

International Civil Aviation Organization

## MIDANPIRG/22 & RASG-MID/12 Meetings

(Doha, Qatar, 4 - 8 May 2025)

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

COLLABORATIVE OPERATIONAL ENHANCEMENT INITIATIVE BETWEEN OMAN AND YEMEN FOR AIR NAVIGATION SERVICE IMPROVEMENT AND TRAFFIC FLOW OPTIMIZATION OVER HIGH SEAS BETWEEN MID AND AFI REGIONS

(Presented by the Sultanate of Oman and the Republic of Yemen)

### **SUMMARY**

This paper presents the outcome of the joint meeting that was hosted by Oman in Muscat on the 26-27th of February 2025, between Oman Civil Aviation authority (CAA) and the Yemen Civil Aviation & Metrology Authority (CAMA) to discuss and collaborate initiatives that should be taken by the two states for the air navigation service improvement and traffic flow optimization over the Arabian Sea between MID and AFI Regions.

Action by the meeting is at paragraph 3.

## REFERENCE

- MIDANPIRG/20
- MIDANPIRG/21
- GANP, DOC 9750

### 1. Introduction

- 1.1 This meeting comes as a continuation of the results of the first meeting between the Ministers of Transport of the two states held in Muscat in December 2024, as part of the ongoing efforts aimed at improving the air traffic management and ensure seamless air traffic flow.
- 1.2 The main objectives of the meeting that was hosted by Oman Civil Aviation authority (CAA) were:
  - a) To discuss common challenges and opportunities and ways of collaboration in order to solve and improve air traffic flow between MID and AFI Regions
  - b) To study and assess the common Airspace structure (ATS route network, PBN implementation, establishment of parallel and direct ATS route, implementation of FUA & FRA, Longitudinal Separation minima) to identify the status of the airspace optimization (capacity and efficiency), complexity and operational impact on environment.

c) To ensure that future traffic growth is sustainable and demand is accommodated.

### 2. DISCUSSION

- 2.1 This initiative comes into the scope of the ongoing project that Oman has started in June 2023, Oman Airspace Strategic Project (OASP), for airspace optimization, and part of its efforts to enhance airspace structure via improved route network to accommodate regional and international flows considering the introduction of the FUA and FRA concept, hence, improving traffic flows to reach CO2 emission reductions and ultimately LTAG.
- 2.2 To reach this goal Oman has initiated a Regional Approach Collaboration and initiatives that have been actioned by joint meetings with the adjacent States to elaborate on the plans related to the project and further actions have been taken for the necessary coordination with Pakistan and India to foster the inter-regional initiatives that aim to enhance the airspace at the interface over high seas between MID Region and Asia Pacific (APAC) where challenges are rising in accommodating the air traffic growth primarily due to the route network structure and numerous route constraints.
- 2.3 In the light of the above, and as global air travel continues to expand, the airspace over the high seas at the interface between Oman and Yemen has become a growing corridor for flights connecting Middle East and the Africa Region. Actually, this strategic airspace facilitates efficient and safe passage for numerous airlines on the current available RNAV5 Routes as B400 and R401, and enhancing connectivity between these two major parts of the world is essential with the expected traffic growth and thus similar initiatives by the two states should be undertaken to solve and improve the air traffic flow through efficient route structure that make optimum use of performance-based navigation.
- 2.4 the Middle East will have a Compound Annual Growth of CAGR of 3.6% for the period 2019-2040 and 4.6/% for the CAGR by Region Route group Middle East/Africa.

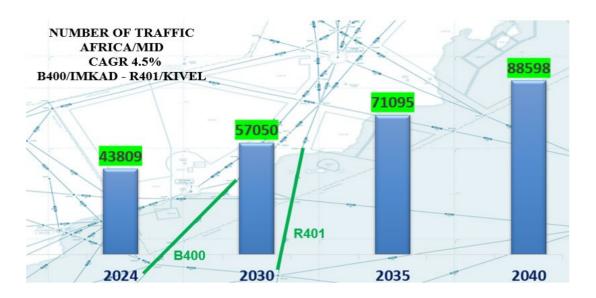
Region	Recovery year	CAGR (2019 - 2040)	Additional passengers by 2040, millions
Africa	2023	3.6%	169.7
Asia Pacific	2024	4.5%	2,536.8
Europe	2023	2.2%	701.4
Middle East	2023	3.6%	264.1
North America	2023	2.2%	558.5
Latin America & Caribbean	2023	2.8%	304.0
World	2024	3.4%	3,923.0

Sources: IATA Sustainability and Economics, Tourism Economics (September 2023 release)

Africa - Middle East







- 2.5 On the other hand, both states have recognized the shared challenges they encounter and have mutually agreed to form a collaborative technical team. This team will focus on addressing the intricacies of airspace optimization and air traffic flow, with a particular emphasis on studying the following:
  - Improved traffic flow through existing route network to solve existing hotspots over waypoint **RIGAM** crossing traffic flow from Somalia into Oman and develop a concept for future airspace route structure, hence improve the air navigation services.
  - Improved & reduced separation procedures between both states.
  - Explore interfacing ATM systems to enhance informational exchange.
  - Work in progress to resolve the RVSM safety issues regarding the high LHD reports on Waypoint **IMKAD** and develop plan for OLDI connection implementation to overcome the growing number of LHDs category E caused mainly human errors.
  - Assess and explore the actual CNS capabilities through the enhancement of the surveillance, communication and navigation aids infrastructure to meet the requirement of regional demands for the maximum benefit of the air navigation system in the common area.

#### 3. ACTION BY THE MEETING

## 3.1 The meeting is invited to:

- a) take note of the progress made by Oman in developing initiatives aiming at enhancing safety, improve efficiency of the airspace over the high seas at the interface with AFI region;
- b) acknowledge the Oman-Yemen joint collaboration to improve the air navigation service and hence optimize the airspace in the between their FIRs long range corridors for flights connecting Middle East and the Africa Region; and
- c) Recognize the importance of interregional coordination in enhancing the efficiency of air navigation service provision in airspace above high seas, and request the relevant ICAO Regional Offices, in this case the ME Office, to support the initiatives and processes undertaken by the affected States.