



International Civil Aviation Organization

MIDANPIRG Air Traffic Management Sub-Group

Tenth Meeting (ATM SG/10)
(Jeddah, Saudi Arabia, 20 – 23 October 2024)

Agenda Item 4: MID Air Navigation Priorities and Targets related to ATM/SAR

ASBU THREADS AND ELEMENTS RELEVANT TO ATM/SAR

(Presented by the Secretariat)

SUMMARY

This paper presents proposals for modifying the applicability area, incorporating additional elements into MID Priority 1, and establishing Key Performance Indicators (KPIs) to track advancements and evaluate the effects of implementing ASBU threads/elements within the domains ATM/SAR.

Action by the meeting is at paragraph 3.

REFERENCES

- GANP 7th edition
- MID Air Navigation Strategy Plan (ICAO MID Doc 002)
- MID ANP Volume III
- First Meeting RANP/NANP TF/1 (Cairo, Egypt, 19 – 22 February 2024)
- MIDANPIRG/21 & RASG-MID/11 (Abu Dhabi, UAE, 4 – 8 March 2024)

1. INTRODUCTION

1.1 The Assembly, through Resolution A41-6, endorsed the 2023-2025 edition of the Global Air Navigation Plan (GANP) as the global strategic directions for safety and the evolution of the air navigation system.

1.2 Furthermore, the Assembly 41 resolved that these global plans shall provide the frameworks in which regional, sub-regional and national plans will be developed and implemented, thus ensuring consistency, harmonization and coordination of efforts aimed at improving international civil aviation safety, capacity and efficiency.

1.3 The ICAO MID Office organized a RANP/NANP TF/1 (19-22 February 2024, Cairo, Egypt) which was attended by 55 participants from 10 States and 2 international organizations. The meeting unanimously elected Mr. Nasser Al-Khalaf, Air Traffic Controller & ANS Advisor, Qatar Civil Aviation Authority (QCAA) as the Chairperson and Mr. Abdullah M. Albathi, Director of Air Navigation Safety Systems, Saudi Arabia General Authority of Civil Aviation Authority (GACA), as the Vice Chairperson of the RANP/NANP TF.

1.4 The meeting may wish to note that the MID Region Air Navigation Strategy (ICAO MID Doc 002, Edition March 2024) and MID ANP Volume III (Edition March 2023) respectively endorsed by MIDANPIRG through Conclusion 21/2 and Conclusion 20/8.

2. DISCUSSION

2.1 The meeting may wish to recall MIDANPIRG/21 discussion regarding the need for the MIDANPIRG subsidiary body to allocate enough time in their agenda for the detailed discussion of the ASBU Threads relevant to their technical areas, including the identification of priorities, definition of applicability areas, performance indicators, metrics, targets, etc. Accordingly, based on the outcomes of the ASM WG/1 meeting and further review by the Secretariate, the following changes are proposed to ANP Volume III and ICAO MID Doc 002:

a) New elements:

i. *FRTO B0/1: Direct routing (DCT);*

Direct routings (DCTs) are established at national and regional levels and made available for flight planning (with published conditions of use). DCTs should be considered as an early iteration of the Free Route Airspace (FRA) concept. Direct routing operations allow airspace users to optimize flight and fuel planning.

ii. *FRTO B0/3: Pre-validated and coordinated ATS routes to support flight and flow;*

A collection of routes that have been pre-validated and coordinated with impacted air route traffic control centers and airspace users. There are many instances when ATC needs to move air traffic away from, or into, a particular area of airspace. When this happens, traffic managers will typically implement reroutes – a common route, or set of routes, that they want aircraft to use in a particular area. These routes are predetermined and applied to the certain sector/airport accordingly. Routes are available through ANSP database and are published for the airspace users.

iii. *FRTO-B0/4: Basic conflict detection and conformance monitoring;*

Deployment of basic conflict detection tools (Medium Term Conflict Detection Tool-MTCD) and conformance monitoring warnings. MTCD assists the controller in conflict identification and planning tasks by providing automated early detection of potential conflicts, identifying aircraft constraining the resolution of a conflict or occupying a flight level requested by another aircraft.

iv. *FRTO B1/1: Free Route Airspace (FRA);*

FRA is a specified volume of airspace within which users may freely plan a route between a defined entry point and a defined exit point, with the possibility to route via intermediate (published or unpublished) waypoints, without reference to the ATS route network, subject to airspace availability. Within this airspace, flights remain subject to air traffic control.

v. *FRTO B1/4: Dynamic sectorization;*

Dynamically adapt ATC sectorization to respond to traffic demand without increasing the number of controllers working position in use.

vi. *NOPS B1/6: Initial Dynamic Airspace configurations;*

Short Term ATFM Measures (STAM) intends to smooth sector workloads by reducing traffic peaks through short-term applications of minor ground delays, appropriate flight level capping, timing and modalities of ATC re-sectorisation. These measures are capable of reducing the traffic complexity for ATC with minimum curtailing impact on the airspace users.

b) New KPIs:

i. *KPI 04: Filed flight plan en-route extension;*

This KPI measures the en-route horizontal flight (in)efficiency contained in a set of filed flight plans crossing an airspace volume. Its value is influenced by route network design, route & airspace availability, airspace user choice.

ii. *MID Region KPI: Reduction of longitudinal separation in En-route;*

To monitor the progress of MIDANPIRG Conclusion 13/5 regarding implementation of reduce longitudinal separation.

c) Change in applicability areas:

- i. *FFICE B0/1 (Automated basic inter facility data exchange (AIDC))*: new applicability area is required to develop based on criteria proposed in WP/6;
- ii. *FRT0 B0/2 (Airspace planning and Flexible Use of Airspace (FUA))*: Iran, Iraq, Kuwait and Oman are proposed to add the current applicability area; and
- iii. *RSEQ B0/1 (Arrival Management)*: propose to remove HEBA, HELX, HESN and HESH from the current applicability area.

3. ACTION BY THE MEETING

3.1 The meeting is invited to review and agree on proposed Elements, KPIs and Applicability areas in para 2.1 to present RANP/NANP TF/2 Meeting.