



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

IMPLEMENTATION OF FREE ROUTE AIRSPACE

(Presented by the Secretariat)

SUMMARY

This paper presents the need to adopt a regional approach for Free Route Airspace implementation to further support efficient and environmentally sustainable flight operations within the MID Region.

Action by the meeting is at paragraph 3.

References

- ICAO Global Air Navigation Plan
- ICAO Global Air Traffic Management Operational Concept (Doc 9854)
- ATM SG/9 meeting Report (Sharm El Sheikh, Egypt, 14 – 16 November 2023)

1. INTRODUCTION

1.1 The benefit of Free Route Airspace (FRA) has been quantitatively confirmed by operators. It provides more efficient and optimized flight trajectories avoiding the constraints of the route structure, which will alleviate congestion and support the economy of operations, eventually contributes to the environmental protection by saving flight time, fuel, and reducing CO₂ emission and supports the sustainable aviation goals.

1.2 Based on available ATM infrastructure and techniques, different levels of FRA implementation can be considered, varying from published Direct routes, towards Cross border FRA implementation; accordingly, the benefits could be maximized.

2. DISCUSSION

2.1 The implementation of FRA within Emirates FIR on 13 July 2023, was the first FRA implementation in the MID Region, utilizing the advanced ATM system in Sheikh Zayed Air Navigation Centre. The benefits have been confirmed by airspace operators and found tons of fuel savings within the area of applicability.

2.2 The significance of FRA implementation within Emirates FIR was found to benefit more than 55,000 flights annually, achieving fuel savings over 30 million KGs, and operational savings that could exceed AED 50 million for airlines. In a case study conducted by one airspace user, it

has been identified that utilization of FRA in the Emirates FIR for more than 7,600 flights/year would result in more than 205,000 KG/year of savings of fuel. Thus, providing the airspace user with savings exceeding USD 96,000 annually.

2.3 The meeting may wish to note that the ATM SG meeting reviewed the process for implementation, presented by UAE, and the plans for implementation presented by Qatar, and agreed that to maximize the benefits, a FRA implementation would be conducted, to support further implementation within the MID Region.

2.4 Accordingly, the meeting agreed on the following Conclusion:

Why	To foster the FRA implementation within the MID Region
What	Organize FRA Implementation Workshop
Who	ICAO MID Office, with the support of IATA, States and Stakeholders
When	2024

***DRAFT CONCLUSION 21/XX: FREE ROUTE AIRSPACE (FRA)
IMPLEMENTATION WORKSHOP***

That, the ICAO MID Office, IATA and concerned States and Stakeholder organize FRA Workshop in 2024, to foster the implementation of FRA in the MID Region.

3. ACTION BY THE MEETING

- 3.1 The meeting is invited to:
- a) note the information of the paper, and
 - b) review and agree on the Draft conclusion at para 2.3, and
 - c) invite the States and Stakeholders to support the conduct of the Free Route Airspace Implementation Workshop.