ATFM in ICAO MID Region

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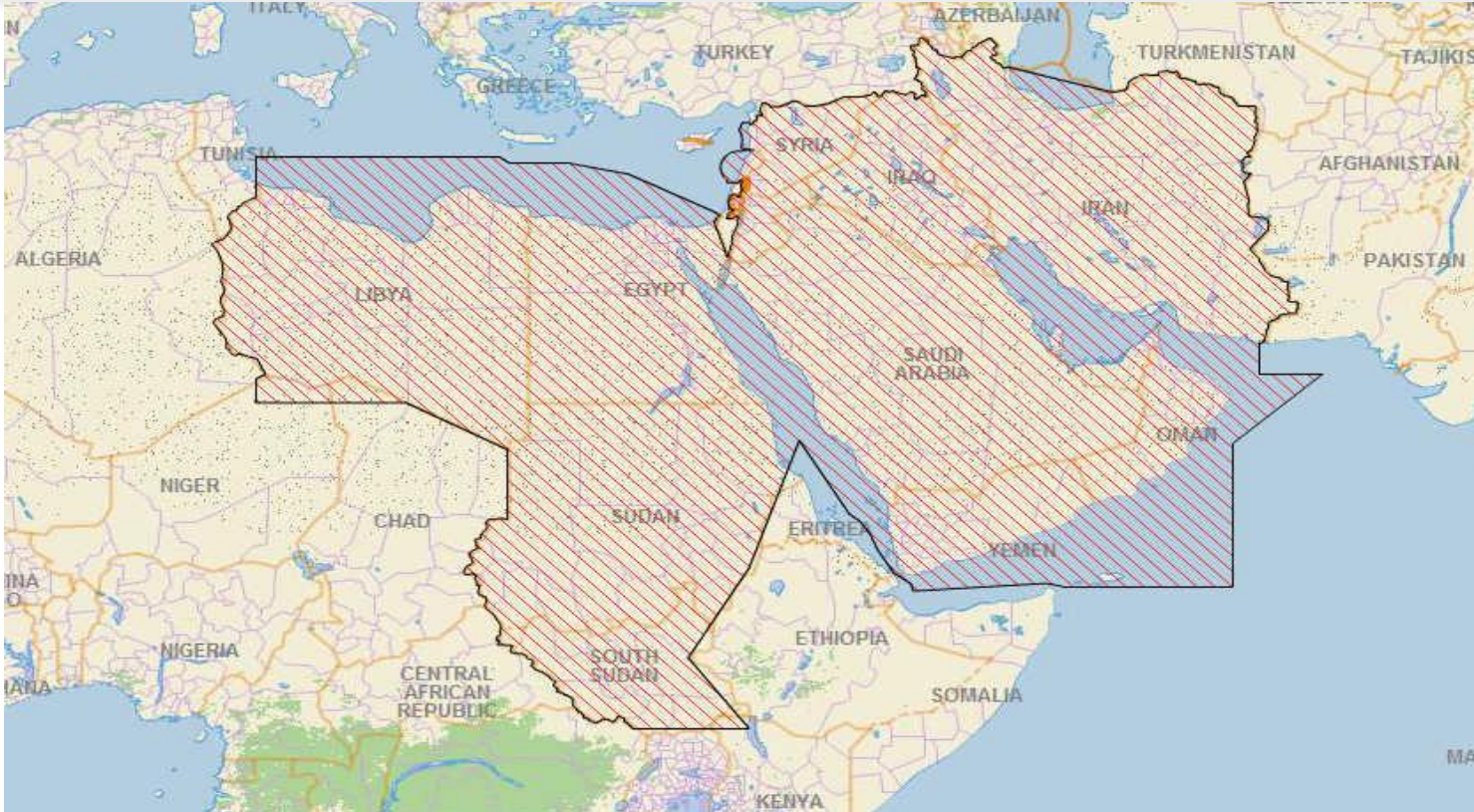*Middle East Office, Cairo*

Casablanca 17-18 March 2019

Outline

➢ History of ATFM in MID Region

➢ ATFM Task Force

➢ ATFM Core Team

➢ Action by the Workshop

ICAO Middle East Region is composed of **15 States**:

Bahrain	Oman
Egypt	Qatar
Iran	Saudi
Iraq	Arabia
Jordan	Sudan
Kuwait	Syria
Lebanon	UAE
Libya	Yemen

1. ATM/AIS/SAR SG/8 meeting (Muscat, Oman, 20 - 23 November 2006)

2. APAC ATFM TF/12 meeting with MID (Cairo, Egypt, 13 - 17 July 2008)

3. ATFM Seminar (Cairo, Egypt, from 20-21 July 2009)

4. MIDANPIRG/12 meeting (Amman, Jordan, from 17 to 21 October 2010)

5. MIDANPIRG/15 meeting (Bahrain, 8 – 11 June 2015)

6. MAEP Steering Committee meeting (Cairo, Egypt, 20- 22 October 2015)

7. MAEP Board/2 meeting (Cairo, Egypt, 11 - 13 April 2016)

8. ICAO ATFM Seminar (Dubai, UAE, from 13 to 15 December 2016)

9. MAEP Board/3 meeting (Cairo, Egypt, 16-18 January 2017)

10. MIDANPIRG/16 meeting (Kuwait, 13 – 16 February 2017)

11. MSG/6 meeting (Cairo, Egypt, 3 -5 December 2018)

- ATFM was endorsed as one of the priority regional air navigation projects to be implemented under the framework of the MID Region ATM Enhancement Programme (MAEP).

- The MAEP Board/2 meeting (Cairo, Egypt, 11 – 13 April 2016) based on the prioritization done by the MAEP SC/2 meeting (Cairo, Egypt, 20 - 22 October 2015), agreed that the project would not be initiated before 2017, providing that all the enablers/prerequisites are implemented.

➢ The ICAO ATFM Seminar (Dubai, UAE, from 13 to 15 December 2016) was attended by a total of one hundred forty (140) participants from thirteen (13) States and eighteen (18) Organizations/Industries.

➢ The main objective of the Seminar was to provide an update on the ICAO Global and Regional developments related to ATFM, including the provisions of the latest version of the ICAO Doc 9971 (CDM, ATFM, ACDM), highlighting the importance of standardization and harmonization with regard to worldwide ATFM implementation.

➢ The Seminar brought together CDM/ATFM stakeholders, (Regulators, Air Navigation Service Providers, Aerodrome Operators, Aircraft Operators, Organizations and Industry) to share expertise and lessons learned from ATFM implementation including presentation related to national (State, ANSP), sub-regional and regional solutions.

The third day of the Seminar was dedicated to the ICAO MID Region to address the challenges facing the MID States related to air traffic flows and agree on the way forward for Collaborative ATFM implementation in the MID Region, taking into consideration the lessons learned and best practices presented during the first two days of the Seminar. The Seminar recognized the need for a collaborative phased approach toward the implementation of a regional ATFM system in accordance with the region requirements.

The main outcome of the Seminar are as follows:

- Establishment of a MID ATFM TF/WG under the ATM SG.
- Development of ATFM Concept of Operations taking into consideration Asia Pacific and Europe experiences.
- Need to raise awareness about ATFM.
- Conduct training courses related to ATFM.
- States to consider the establishment of ATFM Cell or National Operation Centre composed of all concerned Stakeholders.
- Carry out a survey to determine airspace and sector capacity, hotspots, ATFM systems/measures, etc.
- Expedite MID IFPS project implementation.
- Continue working on airspace improvements.

✓ The MAEP Board/3 meeting (Cairo, Egypt, 16-18 January 2017) agreed that the first step for the initiation of the MID ATFM project would be the establishment of a dedicated ATFM TF/WG under the framework of the ATM SG, that will be responsible for the development of the MID Region ATFM Concept of Operations. Accordingly, the meeting encouraged States and Stakeholders to implement the Recommendations emanating from the ATFM Seminar and support the work of MID ATFM TF/WG.

✓ MIDANPIRG/16 (Kuwait, 13 – 16 February 2017) established the MID ATFM Task Force through MIDANPIRG Decision 16/16.

DECISIONS 16/16: ATFM TASK FORCE

That,

a) an ATFM Task Force be established to develop an ATFM Concept of Operations for the MID Region;

b) the ATM SG/3 meeting develop the terms of reference of the ATFM Task Force; and

c) States support the ATFM Task Force through:

   i.   assignment of ATFM Focal Point to contribute to the work of the Task Force; and

   ii. provision of required data in timely manner, and in particular to the survey that will be carried out related to the airspace and sectors capacity, hot-spots, ATFM measures/system, etc.

DECISIONS 16/18: WORLD CUP 2022 TASK FORCE

That,

a) a World Cup 2022 Task Force be established to develop and follow-up the implementation of a collaborative action plan to accommodate the expected high increase in traffic, in a safe and efficient manner, taking into consideration similar experiences;

b) the Task Force address other major events such as the EXPO 2020; and

c) the ATM SG develop the terms of reference of the Task Force

Terms of Reference

ToRs of ATFM and FWC2022 Task Forces were developed by ATM SG

Reviewed by the ATFM TF/1 and FWC2022 TF/1 (Muscat, Oman, 23 -26 September 2018)

Endorsed by MSG/6 (Cairo, Egypt, 3 -5 December 2018)

ATFM TF/1

The First Meeting of the Air Traffic Flow Management Task Force (ATFM TF/1) was successfully held in Muscat, Oman, 23 - 25 September 2018. The meeting was gratefully hosted by the Public Authority for Civil Aviation (PACA), Oman.

The Meeting was attended by a total of forty one (41) participants from ten (10) States (Bahrain, Egypt, India, Iraq, Kuwait, Oman, Qatar, Saudi Arabia, UAE and USA) and six (6) International Organizations/Industries (AEROTHAI, CANSO, EUROCONTROL, IATA, MAAR and MIDRMA).

ATFM TF/1

- Based on the discussions and the experience from other regions, the meeting agreed that it would not be feasible to define and develop a CONOPS for the implementation of ATFM during the meeting without assessment of the current ATM and ATFM States' capabilities.

- The meeting agreed to a set of actions to be undertaken till the ATFM TF/2 meeting, with a view to facilitate the coordination and follow-up the implementation of the agreed actions,

- The meeting established the ATFM Core Team composed of volunteer experts from Bahrain, India, Oman, Qatar, Saudi Arabia, UAE (ATFM TF Chairman), USA, ACAO, AEROTHAI, CANSO, EUROCONTROL, IATA and ICAO.

I.   The Core Team is expected to carry out the task assigned by the ATFM Task Force which include but not limited to:

1.   Develop a questionnaire to be disseminate to States by ICAO MID Office for surveying the current status of the MID Region related to ATM/ATFM capabilities, airspace, sectors and airports capacity, etc. (The questionnaire should be sent to ATFM/ATM focal points and MIDANPIRG Members)

2.   Analyze the received responses for the questionnaire;

3.   Carry out teleconferences with States' ATFM focal points to explore their views and thoughts related to ATFM taking into consideration the questionnaire responses

4.   Consolidate the responses and prepare a progress report to be presented to the ATFM TF/2 meeting

5.   Define the required minimum set of data that should be exchanged and explore means that would be used for the exchange of data including the development of a common template.

6.   Prepare an initial draft ATFM CONOPS.

7.   Develop guidance as required to support States addressing issues related mainly to:

a)   aerodromes and airspace capacities under the normal circumstances and adjustment factors affecting the capacity;

b)   regular review for aerodromes and airspaces where traffic demand is expected to reach capacity, or is resulting in traffic congestion;

c)   mechanisms for ATFM data gathering, collation and sharing between States, Organizations and ICAO, which may include:

i. adjusted aerodromes and airspace capacity due to factors affecting capacity such as special use airspace status, runway closures and weather information;

ii. traffic demand information which may include flight schedules, flight plan data, repetitive flight plan data as well as associated surveillance updates of flight status; and

iii. ATFM Daily Plan

7.   c)   mechanisms for ATFM data gathering, collation and sharing between States, Organizations and ICAO, which may include:

> i. adjusted aerodromes and airspace capacity due to factors affecting capacity such as special use airspace status, runway closures and weather information;

> ii. traffic demand information which may include flight schedules, flight plan data, repetitive flight plan data as well as associated surveillance updates of flight status; and

> iii. ATFM Daily Plan

> d)   compliance by airspace users with ATFM measures; and

> e)   any other guidance relevant to the regional ATFM Framework.

8.   Develop a Template to support States with the development of National ATFM Implementation Plan.

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Roadmap for development of ATFM CONOPS for the MID Region

Outcome of ATFM Core Team

- The meeting reviewed the responses to the survey received from 10 States.
- It was recognized that the MID Region is still in the first steps related to the establishment of ATFM capabilities.
- It was recommended that qualification of experts in ATFM as well as raising awareness should be given high priority.
- The meeting agreed to a set of criteria to be used for the <u>evaluation of the scenarios</u> based on the severity of the challenge to achieve the criteria as well as its weight/importance on the success of the scenario.
- The meeting emphasized that establishing a centralized ATFM Unit would be the optimal solution followed by the scenario in having 2 Centres for 2 participating areas, then a centralized scenario through a third party providing the ATFM service and the last one would the Multi-Nodal. However, considering the challenges, feasibility and time and efforts required, the Multi Nodal Scenario achieved the highest Score.

High level outline to be considered during the development of the CONOPS

Phase I- Building State's National ATFM Capabilities:

1. Raising awareness related to ATFM

2. Establishing the regulatory framework for ATFM at national level

3. Establishment of ATFM Services within the ATS organizational structure (FOC, FMP, FMU, etc.)

4. Human resources

5. Training

6. Operating Procedures

7. National ATFM Team to ensure Collaborative Decision Making (CDM)

8. Tools to be used

9. Determine and declare Airspace and airports capacity

10. Establishment of State's National ATFM CONOPS

High level outline to be considered during the development of the CONOPS

Phase II – Establishment of Regional Framework

1-   Setting up the concept/framework for Cross border ATFM in the MID Region

2-   Define which ATFM Measures would be required including GDPs (where applicable to be defined by States)

3-   Agreement on the Format of the ATFM Messages

4-   Means to be used for Communication between adjacent States ATFM FOC

5-   Development of Common Operating Procedure (COP)

6-   Agreement on LoA template for ATFM (App G of ATS LoA Template)

7-   Agreement on the coordination procedures

8-   Signature of LoAs between adjacent ATFM FOC

9-   Establishment of platform to be used for sharing of information

High level outline to be considered during the development of the CONOPS

Phase III- Implementation of Cross border ATFM

1-   Exchange of information through the established platform and/or periodic daily teleconferences

2-   Sharing of the ATFM Daily Plan

3-   Implementation of the ATFM/CDM process for regulating traffic when required (regional and later inter-regional)

4-   Post Implementation Review

5-   Research and future development

Action by the Workshop

The Workshop is invited to discuss and recommend actions that would support advancing ATFM Implementation n the MID Region for consideration by the ATFM TF/2 meeting.

THANK YOU