

International Civil Aviation Organization

MIDANPIRG Air Traffic Management Sub-Group

Eighth Meeting (ATM SG/8) (Amman, Jordan, 7 – 10 November 2022)

Agenda Item 4: Planning and Implementation subject related to ATM/SAR

ADD T800 TO MID REGION ATS NETWORK-ANP

(Presented by the Qatar Civil Aviation Authority)

SUMMARY

This paper aims to provide an overview of the safely operated T800 since its implementation in 2017, leading to a collaborative agreement for the integration of the ATS Route into the MID Region ATS Route Network and thus to update the Air Navigation Plan – Middle East Region (Doc9708), Volume II – Table ATM II-MID-1.

Action by the meeting is in paragraph 3.

REFERENCE(S)

- ICAO ASSEMBLY 41ST SESSION, A41-WP/371 (Montreal, Canada, 27 August 2022)
- ICAO MID State Letter AN 6/5A 22/163 (25 July 2022)
- ICAO MID DOC 001 MIDANPIRG Procedural Handbook Edition February 2022
- ICAO ANNEX 16, Environmental Protection, Volume IV, Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA), First Edition, October 2018
- MIDANPIRG/19 & RASG-MID/9-Report (Riyadh, Saudi Arabia, 14 17 February 2022)

1. Introduction

- 1.1 The meeting may wish to recall that the MIDANPIRG/19 Report documented in paragraph 5.7.4," The meeting noted that Bahrain, Iran and Qatar requested to include the Route T800 in the MID eANP VOL II, Table ATM II-MID-I; however, UAE objected to this proposal".
- 1.2 The meeting may wish to note the following paragraphs of the MIDANPIRG Procedural Handbook, in particular the Terms of Reference (ToR) of the Air Traffic Management Sub-Group (ATM SG):
 - a) seek to achieve common understanding and support from all stakeholders involved in or affected by the ATM developments/activities in the MID Region; and
 - b) based on the airspace user needs and in coordination with stakeholders (States, International Organizations, user representative organizations and other ICAO

Regions), identify requirements and improvements for achieving and maintaining an efficient route network in the MID Region.

- 1.3 According to ICAO MID Doc 001, the relevant tasks for the ATM SG are the following:
 - a) review the MID ATS Routes Network to assess its capacity and constraints;
 - b) identify requirements and improvements for achieving and maintaining an efficient ATS Route Network in the MID Region;
 - c) propose a strategy and prioritized plan for development of improvements to the route network, highlighting:
 - areas that require immediate attention
 - interface issues with adjacent ICAO Regions
 - d) submit completed route proposals for amendment of the Basic ANP Table ATS-1, to the ICAO MID Regional Office for processing; and
 - e) develop proposals for the updating of relevant ICAO documentation, including the amendment of relevant parts of the MID ANP, as deemed necessary.
- 1.4 The meeting may recall that the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA) is the first global market-based measure applicable to our sector, complementing other intra-sector aviation emissions reduction efforts such as technical innovations, operational improvements and sustainable aviation fuels. CORSIA is reflected in the ICAO Annex 16 Environmental Protection, Volume 4. It represents a cooperative approach offering a harmonized way to reduce emissions from international aviation, minimizing market distortion while respecting the particular circumstances and respective capabilities of ICAO Member States.

2. DISCUSSION

2.1 The meeting may wish to reopen the discussion about integrating T800 in the MID eANP. It is crucial to find consensus at the technical level to ensure a smooth integration of the ATS route in the MID Region ATS Route Network and thus to update the Air Navigation Plan – Middle East Region (Doc9708), Volume II – Table ATM II-MID-1 before the upcoming MIDANPIRG/20.

Designator	Significant Points	Remarks
T800 (RNAV1)	DOHA HAMAD INTL (DOH) 251459.66N 0513634.80E VAXIN 254043.00N 0522148.00E DASUT 261832.00N 0531108.00E	Note: Unidirectional (Eastbound)

Table 1: ATS Route T800 description

2.2 T800 was first time planned by Qatar Airways on the 22JUN2017. Since implementing the ATS route over five (5) years ago, a monthly average of more than half a dozen different Aircraft Operating Agencies operated a total of 32.384 flights safely.

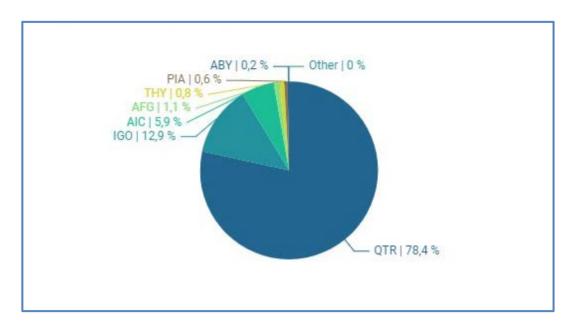


Figure 1: Average distribution of flights used T800 in September 2022

- CORSIA was established in 2016, and before the pilot phase, the ICAO Council completed the development of the essential components. According to the ICAO document, CORSIA States for Chapter 3 State Pairs, 115 States will participate in CORSIA from 01JAN2023, out of which one-third of the ICAO MID States (Iraq, Oman, Qatar, Saudi Arabia and the United Arab Emirates) are participating on a voluntary basis. During the Assembly, it was announced that the total number increased to 118 States as three additional States notified their decision to participate in the CORSIA voluntarily.
- 2.4 In the interest of reducing the carbon footprint of the MID Region in conformity with the international effort referenced in Annex 16 Environmental Protection, Volume IV Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA), which was approved on the highest level by the ICAO Council, the safe operation of T800 with its benefit beyond operational advantages should allow all States to agree on the integration of the ATS route in the MID eANP.
- Based on the above and assumption that the nearest alternative routing would be DOH P430 ALVEN T430 RAGAS M561 KHM, the alternative route would be 26.7 NM longer than the routing via T800. The estimated additional fuel burn resulting from the non-availability of T800 with the average Qatar Airways (QTR) aircraft type mix is 2,000,000 KG annually. Contemplating the September 2022 figures proving that 78.4% of the flights using T800 are QTR, the following calculation can be derived. Considering that not only does QTR operate multiple aircraft types on each route and calculating the same fuel burn for 100% of the flights using T800 via DASUT compared to operating via RAGAS, this would also correspond to more than eight (8) million KG of CO₂ emissions per year. Over more than five (5) years, saving an average of 502,358,974 KG of CO₂ emissions in the MID Region was achieved.

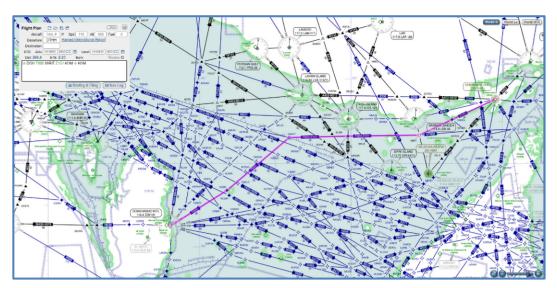


Figure 2: DOH T800 MIRIT Z151 KHM

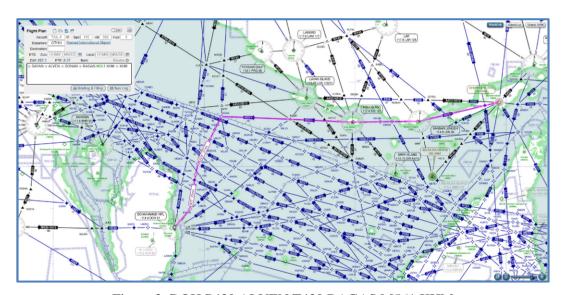


Figure 3: DOH P430 ALVEN T430 RAGAS M561 KHM

- 2.6 Furthermore, in operational point of view, lack of T800 would bring hundreds of additional monthly flights closer to the hotspot areas where Doha ACC safely controls successive in and outbound traffic to and from Bahrain/Doha.
- 2.7 It is worth mentioning that this route is one of the best options for traffic to avoid tropical monsoon over Indian Ocean. This event annually happens in the summer period and extend to Gulf area which cause significant deviation of the traffic transiting over UAE and Oman to the north.
- 2.8 Integration of T800 in the MID eANP would have the following benefits:
 - a) keeps the ascending and descending traffic in the vicinity of FIR boundaries unchanged as operated safely since 2017;
 - b) avoids disruption to the safe and well-organized traffic flow handled effectively and efficiently over the past years;

- c) minimizes the impact of a change in the traffic flow of safe and efficient operations considering capacity, economy provision of regional traffic flows;
- d) maintains the complexity in the interface between the initiating States;
- e) minimizes new operational arrangements and additional safety measures;
- f) apart from, most importantly, be safe, as proven over more than five (5) years. T800 is also overall cost-effective;
- g) prevents impacts on the effectiveness of current airspace utilization;
- h) reduces the impact of ATS route change;
- i) optimizes the user-level allocation of the existing well-established procedures;
- j) avoids detrimental consequences for ANSPs and Aircraft Operating Agencies; and
- k) keeps us closer to a small CO₂ footprint.
- Amending the MID Regional Air Navigation Plan depends on collaboration, good relations and mutual respect between the MID States, which are fundamental to ensuring seamless services with high safety and quality. Therefore, the State of Qatar appreciates the efforts of all participating members of the ATM SG/8 to achieve the highest level of safety and keep our carbon footprint as trim as possible within the MID ATM environment.

3. ACTION BY THE MEETING

- 3.1 The meeting is invited to provide the usual collaborative support by:
 - a) noting the information contained in this paper; and
 - b) reviewing and positively reconsidering the integration of T800 as a permanent route in the MID eANP Volume II Table ATM II-1.