



*International Civil Aviation Organization*

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

***(Doha, Qatar, 4 – 8 May 2025)***

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

**ENHANCING UAE AIM SERVICES PROVISION**

*(Presented by United Arab Emirates / General Civil Aviation Authority)*

**SUMMARY**

This Information Paper presents the various initiatives taken by UAE AIM to enhance AIM Services Provision by digitalization and automation.

Action by the meeting is at paragraph 3.

**REFERENCE**

- ICAO ANNEX 4 - AERONAUTICAL CHARTS
- ICAO ANNEX 15 - AERONAUTICAL INFORMATION SERVICES
- ICAO DOC 8697 - AERONAUTICAL CHART MANUAL
- ICAO DOC 10066 - PANS AERONAUTICAL INFORMATION MANAGEMENT
- ICAO DOC 9854 – GLOBAL ATM OPERATIONAL CONCEPT
- ICAO DOC 9750 - GLOBAL AIR NAVIGATION PLAN
- ICAO – ROADMAP FOR THE TRANSITION FROM AIS TO AIM
- ICAO DOC 008 - MIDANPIRG - GUIDANCE FOR AIM PLANNING AND IMPLEMENTATION IN THE MID REGION

**1. INTRODUCTION**

1.1 ICAO endorsed Global ATM Operational Concept (Doc 9854) and recognized that in the global air traffic management (ATM) system environment envisioned by the operational concept, aeronautical information service (AIS) would become one of the most valuable and important enabling service. As the global ATM system foreseen in the operational concept was based on a collaborative decision-making environment, the timely availability of high-quality and reliable electronic aeronautical, meteorological, airspace, and flow management information would be necessary.

1.2 ICAO published in 2009 the “Roadmap for the transition from AIS to AIM”. It identifies the major milestones recommended for a uniform evolution across all regions of the world and specific steps that need to be achieved.

1.3 ICAO introduced the Aviation System Block Upgrades (ASBU) methodology in the fourth edition of the Doc 9750 (Global Air Navigation Plan), endorsed by the ICAO Assembly in 2013, as a systemic manner to achieve a harmonized implementation of the air navigation services. It 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 The GANP represents a rolling, 15-year strategic methodology, which leverages existing technologies and anticipates future developments based on State/industry agreed operational objectives. The Block Upgrades are organized in six-year time increments starting in 2013 and continuing through 2031 and beyond.

1.5 MID Doc 008 “Guidance for AIM Planning and Implementation in the MID Region” has been developed to harmonize the transition from AIS to AIM in the MID Region and to address Global and Regional issues related to planning and implementation of Aeronautical Information Management. For planning, MID Doc 008 mentions 2031+ as the timeframe for states to implement Electronic Aeronautical Charts.

1.6 ICAO Annex 4, CHAPTER 17 and Doc 8697 Chapter 7.17 provided guidance for the provision of Aeronautical Chart ICAO - 1:500 000.

1.7 ICAO Annex 15 and Doc 10066 provided guidance for the provision of Electronic Terrain and Obstacle Data (ETOD) Area 1 Data.

## **2. DISCUSSION**

2.1 ICAO Annex 15, Para 5.2.5.3 states that Aeronautical Chart — ICAO 1:500 000 shall be provided as Aeronautical Information Products outside the AIP. UAE AIM was providing Aeronautical Chart — ICAO 1:500 000 as printed chart in hard copy format. To acquire the charts customers were required to fill and submit a Chart request form. Following the submission hard copy printed Chart were delivered to customers. Process was totally manual, consuming significant time and effort both for customers and UAE AIM.

2.2 In support of ICAO Annex 15 and Doc 10066 requirements UAE AIM was also providing eTOD (Electronic Terrain and Obstacles Data) Area 1 to customers. To acquire eTOD Area 1, customers were required to fill and submit eTOD Data request form in PDF Format. The form also included a self-Declaration which needs to be agreed by customers in order for UAE AIM to accept the Data request form. Following the review and approval customers were granted access to eTOD Area 1 data on a Sharefile location. This process too was totally manual consuming significant time and effort both for customers and UAE AIM.

2.3 ICAO Aviation System Block Upgrades (ASBU) encourages digitalization of services under Global ATM Operational Concept (Doc 9854). In order to digitalize the services UAE AIM carried out a Benchmarking and Feasibility study aiming to replace the paper chart with an electronic chart. UAE AIM also conducted a Market Study to understand the market for the provision of Aeronautical Chart ICAO - 1:500 000 in electronic format. Following the study and as a conclusion UAE AIM discarded paper production of the chart and started provision of Aeronautical Chart — ICAO 1:500 000 in electronic (GeoTIFF) format.

2.4 UAE fosters Innovation and Sustainability at the core of its Air Navigation Services. As a continuous improvement UAE AIM transformed Aeronautical Chart ICAO - 1:500 000 into a complete online self-service. Currently customers get instant access to the service upon subscription online.

2.5 Following the culture of Innovation and Sustainability UAE AIM transformed eTOD Area 1 Data service to a complete online self-service. Requirement to fill and upload PDF form was replaced with a simple Checkbox using latest HTML Technology. Currently customer have to simply accept the self-Declarations by ticking a check-box and to get instant access to the data.

2.6 In conclusion, these automations improved the efficiency of AIM products and services delivery and contributed to the Sustainability of Air Navigation Services.

### **3. ACTION BY THE MEETING**

3.1 The meeting is invited to note the progress made by UAE AIM in digitalization and automation of AIM Services and consider such approaches where suitable.

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