



International Civil Aviation Organization

MIDANPIRG/21 & RASG-MID/11 Meetings

(Abu Dhabi, UAE, 4 – 8 March 2024)

Agenda Item 5.3: ANS (AIM, PBN, AGA-AOP, ATM-SAR, CNS and MET)

MID REGION AIRSPACE MANAGEMENT

(Presented by the Secretariat)

SUMMARY

This paper presents the necessity of establishment of MID Airspace Management Task Force to deal with pending tasks related to development of MID Region Airspace management and ATS route network structure.

Action by the meeting is at paragraph 3.

REFERENCE

- MIDANPIRG/20 and RASG-MID/10 Meetings Report (Muscat, Oman, 14 – 17 May 2023)
- MIDANPIRG/15 (Bahrain, 8-11 June 2015)
- ATM SG/9 (Sharm El Sheikh, Egypt, 14 – 16 November 2023)
- ICAO MID High Level Airspace Concept (MID Doc 004)

1. INTRODUCTION

1.1 An airspace concept provides the outline and intended framework of operations within an airspace. Airspace concepts are developed to satisfy explicit and implicit strategic objectives such as improved safety, demand monitoring, increased capacity and mitigation of environmental impact, etc. Airspace concepts include details of the practical organization of the airspace and its operations based on particular infrastructure assumptions, e.g. Airspace volume delineation, ATS route structure, applicable separation minima and route spacing, CNS equipment coverage and obstacle clearance.

1.2 The meeting may wish to recall that MIDANPIRG/15, in particular Conclusion 15/22 related to the enforcement of ICAO MID Doc 004 (High level Airspace Concept (HLAC):

CONCLUSION 15/22: MID REGION HIGH LEVEL AIRSPACE CONCEPT

That, the MID Region High Level Airspace Concept is endorsed as MID Doc 004.

1.3 The objective of this document is to consolidate the requirements related to airspace operations, navigation applications and CNS/ATM enablers agreed on by MIDANPIRG, in order to provide a generic set of characteristics to be applied by States, which would support the harmonization of the airspace operations in the MID Region. The 2nd version of MID Doc 004 available at [MID](#)

[REGION HIGH LEVEL AIRSPACE CONCEPT \(icao.int\)](https://www.icao.int).

1.4 Accordingly, MIDANPIRG/16 through Decision 16/17 agreed to establish the MID Route Development Working Group (MID RDWG) under the ATM Sub-Group to focus on route development in the Region, taking into consideration the inter-regional developments.

DECISIONS 16/17: MID ROUTE DEVELOPMENT WORKING GROUP (MID RDWG)

That,

- a) a MID Route Development Working Group be established to support the route development within the MID Region and at the interfaces with ICAO AFI, APAC and EUR Regions; and*
- b) the ATM SG develop the terms of reference of the MID RDWG.*

2. DISCUSSION

2.1 The following principles are highlighted in the High Level Airspace Concept:

Principle 1 – Safety

Principle 2 – Operational Performance

Principle 3 – Airspace Continuum

Principle 4 – Increase airspace capacity

Principle 5 – Collaborative Decision-Making process

Principle 6 – Ensure close relationship between airspace structure, ASM and ATFCM

Principle 7 – Continuous Development of MID Airspace

2.2 As consolidated in the ICAO MID Doc 004, so far, MIDANPIRG meetings endorsed the following Conclusions to meet the regional requirements.

a) Reduced surveillance longitudinal separation

CONCLUSION 13/5: IMPLEMENTATION OF REDUCED RADAR LONGITUDINAL SEPARATION IN THE MID REGION

That, States, that have not yet done so;

- i) be urged to implement the 20 NM radar longitudinal separation;*
- ii) be encouraged to further reduce the radar longitudinal separation within the MID Region to 10 NM, where appropriate; and*
- iii) be invited to agree with their neighboring FIRs/States on the date of implementation and updating of the LoAs;*

b) Performance Based Navigation (PBN) Implementation

CONCLUSION 12/9: RNAV 5 IMPLEMENTATION IN THE MID REGION

That, States that have not yet done so, be urged to:

- i. *update their AIP to change RNP 5 to RNAV 5; and*
 - ii. *take necessary measures to implement RNAV 5 area in the level band FL160 - FL460 (inclusive).*
- c) *Civil-Military cooperation, implementation of Flexible Use of Airspace (FUA) and Free route Airspace (FRA)*

MIDANPIRG DECISION 19/19: MID CMC/FUA ACTION GROUP

That,

- i. *the MID CMC/FUA Action Group develop region specific complementary procedures for ICAO Doc. 10088, in order to ensure that the regional requirements related to Civil Military Cooperation and implementation of FUA Concept are addressed, including State aircraft operations under Due Regard in particular over the high seas, are covered; and*
 - ii. *the outcome of the MID CMC/FUA AG, be presented to ATM SG/8 meeting, for review.*
- d) *MID ATS route network, catalogue and RDWG*

MIDANPIRG CONCLUSION 17/18: MID RDWG AND MID REGION ATS ROUTE CATALOGUE

That, States be urged to:

- i. *use the MID Route Development Working Group (MID RDWG) as the main platform to facilitate bilateral and multilateral coordination related to the improvement of the ATS Route Network and airspace management in the MID Region; and*
- ii. *review the MID Region ATS Route Catalogue and take actions related to the implementation of the ATS proposals relevant to their FIRs.*

2.3 In light of the above MIDANPIRG Conclusions, and based on MID top flows calculated by MIDRMA based on Traffic Data Sample (TDS) provided by MID States for the year 2023 and the restrictions of the current Letter of Agreement (LoA) between adjacent FIRs, the Secretariat with coordination of MIDANPIRG Chairperson have conducted further study on the MID Region Airspace structure (ATS route network, PBN implementation, establishment of parallel and direct ATS route, implementation of FUA & FRA, Longitudinal Separation minima, ATS route designator requirement and 5LNCs) to identify the status of the airspace optimization (capacity and efficiency), complexity and operational impact on environment. The result of this comprehensive study the following categorized outlines needs to improve:

- a) Demand and trend analysis;
- b) optimize airspace capacity through implementation of PBN, Civil and Military Cooperation, FUA, FRA and enhanced longitudinal separation;
- c) improvement of CNS structure at regional level to meet the requirement of regional demands and support main international flows;
- d) development of the Regional procedure to regulate and harmonize implementation of TOS, RAD and FLAS; and
- e) optimize usage of regional ATS route designators and 5LNC.

2.4 In line with the above-mentioned constant tasks that directly relate to airspace management, the meeting may wish to agree on the following Conclusions to establish “**MID Airspace Management Task Force**” to assist ATM SG to make required actions to deal with the aforementioned issues in the most harmonize and efficient manner to avoid duplication of effort in several Action Groups.

Why	To deal with the constant variety of task related to Airspace Management in most efficient and harmonized manner at regional level.
What	Establish MID Airspace Management Task Force (ASM TF)
Who	ICAO MID Office
When	2024

DRAFT MIDANPIRG DECISION 21/XX: MID ASM TASK FORCE

That,

- a) MID Airspace Management Task Force (ASM TF) be established to ensure the continuous development of airspace structure at regional level in the most efficient and harmonized manner;
- b) The ASM TF to elect Chairperson and develop Terms of Reference during the first meeting of MID ASM Task Force; and
- c) States support the MID ASM Task Force through:
 - i. assignment of Focal Point to contribute to the work of the Task Force; and
 - ii. sharing states’ experience and provision of required data in timely manner.

2.5 Accordingly, the secretariat is proposing to dissolve the Route Development Action Group.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) note the information presented in this paper, and
- b) agree on draft Decision on 2.4.