

>   *MIDANPIRG CONCLUSION 20/9:   DEVELOPMENT OF NANP*
>
>   *That, in order to enable prioritization and optimum allocation of resources for all planned projects within States:*
>
>   *a) States be urged to develop NANP based on a performance-based approach and the six-step performance management process six-step performance management process described in the Manual on Global Performance of the Air Navigation System (Doc 9883) and the Revised MID Air Navigation Strategy (Doc 002); and*
>
>   *b) ICAO MID to conduct assistance missions/Workshops at National level on GANP/NANP in 2023-2024.*

2.6   Accordingly, the ICAO MID Office carried out a multidisciplinary Air Navigation services State mission to Kuwait from 28 May to 1 June 2023 to provide assistance and guidance related to the implementation of several ANS Aspects in accordance with regional requirements and plans and support the development of National Air Navigation Plan (NANP) for Kuwait.

2.7   The meeting may wish to note that Kuwait National Air Navigation Plan (KNANP) was developed based on these activities, as well as further follow up and actions have been carried out by Kuwait Civil Aviation Authority.

AIR NAVIGATION REPORT 2022

2.8   The MIDANPIRG/20 meeting noted that the Web-based MID Air Navigation Report for 2022 has been developed to increase users' engagement, improve information accessibility and increase visibility. The link to the web-based report is icao.int/MIDANReport/Pages/ANReport2022-Main.aspx.

2.9   According to the Air Navigation Report 2022, the status of implementation of the Priority 1 Thread/Elements related to ATM/SAR are reflected to **Appendix A.**

DEVELOPMENT OF AIR NAVIGATION REPORT 2023

2.10   The meeting may wish to recall MIDANPIRG/20 meeting Conclusion 20/11, urging States to provide the ICAO MID Office, with relevant data necessary for the development of the MID Region Air Navigation Report (2023).

MIDANPIRG CONCLUSION 20/11:   *WEB-BASED MID REGION AIR NAVIGATION REPORT (2023)*

That,

a) *States be invited to provide the ICAO MID Office with the following data for the development of the MID Region Air Navigation Report (2023) by 1 December 2023:*

     i. *Status of ASBU Implementation; and*

     ii. *States' implementation of the Performance Based approach using the agreed Template as at Appendix 6.1A; and*

b) *the MID Air Navigation Report (2023) be presented to the MIDANPIRG/21 for endorsement.*

2.11   Based on the above, the meeting is requested to provide feedback regarding the following subjects to the ICAO MID Office not later than 15 December 2023, for the development of the MID Air Navigation Report-2023:

a) ASBU implementation status data and update;

b) State performance monitoring KPIs based on 6 steps approach in the MID ANP Vol III endorsed by MIDANPIRG 20;

c) States successful story; and

d) Development of State's National Air Navigation Plan (NANP) based on the outcomes on GANP/NANP workshop and MID ANP Vol III endorsed by MIDANPIRG 20.

3. ACTION BY THE MEETING

3.1   The meeting is invited to:

a) urge MID States to expedite implementation of the performance-based approach and develop their National Air Navigation Plan with support from ICAO MID Office;

b) request Kuwait Civil Aviation Authority to share its experience and lessons learned with other MID States to develop their national plan;

c) urge States to provide the necessary data required for the development of the MID Air Navigation Report-2023 in para 2.11, before **15 December 2023**.

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

As reported by States in September 2023

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 Egypt Iran Iraq Jordan Kuwait Lebanon Libya Oman Qatar Saudi Arabia Sudan Syria UAE Yemen Average 57%, below target
APTA B0/2	PBN SID and STAR procedures (with basic capabilities)	All RWYs ENDs at International Aerodromes	70%	Dec 2022	Bahrain Egypt Iran Iraq Jordan Kuwait Lebanon Libya Oman Qatar Saudi Arabia Sudan Syria UAE Yemen Average 55%, below target
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 Egypt Iran Iraq Jordan Kuwait Lebanon Libya Oman Qatar Saudi Arabia Sudan Syria UAE Yemen Average 44%, below target

APTA B0/5	CCO (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
					Egypt
					Iran
					Iraq
					Jordan
					Kuwait
					Lebanon
					Libya
					Oman
					Qatar
					Saudi Arabia
					Sudan
					Syria
					UAE
					Yemen
					Average 44%, below target
APTA B0/7	Performance based aerodrome operating minima – Advanced aircraft	All States	50%	Dec 2021	Bahrain
					Egypt
					Iran
					Iraq
					Jordan
					Kuwait
					Lebanon
					Libya
					Oman
					Qatar
					Saudi Arabia
					Sudan
					Syria
					UAE
					Yemen
					Average 42%, below 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
					Egypt
					Iran
					Iraq
					Jordan
					Kuwait
					Lebanon
					Libya
					Oman
					Qatar
					Saudi Arabia
					Sudan
					Syria
					UAE
					Yemen
					Average 57%, below target
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
					Egypt
					Iran
					Iraq
					Jordan
					Kuwait
					Lebanon
					Libya
					Oman

					Qatar
					Saudi Arabia
					Sudan
					Syria
					UAE
					Yemen
					Average 60%, below target
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
					Average 41.6%, below target
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
					Average 100%, above target
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
					Average 91.6%, above target
SNET	Area Proximity		70%	Dec 2021	Bahrain
					Egypt

B0/3	Warning (APW)	Bahrain, Egypt, Iran, Iraq, Kuwait, Jordan, Lebanon, Oman, Qatar, Saudi Arabia, Sudan, UAE			Iran
					Iraq
					Jordan
					Kuwait
					Lebanon
					Libya
					Oman
					Qatar
					Saudi Arabia
					Sudan
					Syria
					UAE
					Yemen
					Average 62.5%, below target
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
					Average 73%, 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 35.7%, below target