International Civil Aviation Organization

MIDANPIRG/22 & RASG-MID/12 Meetings

(Doha, Qatar, 4 – 8 May 2025)

Agenda Item 5.2: MID Region Air Navigation priorities and targets

ENHANCING MID REGION AIR TRAFFIC FLOW WITH THE RAD PORTAL

(Presented by Saudia Arabia and Oman)

SUMMARY

Saudi Arabia initiated a Route Availability Document (RAD) project to improve Air Traffic Flow Management (ATFM) in the MID Region to manage properly the traffic flow, distribute traffic, and re-route flights during unexpected or abnormal events. This paper highlights the need for a harmonized approach for route availability management. The RAD project includes a proposal for a platform (web-based portal) for easy access by all MID States.

Action by the meeting is at paragraph 3.

REFERENCE

- European Route Network Improvement Plan (ERNIP) part 1.
- ERNIP PART 4.
- Report on the Feasibility of (LTAG) For International Civil Aviation CO_2 Emission Reductions, March 2022.

1. INTRODUCTION

1.1 The Route Availability Document (RAD) was published as an AIP Supplement-primarily through static Excel documents accessed via URL links. The benefits are obvious, serving as a common reference document, providing a single, fully integrated, and coordinated route scheme, for flight planning within Jeddah FIR.

1.2 Both Saudi Arabia and Oman are now committed and working towards implementing cross-border RAD which will offer efficient flight planning options across both Jeddah and Muscat FIR.

1.3 Another key effort is to implement a web portal for RAD. This platform will provide improved accessibility and efficiency for all airspace users in route planning. As regional air traffic continues to grow, the RAD platform will automate and streamline access to route information within the MID region, providing real-time updates that can be used as an interactive planning tool, and an integrated data service to all concerned stakeholders.

2. DISCUSSION

2.1 Objective of the RAD platform

The primary objective of the RAD platform is to create a portal that can be accessed and manage the RAD. This will enable a centralized, user-friendly interface offering comprehensive route availability, and real-time updates on airspace changes. The Key objectives include:

- improved air traffic flow and capacity management;
- enhanced flexibility and efficiency of the flight planning;
- seamless cross-border route coordination with adjacent FIRs; and
- strengthening regional airspace efficiency and digital innovation.

2.2 Key Features and Capabilities of the RAD platform

The main features of the RAD platform envisaged for the website can be summarized as follows:

- Centralized/Multi Nodal Web Access: one platform/multi nodal platform for route availability data, replacing Excel-based processes for making the information and data available;
- Interactive Planning: static updates of airspace availability, route restrictions;
- Advanced Search and Filtering Tools: route options can be searchable by FIR, flight level, waypoint, segment restrictions, and operational hours;
- Secure Role-Based Access: the website will use authentication and role-based controls to customize access for AUs, ANSPs, and other stakeholders;
- Mobile Desktop Accessibility: the website may use a technology that allows fully responsive design for use across all devices; and
- API Access Data Export: The platform may offer integration with external systems and the ability to export data for offline use or analysis.

2.3 Functional and Technical Requirements

The platform will be designed to ensure at least the following functions:

- high availability (99.9% uptime) and scalability to support growing user demand and accommodate State needs for access. The system will have an adequate level of redundancy to achieve the target level of availability;
- real-time system performance with quick load times;
- robust audit logs, backups, and disaster recovery plans; and
- customizable user interface with user-defined alerts, saved routes, and preferences.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

a) review and consider the proposed RAD website as a centralized or the option to have Multi-Nodal RAD platform, to serve cross-border for the MID Region;

b) request participation from adjacent MID States attending the meeting to collaborate by presenting and publishing their respective RADs within the same portal, enabling integrated cross-border flight planning and improved regional coordination;

c) support the establishment of a shared regional RAD portal, with role-based access for Airspace Users (AUs) and Air Navigation Service Providers (ANSPs) across participating States; and

d) invite ICAO MID Airspace Management Working Group (ASM WG) to lead the coordination for initiating MID RAD, including:

- schedule the meetings
- identify the required Data needed for RAD document;
- define the implementation plan and timeline agreement

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