



INTERNATIONAL CIVIL AVIATION ORGANIZATION

MIDDLE EAST OFFICE

AIR TRAFFIC FLOW MANAGEMENT IMPLEMENTATION WORKSHOP

(Doha, Qatar, 6 – 7 February 2023)

MAIN OUTCOMES OF THE WORKSHOP

1. PLACE AND DURATION

1.1 The Air Traffic Flow Management (ATFM) Implementation Workshop was gratefully hosted by Qatar Civil Aviation Authority (QCAA) in Doha, at the Qatar Air Traffic Control Centre (QATCC), 6 – 7 February 2023.

2. OPENING

2.1 The Workshop was opened by Mr. Ahmad Al-Eshaq, ANS Director, Qatar Civil Aviation Authority, who welcomed all the participants to Qatar and wished them a pleasant stay and a fruitful Workshop.

2.2 Mr. Ahmad Amireh, Regional Officer, Air Traffic Management and Search and Rescue (RO/ATM/SAR) extended appreciation to Qatar for hosting the Workshop and to the participants for being part of the ATFM Task Force and for accepting the invitation to actively participate in the Workshop and share their State experiences, views and challenges, which would support the ATFM Task Force in achieving its objectives. He highlighted that the priority now is for implementing Phase IA of the MID ATFM Implementation Plan.

3. ATTENDANCE

3.1 The Workshop was attended by a total of fifty (50) participants from eight (8) States (Bahrain, Iraq, Jordan, Oman, Qatar, Saudi Arabia, UAE and USA/FAA) and four (4) International Organizations (CANSO, EGATCA, IATA and IFATCA). The list of participants is at **Attachment A**.

4. OBJECTIVE

4.1 The objective of the Workshop was to foster the ATFM implementation as per the agreed plan; in particular, Phase IA. The slow pace of development during the last two years was reasonable due to higher priority and pressing tasks, related to the COVID-19 recovery and the FWC2022. The ATFM implementation during the FWC2022 was considered as a live and successful example of the ATFM implementation of MID Doc 014.

4.2 The Workshop provided an opportunity to support the MID States in taking the proper actions required for implementing Phase IA of the MID ATFM Implementation Plan within the agreed timelines. Additionally, the Workshop was considered as a venue for States to share their experience and challenges among the ATFM TF members.

5. ADOPTION OF THE PROVISIONAL AGENDA

5.1 The following Agenda was adopted:

- ICAO ATFM provisions
- Regional ATFM implementation plan
- Capacity management in correlation with the airspace management
- Capacity calculation and declaration methodologies
- ATFM measure implementation
- Hands-on exercises
- Sharing States experience

5.2 The documentation and presentations delivered during the Workshop are available on the ICAO MID Office website at: <https://www.icao.int/MID/Pages/2023/ATFM%20Workshop.aspx>

6. DISCUSSION POINTS

6.1 The following topics were presented and discussed:

- a) Review of ICAO references related to ATFM and the Regional requirements and plans.
- b) Capacity management and airspace enhancements, that would improve the capacity as a first step prior any ATFM implantation.
- c) Operational data collection and distribution procedures.
- d) Capacity calculation methodologies to identify the areas of ATFM requirements.
- e) Review of the ATFM implementation Plan Phase IA, and proposed enhancements to it to be reviewed by the ATFM TF/7 meeting, as at **Appendix A**. The majority of the States supported the timeline of Phase IA to be completed by 31 December 2023.
- f) The States provided the developments related to ATFM implementation and the challenges faced during the establishment, as follow:
 - Iraq-GCANS presented PPT/1, including an overview of Baghdad FIR, sectorization and traffic distribution and attraction events. GCANS presented their experience in the initial steps of the establishment of FUA concept and ADP process.
 - Oman presented PPT/2, including their methodology for Capacity calculation.
 - Qatar presented PPTs/3, 4 and 5, including FWC2022 ATFM Implementation, Capacity analysis and declaration Methodology and highlights of the Regulation establishment and documentation.
 - Saudi Arabia-SANS presented PPT/6, including the national ATFM Plan and provided a live demonstration of SANS ATFM Dashboard, including traffic trends analysis.
- g) The participants noted with appreciation the successful establishment of Doha ATFM unit and the implementation of ATFM measures during FWC2022 event, in addition to the continued ADP distribution.
- h) The offer received from QCAA related to the provision of support to the States in ATFM, including support in documentation (regulation and operations manual) and initial training and setup of ATFM unit, was noted with appreciation.
- i) The participants recalled and thanked CANSO for their offer received earlier and the capabilities of the new version of the CADENCE operational data exchange platform at no charge including the required training and customization option to meet the MID Regional requirements.

7. OUTCOMES

7.1 The participants of the Workshop agreed on the timeline of Phase IA to be 31 December 2023; and the tasks will not require any additional human resources or tools.

7.2 Based on the above, it was highlighted that the results of the last conducted ATFM implementation survey in 2018 are not representing the latest developments by the States; and

encouraged the ATFM TF to develop and circulate new survey, including the activities of Phase IA of the MID ATFM Implementation Plan to the MID States to enable the TF monitor the actual level of implementation and provide support, as required.

APPENDIX

Note: detail information regarding each element is available in ICAO MID Doc 014, Version 2, Part II Chapter 5.

Checklist for ATFM service implementation assessment and monitoring						State	
Item	Phase	Task	Subtask / parameters to be considered	Target date / intervals	Applicable area	Status / reference	
1	IA	ATFM Regulations and national guidance material		31 December 2023	States where traffic demand at times exceeds or is expected to exceed declared capacity.		
2		Strategic Capacity and Demand Monitoring and Analysis: A regular program of strategic capacity and demand analysis	Human resources: Structure, Job description and Training programme	Programme of bi-annual analysis or on ad-hoc basis		Should be implemented for all international airports and associated terminal area airspace, and for all en-route ATC sectors. Where strategic analysis indicates that demand does not yet exceed capacity, preparation for the implementation of ATFM capability should be based on careful analysis of current traffic and expected growth in the next 5 years	
			Historical traffic data analysis and traffic growth forecasts				
			Seasonal flight schedules				
			Compliance with other ATC Units, which may be implementing ATFM measures				
			ATC procedures related to ATFM including LoAs				
			ATFM systems/tools (Daily traffic demand analysis)				
3		Methodology for Capacity calculation and declaration	Calculation of Aerodrome Acceptance Rate (AAR)	Based on item 2		Should be implemented for all international airports and associated terminal area airspace, and for all en-route ATC sectors. Where strategic analysis indicates that demand does exceed potentially will exceed the capacity, preparation for the implementation of ATFM capability should be based on careful analysis of current traffic and expected growth in the next 5 years	
			Calculation Sector Capacity				
			Policy for identifying the need for tactical ATFM measures (ATFM CONOPS)				
4		Pre-Tactical Capacity and Demand Monitoring and Analysis	Expected runway and airspace configurations	Daily pre-tactical airport and airspace capacity and demand analysis		all ATFM Program Airports and associated terminal area airspace, and for all en-route ATC sectors	
			Forecast meteorological phenomena				
			ATC resources, facilities and equipment				

ATFM WORKSHOP- OUTCOMES

APPENDIX A

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			Other known or expected capacity constraints (including Military, special movements...)			
			updated flight schedule and flight plan information			
5		Pre-Tactical ATFM Execution	Operational data exchange (Daily Teleconferences between ACCs)	Daily basis	ATFM Daily Plan (ADP) for all ATFM Program Airports and associated terminal area airspace, including airport and airspace capacity declarations and related background information including relevant AIP/NOTAM publication should be prepared and distributed to all relevant stakeholders.	
			Web-based / Email distribution			
6		Post-Operations Analysis		Daily basis	The accuracy and effectiveness of capacity and demand analyses and ADP preparation and distribution, including supporting information should be verified through comparison with operational outcomes observed, and rectification of discrepancies included in planning for system and process improvements.	

ATTACHMENT A



LIST OF PARTICIPANTS

State	Name	Title
BAHRAIN	Mr. Abdulla Hasan Al Qadhi	Director Air Traffic
	Mr. Ahmed Y. Al Malki	A/Chief Air Traffic Management
IRAQ	Mr. Abbas Sabbar Ghali	Director General of GCANS - GCANS
	Mr. Abdullah Fadhil Mohsin	Operations Member - GCANS
	Mr. Ali Mohammed Abdalghani	OPS Manager - GCANS
	Ms. Hiba Khalid Hussein	Approach Procedure Unit - GCANS
	Mr. Hussein Abdulkareem Lazim	ATFM Deputy - GCANS
	Mr. Mohanad Ali M. Jawad	ATFM Manager - GCANS
	Mr. Nabeel Saad Abdulridha	ACC Training Manager - GCANS
JORDAN	Mr. Khaled Arabiyat	ATM Director - CARC
	Mr. Marwan Hani Al-Masri	Air Traffic Control Officer ATCO - CARC
	Mr. Mohammad AbuSalah	Air Traffic Controller - CARC
OMAN	Mr. Abdullah Said Al Hasani	Standard Officer – Airspace
	Mr. Mohammed Rashid Hamad Al Balushi	Air Traffic Controller Officer
QATAR	Mr. Abdulla Abdulqader Al-Haj	Head of Doha Tower
	Mr. Ahmed Mesad Qadar	ATCO 1 Approach
	Mr. Ahmed Mohd H M Al-Eshaq	ANS Director
	Mr. Eissa Abdulrahman Al-Meabid	Deputy Head of Approach

ATFM WORKSHOP-OUTCOMES
ATTACHMENT A

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State	Name	Title
	Mr. Erwin Obergruber	ATM Advisor
	Mr. Johan Venter	ATCO - Instructor
	Mr. Keith Crawford	ANS Advisor - ATFM Expert
	Mr. Kevin Cooper	ANS Advisor
	Mr. Majed Alatawi	Director Safety Department
	Mr. Marco Proietti	OPS Expert (ENAV - FUSION)
	Miss. Marion Murel	ANS - Deputy Safety Manager
	Ms. Maryam Rashid Al-Naimi	Acting Head of IMS - ANS Safety
	Mr. Mohammed A.Rahman Al-Nuaimi	Radar Engineer
	Mr. Mohammed Almuhamadi	ATC / Head of Training, Air Navigation Department
	Mr. Nasser Jassim Al-Khalaf	Head of Air Traffic Operations
	Ms. Noof Al-Sheebi	Air Traffic Expert, Safety Officer
	Mr. Pieter Jacobus De Bruyn	ATFM Specialist
	Dr. Ramy Saad	ANS Inspector
	Mrs. Samina Razaq	Senior Electronics Engineer
	Mr. Umair Ahmed	Team Lead Comm. OPS
SAUDI ARABIA	Mr. Ahmad Sami Abu Ghallab	ATFM Chief - SANS
UAE	Mr. Ahmed Ali Saeed Al Mansoori	Senior Specialist - Air Space Management
	Mr. Rovshan Sultanov	Manager Airspace Design & Development - Dubai Air Navigation Services (DANS)

State	Name	Title
	Mr. Saood Abdulla AlAnsari	ATC Operations Manager - Approach (DANS)
	Mr. Simon Lindsay Blackwell	Team Leader Procedures – ATC-DXB Tower - Dubai Air Navigation Services (DANS)
USA/FAA	Mr. Travis Fiebelkorn	Senior International Representative, Federal Aviation Administration, Air Traffic Organization, Mission Support- Europe, Africa, Middle East Group

Org.	Name	Title
CANSO	Mr. Javier Alejandro Vanegas	Director Latin America and Caribbean Affairs - Civil Air Navigation Services Organization (CANSO)
EGATCA	Mr. Ahmed Mohamed Fouad Haikel	ATCO
	Mr. Hany Mohamed Abdelnoneem	ATCO
	Mr. Raef Elsayed Ibrahim Doghda	ATCO
IATA	Ms. Zainab Khudhair	Manager Safety & Flight Operations (Africa & Middle East)
	Mr. Jacob Kipchumba Kangogo	ATM Regional Manager - ASPAC - Qatar Airways
IFATCA	Mr. Fateh Bekhti	Executive Vice President IFATCA AFM
ICAO MID	Mr. Ahmad Amireh	Regional Officer, Air Traffic Management and Search and Rescue (RO/ATM/SAR)
	Ms. Dina El Karimy	Technical Assistant (ATM/SAR & ASF)