



International Civil Aviation Organization

MIDANPIRG/20 and RASG-MID/10 Meetings

(Muscat, Oman, 14-17 May 2023)

Agenda Item 6.5: ATM

ATFM IMPLEMENTATION PLAN IN MUSCAT FIR

(Presented by Sultanate of Oman)

SUMMARY

This paper presents the CAA Oman's plan and commitment of implementing Air Traffic Flow Management (ATFM) in order to enhance safety and efficiency of air traffic flow within the Muscat FIR.

REFERENCES

- MIDANPIRG Air Traffic Flow Management Implementation Workshop (6-7 Feb 2023, Doha, Qatar)
- ICAO Annex 11- Air Traffic Services (AMDT. 2020).
- ICAO Doc 9971- Manual on Collaborative Air Traffic Flow Management (2018)
- ICAO Doc 4444- PANS ATM (AMDT. 2022)
- Sector Capacity - Air Traffic Flow Management (ATFM) Seminar, ICAO MID Office, Cairo, Egypt. (2009)

1. INTRODUCTION

1.1 ICAO Annex 11- Air Traffic Services and Doc 4444- PANS ATM specifies ATMF as a service established with the objective of contributing to a safe, orderly and expeditious flow of air traffic by ensuring that ATC capacity is utilized to the maximum extent possible, and that the traffic volume is compatible with the capacities declared by the appropriate ATS authority.

1.2 It is a responsibility of the State to implement ATFM for airspace where air traffic demand at times exceeds, or is expected to exceed, the declared capacity of the air traffic control services concerned.

1.3 Taking into consideration of above provision, CAA Oman has formulated the plan for the implementation of ATFM to meet national demand as well as the regional and global expectations.

2. DISCUSSION

2.1 Currently, flow measure is implemented with UAE only which is 5 minutes in track which has both negative (airline delay and Muscat FIR avoiding tendency) and positive impact (traffic flow better managed with enhanced safety and less ATC workload).

2.2 The goals of current measure were to break the chain reaction of delays, save air delays and less emission. However, the benefits were not achieved as anticipated.

2.3 Reconsideration on the current context was necessary to understand and evaluate the existing by analysis of available data and traffic trend in order to explore and implement other effective flow control measures.

2.4 After deliberate study, CAA Oman has come to the following solutions:

2.4.1 Project for Sector Capacity Declaration, which is the foundation for many other ATM projects, has already been executed and outcome of which is currently in the evaluation phase.

2.4.2 Projects for Airport Collaborative Decision Making and Air Traffic Flow Management are complementary to each other and have already started.

2.4.3 Project for Air-Space Re-structure has just started which will acquire crucial and effective feedback from the above two projects.

2.4.4 Muscat ACC planning for the future betterment by preparing itself for system integration with neighboring countries and even to work under one sky principle in future.

2.5 While implementing the above solutions, proper considerations will be given on the factual information from the data analysis, requirements of neighbouring FIRs and availability of time and resources along with the proper justification. As such, CAA Oman is planning to implement as follows:

2.5.1 The First Step is to implement the sector capacity which will trigger the flow management.

2.5.2 Analysis and study the current traffic data to pin point the bottle neck and the hot zones also to determine the peak hours and points of traffic density.

2.5.3 Decide the proper traffic measures to be implemented taking into consideration of the neighbouring countries measurements to ensure harmonization.

2.5.4 Trial phase and applying slight adjustments, if applicable.

2.5.5 The agreement of the measures to be implemented with the neighboring countries and signing the letter of agreement.

2.5.6 ATFM Implementation phase.

2.5.7 Sharing the collected data and statistic with stakeholders.

2.6 The project is anticipated to accomplish within 3-5 years as it involves a lot of research trials, analysis and agreement.

3. ACTION BY THE MEETING

3.1 The Meeting is invited to:

- a) note the information contained in this paper;
- b) request member States to provide their feedback and experience about ATFM implementation; and
- c) discuss any relevant matters as appropriate.