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MID ATFM Task Force Update to ATM SG5

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Chairman - MID ATFM Task Force



ATM SG/5 (Aqaba, Jordan, 1-4 December 2019)



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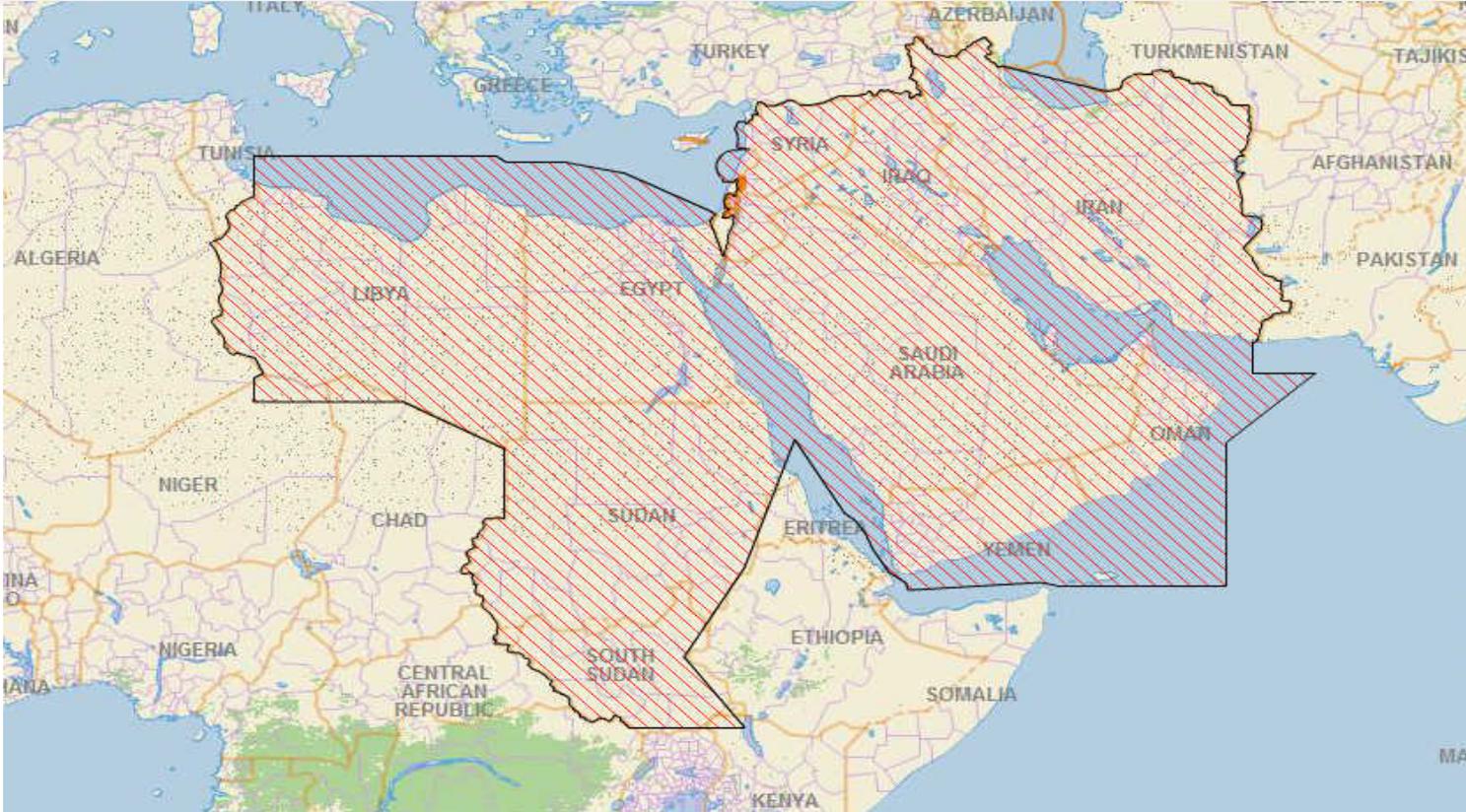
Why ATFM is needed in the MID Region?



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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 |



ATFM TF Meetings

- 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 **ATFM TF/2** was successfully held in **Casablanca**, Morocco, **19 – 20 March 2019**. The meeting was gratefully hosted by the Arab Civil Aviation Organization (ACAO).
- The Meeting supported the recommendations emanating from the **ACAO/ICAO ATFM Workshop** (Casablanca, Morocco, **17 – 18 March 2019**) held-back-to-back with the ATFM TF/2 meeting
- The **ATFM TF** and **FWC2022** TF meetings are being held **back-to-back**





Where do we stand Now?

The ATFM TF/1 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 to carry out the tasks assigned by the ATFM Task Force that include but are not limited to:

1. Carry out a survey to assess the status of the MID Region related to ATM/ATFM capabilities, airspace, sectors and airports capacity, etc.
2. Carry out teleconferences with States' ATFM focal points to explore their views and thoughts related to ATFM taking into`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.
3. Prepare an initial draft ATFM CONOPS.



4. Develop guidance as required to support States addressing issues related mainly to:
 - a) aerodromes and airspace capacities;
 - b) regular review for aerodromes and airspaces where traffic demand is expected to reach capacity, or is resulting in traffic congestion;
 - c) compliance by airspace users with ATFM measures
 - d) any other guidance relevant to the regional ATFM Framework
 - e) mechanisms for ATFM data gathering, collation and sharing between States, Organizations and ICAO
5. Develop a Template to support States with the development of National ATFM Implementation Plan.



ATFM Core Team Members

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Main Outcome of ATFM TF based on the Core Team work that was supported by MIDANPIRG/17

- 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 evaluation of the scenarios 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 emphasised that establishing a **centralised ATFM Unit** would be the optimal solution followed by the scenario of having **2 Centres for 2 participating areas**, then a centralised scenario through a **third party providing the ATFM service** and the last one would be the **Multi-Nodal**. However, considering the challenges, feasibility and time and efforts required, the **Multi Nodal Scenario** achieved the highest Score
- MIDANPIRG/17 agreed that **Multi Nodal Scenario** to be implemented as an initial **start**



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



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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 meeting

The meeting is invited to:

- a) commend the work carried out till today by all the experts supporting the ATFM TF and the ATFM Core Team
- b) encourage States and Organisations to implement the Recommendations of the ATFM Workshop held in Casablanca at **Appendix A** and continue their collaboration and provide further support in order to prepare the MID Region to accommodate the significant increase of traffic due to the FIFA World Cup 2022 or any other major events in a safe and efficient manner; review the ATFM Action Plan at **Appendix B**; and
- c) urge States to take necessary measures to ensure the establishment of ATFM service at the national level, including the promulgation of the required regulations, organisational structure, human and financial resources, training, etc.



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Lima

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Central African
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Dakar

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North Atlantic
(EUR/NAT) Office
Paris

Middle East
(MID) Office
Cairo

Eastern and
Southern African
(ESAF) Office
Nairobi

Asia and Pacific
(APAC) Sub-office
Beijing

Asia and Pacific
(APAC) Office
Bangkok



THANK YOU

ACAO/ICAO ATFM Workshop (Casablanca, Morocco, 17 – 18 March 2019)

The main objectives of the ACAO/ICAO ATFM Workshop (Casablanca, Morocco, 17 – 18 March 2019) were to raise awareness about ATFM, share other ICAO Regions and States' experience as well as discuss and agree on recommendations for the implementation of ATFM in the MID Region based on the work carried out by the ATFM Core Team.

The Workshop recognized that:

- a regional solution to manage the traffic flow across the MID Region became a priority.
- collaboration between all stakeholders is a key success for effective development and implementation of regional framework for ATFM/CDM.
- development of ATFM Concept of Operations requires inputs/data from all stakeholders to ensure it meet the projected objectives.
- sharing information is the most important enabler for ATFM/CDM.

The Workshop agreed to the following Recommendations

1. States and Stakeholders are encouraged to support ACAO and ICAO efforts related to the implementation of ATFM/CDM and in particular the work of the MIDANPIRG ATFM Task Force related to the Development of ATFM Concept of Operations for the MID Region taking into consideration other experiences.

States are encouraged to:

2. establish ATFM framework at the national level (regulations, organizational structure, functions, operating procedures, etc.)
3. develop ATFM National Implementation Plan
4. ensure that ATFM personnel are trained and qualified to effectively carry out their tasks. ATFM Manager (decision maker) should have adequate ATC experience.
5. carry out necessary studies to determine airspace and airports capacities
6. exhaust all measures that would increase capacity and continue working on the airspace improvements and the enhancement of the air navigation services within their relevant FIRs taking into consideration the airspace users' requirements.
7. support the implementation of the IFPS at regional level
8. ensure the implementation of the Collaboration Decision Making (CDM) concept.
9. support flight data exchange for the management and monitoring of air traffic flow at regional and inter-regional levels

ATFM TF is invited to:

10. develop a training programme template to be used by States.
11. develop a Template for National ATFM Implementation Plan
12. support States in carrying out their airspace and sector capacity studies

ACAO and ICAO, supported by ATFM experts as required, are invited to:

13. organize workshops and training courses related to ATFM.
14. conduct visits to States to support the ATFM Implementation.

ACTION PLAN FOR IMPLEMENTATION OF ATFM IN THE MID REGION

Key Activities	Action		Target date	Deliverable	Champion	Supported by	Status/RMK
	No	Description					
Key Activity 1 Agreement on the ATFM Regional Framework	1.	Recommending the best Scenario for a regional ATFM framework	20 Mar 2019	Recommendation	ATFM TF/2 meeting		Completed
	2.	Presentation to the ACAO ANC/40	21 Mar 2019	Support	ACAO		Completed
	3.	Preparing a Working Paper to MIDANPIRG/17	30 Mar 2019	WP	Secretariat	Chairman	Completed
	4.	Agreement on the regional ATFM framework by MIDANPIRG	18 Apr 2019	MIDANPIRG Conclusion	MIDANPIRG/17	Secretariat	Completed
	5.	Presentation to the ACAO Executive Council	28-29 Apr 2019	For support	ACAO		Completed
	6.	Notifying States about MIDANPIRG/17 Conclusion and that the development of ATFM CONOPS started	30 Apr 2019	State Letter	ICAO	Chairman	
Key Activity 2 Development of Draft CONOPS	7.	Development of a Draft ATFM CONOPS	10 Jul 2019	Draft ATFM CONOPS	ATFM Core Team		
	8.	Circulating the Draft ATFM CONOPS to States	15 Jul 2019	State Letter	ICAO	ACAO	
	9.	Feedback form States on the Draft ATFM CONOPS	15 Aug 2019	Feedback	States		
	10.	Consolidation of the Draft ATFM CONOPS for presentation to the ATM SG/5 meeting	30 Aug 2019	Consolidated version of ATFM CONOPS	Secretariat	Chairman ATFM Core Team	
	11.	Agreement on the Draft ATFM CONOPS	11 Sep 2019	Draft ATFM CONOPS	ATM SG/5		
	12.	Circulating the Draft ATFM CONOPS	25 Sep 2019	State Letter	ICAO	ACAO	
	13.	Presentation to DGCA-MID/5	Nov 2019	For Info and Support	ICAO		
	14.	Presentation to ACAO Executive Council	Dec 2019	For Info and Support	ACAO		
Key Activity 3 Development of ATFM Regional Framework and	15.	Development of Initial Draft ATFM Regional Framework and draft ATFM Common Operating Procedures	31 Dec 2019	Initial Draft ATFM Regional Framework and draft Common Operating Procedures	ATFM Core Team	Face-to-face meeting(s) might be required	

APPENDIX B

B-2

draft Common Operating Procedures based on the agreed CONOPS	16.	Agreement on the Draft Regional Framework and draft Common Operating Procedures	13 Jan 2020	Draft ATFM Regional Framework and draft Common Operating Procedures	ATFM TF/3 meeting (12-13 Jan 2020)		
	17.	Circulating the Draft Regional Framework and draft Common Operating Procedures to States	20 Jan 2020	State Letter	ICAO	ACAO	
	18.	Feedback form States on the Draft ATFM Regional Framework and draft Common Operating Procedures	10 Mar 2020	Feedback	States		
	19.	Consolidation of a Draft Regional Framework and draft Common Operating Procedures for presentation to the MSG/7 meeting	25 March 2020	Consolidated version of Draft ATFM Regional Framework and draft Common Operating Procedures	Secretariat	Chairman ATFM Core Team	
	20.	Presentation to ACAO Executive Council	Apr 2020	For Info and Support	ACAO		
	21.	Endorsement of the ATFM CONOPS, Regional Framework and Common Operating Procedures including agreement on a roadmap for the implementation	17 Jun 2020	ATFM CONOPS, Regional Framework and Common Operating Procedures	MSG/7 (15-17 Jun 2020)		
	22.	Circulation of the CONOPS, Regional Framework and Common Operating Procedures and posting them on the ICAO MID Website	30 Jun 2020	State Letter	ICAO	ACAO	
	23.	Presentation to ACAO Executive Council	Dec 2020	For Info and Support	ACAO		
Key Activity 4 Implementation of the MID ATFM Regional Framework and Common Operating Procedures based on the agreed CONOPS	24.	Implementation of the MID ATFM Regional Framework and Common Operating Procedures	Cont.	Implementation of ATFM Regional Framework and Common Operating Procedures	States		
	25.	Implementation of ATFM framework at national level	Cont.	National ATFM framework	States		

B-3

Key Activity 5 Post Implementation Review of the MID ATFM Regional Framework	26.	Post implementation review	Each 3 months	Post Implementation review	ATFM Core Team		
	27.	Improvement of the ATFM Regional Framework and Common Operating Procedures	TBD 2021	Proposal for improved ATFM Regional Framework and Common Operating Procedures	ATFM TF	ATFM Core Team	
	28.	Review and continuous improvement of the ATFM Implementation in the MID Region with consideration of establishment of centralized ATFM system for the MID Region	TBD	Continuous improvement	ATFM TF	ATFM Core Team	
Key Activity 6 Training and raising awareness related to ATFM	1.	Development of Training Programme Template for qualifying ATFM Specialist	31 Dec 2019	Training Programme Template for ATFM Specialist	ATFM TF / ATFM Core Team		
	2.	Development of working arrangement for the ATFM Visits to States that would include ATFM Workshop and/or training courses	31 Dec 2019	working arrangement for the ATFM Visits	ATFM TF / ATFM Core Team		
	3.	Organizing an ATFM Workshop with the planned A-CDM Workshop	21-23 Oct 2019	A-CDM/ATFM Workshop	ICAO/ACAO	ATFM TF	
	4.	Organizing of ATFM Training Courses	TBD 2020/2021	ATFM Training Courses	ICAO/ACAO	TBD	
	5.	Conduct ATFM Support visits to States	TBD 2020/2021	ATFM Support visits	ATFM support Team	TBD	
	6.	Conduct familiarization visits to CADENA, Singapore, India, EUROCONTROL, FAA, etc.	TBD	ATFM Familiarization Visits	ACAO ICAO		

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