

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 reference to the related meeting Agenda Items

MID Air Traffic Flow Management (ATFM)

(Presented by ATFM TF Chairman and the Secretariat)

### **SUMMARY**

This paper presents the latest developments related to the Air Traffic Flow Management implementation in the MID Region.

Action by the meeting is at paragraph 3.

#### REFERENCE

- MIDANPIRG/20 AND RASG-MID/10 MEETINGS REPORT (MUSCAT, OMAN, 14-17 MAY 2023)
- ICAO MID Doc 014: MID ATFM PLAN (V2.0)
- ATFM TF/8 MEETING SUMMARY OF DISCUSSION (VIRTUAL, 31 OCTOBER 1 NOVEMBER 2023)
- NINTH MEETING (ATM SG/9) (SHARM EL SHEIKH, EGYPT, 14 16 NOVEMBER 2023)

### 1. Introduction

- 1.1 The MIDANPIRG/19 meeting, through Conclusion 19/14, endorsed the revised version of the MID ATFM Plan (V2.0), which was published under the ICAO MID website as MID Doc 014: <a href="https://www.icao.int/MID/MIDANPIRG/Pages/MID-Docs.aspx">https://www.icao.int/MID/MIDANPIRG/Pages/MID-Docs.aspx</a>.
- 1.2 The MIDANPIRG/19 meeting encouraged the States to develop and implement the ATFM plan on national level, the MID Doc 014 included guidance material for developing a national implementation plan, and training requirements considering the current regional capabilities.
- 1.3 The MIDANPIRG/20 meeting tasked the ATFM TF to develop and circulate a survey to monitor the level of ATFM implementation and provide the necessary support.

### 2. DISCUSSION

2.1 The meeting may wish to note that ICAO and International Organizations would provide support, as appropriate, to the States and ANSPs to further support the ATFM implementation; the MID Office successfully organized the MID ATFM Implementation Workshop, which provided the

participants with a holistic view and the ATFM requirements, and reviewed the ATFM implementation plan (Phase 1A); the Workshop provided an opportunity to support the MID States in taking the proper actions required for implementing Phase 1A of the MID ATFM Implementation Plan within the agreed timelines. Additionally, the Workshop was considered a venue for States and international Organizations to share their experience and challenges among the MID ATFM TF members. A summary of the outcomes of the Workshop are available under ICAO Website: <a href="https://www.icao.int/MID/Pages/2023/ATFM%20Workshop.aspx">https://www.icao.int/MID/Pages/2023/ATFM%20Workshop.aspx</a>.

- 2.2 Furthermore, the MIDANPIRG/20 meeting encouraged the MID States to use the information presented in the Workshop to support the implementation of Phase 1A, and report progress or challenges to the next TF meeting. The timeline of Phase 1A implementation according to the MID ATFM Plan was agreed to be 31 December 2023.
- 2.3 The meeting may wish to note that ATFM TF developed and circulated the ATFM Implementation Survey (2023), to the MID States to enable the TF to monitor the actual level of implementation and provide the necessary support, as required.
- 2.4 The details of the survey analysis were reviewed by the TF, the results were as follows:
  - a) 10 States out of 15 MID States (66.6%) participated in this activity.
  - b) the level of implementation of Phase 1 A items was found as follows:
    - i. National regulation, staffing and training: 53.6%.
    - ii. Demand analysis: 62.5%.
    - iii. Capacity calculation: 53.3%.
    - iv. Measures at airport and TMA: 45%.
    - v. Measures at ACC sector: 50.7%.
    - vi. Supporting tools: 63.3%.
    - vii. Airspace enhancements: 92.5%.
    - viii. ADP and ATFM measures: 42.1%.
  - c) the overall implementation of ATFM Phase IA requirements was 56.5%.
- 2.5 Based on the above, the ATFM TF presented to the ATM SG the analysis, and the ATM SG identified the following common areas are required to foster the implementation of MID ATFM Phase IA:
  - a) National Regulations and organizational subjects including ATFM posts (56%);
  - b) capacity calculation (strategic level) at TMA(s) (40%);
  - c) optimize the operations within the TMA(s), ACC(s) and interface with adjacent ACCs (-100%);
  - d) daily pre-tactical capacity and demand analysis at TMA(s) (20%);
  - e) NOPS B0/1: Initial integration of collaborative airspace management with ATFM (30%);
  - f) ATFM Letter of Agreement/Procedures between the ACC(s) (34%); and
  - g) coordinated ATFM Daily Plan (ADP) and share with the concerned Stakeholders (20%).

- 2.6 The ATFM TF will focus on the items identified above, and encouraged the MID Office to include, in its plan for the year 2024, further implementation support activities to enhance the level of implementation.
- 2.7 The meeting may wish to note that the level of ATFM implementation would vary from one FIR to another based on the level of airspace complexity, number of movements, demand, etc. However, to meet the requirements of Annex 11 (para 3.7.5), the national ATFM position should be the basis of any level of ATFM implementation, starting with the basic capacity vs demand analysis. the Manual on Collaborative Air Traffic Flow Management (Doc 9971) in addition to the MID Doc 014 would provide the required guidance for the establishment of ATFM service.
- 2.8 Accordingly, the meeting may wish to review the ATFM Action plan at **Appendix A**.
- 2.9 Based on the above, the meeting is invited to review and agree on the following Draft Conclusion, emanating from the ATM SG:

## MIDANPIRG CONCLUSION 21/XX: DEVELOPMENT OF MID STATES ATFM PLAN

That.

- a) based on the guidelines provided in ICAO MID Doc 014: ATFM Plan (V2.0), MID States develop their respective ATFM implementation plan and agreements with adjacent FIRs and share them with ICAO MID;
- b) by organising individual workshops, ICAO MID supports the development of States National ATFM Plans and implementation of ICAO Doc 014 requirements for Phase I (including Phase IA & IB), where requested; and
- c) the MID ATFM Task Force is tasked with the identification of Priority ATFM Implementation Areas within the MID Region, to enable further implementation support activities.

### 3. ACTION BY THE MEETING

- 3.1 The meeting is invited to:
  - a) note the outcomes of the ATFM Implementation Survey (2023) and encourage States to complete the implement of Phase 1A of the MID ATFM Plan, according to the agreed timeline;
  - b) review and agree on the Draft Conclusions in para 2.8; and
  - c) encourage the ATFM TF members and the Stakeholders to further support the implementation activities.

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### ACTION PLAN FOR IMPLEMENTATION OF ATFM IN THE MID REGION

| Key Activities          | Action |   |                      |   | G.                           | Supported         | Status /  |
|-------------------------|--------|---|----------------------|---|------------------------------|-------------------|-----------|
|                         | No.    | Description   | Target date          | Deliverable                                     | Champion                     | by                | RMKs      |
| Key Activity 1          | 1.1    | Recommending the best Scenario for a regional ATFM framework  | 20 Mar 2019          | Recommendation                                  | ATFM TF/2 meeting            |                   | Completed |
| Agreement on the        | 1.2    | Presentation to the ACAO ANC/40   | 21 Mar 2019          | Support   | ACAO                         |                   | Completed |
| ATFM Regional Framework | 1.3    | Preparing a Working Paper to<br>MIDANPIRG/17  | 30 Mar 2019          | WP  | Secretariat                  | Chairman          | Completed |
|                         | 1.4    | Agreement on the regional ATFM framework by MIDANPIRG   | 18 Apr 2019          | MIDANPIRG<br>Conclusion                         | MIDANPIRG/17                 | Secretariat       | Completed |
|                         | 1.5    | Presentation to the ACAO Executive Council  | 28-29 Apr<br>2019    | For support                                     | ACAO                         |                   | Completed |
|                         | 1.6    | Notifying States about<br>MIDANPIRG/17 Conclusion and that<br>the development of ATFM CONOPS<br>started | 30 Apr<br>2019       | State Letter                                    | ICAO                         | Chairman          | Completed |
| Key Activity 2          | 2.1    | Review of the CONOPS V0.1 during ATFM TF/3  | 12 Jan 2020          | ATFM CONOPS draft V0.1                          | ATFM TF/3                    |                   | Completed |
| Development of CONOPS   | 2.2    | Further review V0.1 and develop V0.2 for presentation to the ATFM TF/4                                  | 20 Feb 2020          | ATFM CONOPS draft V0.2                          | ATFM Core Team               |                   | Completed |
|                         | 2.3    | Review V0.2 by the ATFM TF/4  | 20 Sep 2020          | ATFM CONOPS draft V0.2                          |                              |                   | Completed |
|                         | 2.4    | Presentation to ACAO ANC  | 28 Sep 2020          | For Info and Support                            | ACAO                         |                   | Completed |
|                         | 2.5    | Development of the CONOPS draft V0.3  | 20 Oct 2020          | Chairperson and<br>Secretariat                  |                              |                   | Completed |
|                         | 2.6    | Circulate the MID ATFM CONOPS draft V0.3 to ATFM TF members   | 20 Oct 2020          | email to TF members for final comments          | Secretariat                  | ACAO              | Completed |
|                         | 2.7    | Feedback form Task Force members on the MID ATFM CONOPS draft V 0.3                                     | 31 Oct 2020          | Feedback/comments                               | Task Force members           |                   | Completed |
|                         | 2.8    | Presentation of MID ATFM CONOPS draft V0.3 to ATM SG/6 for review                                       | 9 Nov 2020           | Consolidated version of ATFM CONOPS V0.3        | Chairman and<br>Secretariat  | ATFM Core<br>Team | Completed |
|                         | 2.9    | Endorsement of the MID ATFM CONOPS V1.0 by MIDANPIRG/18   | Feb 2021             | ATFM CONOPS V1.0                                | MIDANPIRG/18                 |                   | Completed |
|                         | 2.10   | Circulation of the MID ATFM CONOPS V1.0 to States   | Mar 2021             | ICAO Doc 014: MID<br>Region ATFM<br>CONOPS v1.0 | posted under ICAO<br>Website |                   | Completed |
|                         | 2.11   | Presentation to ACAO Executive<br>Council   | 29 – 30 June<br>2021 | For Info and Support                            | ACAO                         |                   | On-going  |

| Key Activities   | Action |  | T4 3-4-        | D. F. 11  | CI.                            | Supported                                 | Status /  |
|--|--------|--|----------------|---|--------------------------------|---|-----------|
|  | No.    | Description  | Target date    | Deliverable   | Champion                       | by  | RMKs      |
| Kev Activity 3  Development of ATFM Regional Framework and | 3.1    | Development of ATFM Regional<br>Framework and Common Operating<br>Procedures initial draft V0.1 to be<br>presented to the ATM SG/6             | 15 Nov<br>2020 | ATFM Regional Framework and Common Operating Procedures initial draft V0.1                              | Chairperson and<br>Secretariat |   | Completed |
| Common<br>Operating<br>Procedures                          | 3.2    | Circulation of the ATFM Regional<br>Framework and Common Operating<br>Procedures initial draft V0.1 to ATFM<br>TF members                      | 15 Nov<br>2020 | email to ATFM TF members for comments   | Secretariat                    |   | Completed |
|  | 3.3    | Feedback form Task Force members on<br>ATFM Regional Framework and<br>Common Operating Procedures initial<br>draft V0.1                        | 15 Dec 2020    | Feedback/comments * consolidate the inputs (after receiving feedback)                                   |                                |   | Completed |
|  |        | Development of: - ATFM Regional Framework draft V0.2, - ATFM Common Operating Procedures draft V0.2.   | 15 Nov<br>2021 | -ATFM Regional Framework draft V0.2, -ATFM Common Operating Procedures draft V0.2.                      | ATFM Core Team                 | Volunteers<br>(States/<br>ANSPs/<br>ORGs) | Completed |
|  | 3.4    | Presentation to ACAO ANC   | Q2 2022        | For Info and Support  | ACAO                           |   |           |
|  | 3.5    | Circulation of the:  - ATFM Regional Framework draft V0.3,  - ATFM Common Operating Procedures draft V0.3. to ATFM TF members.                 |                | email to ATFM TF members  | ICAO                           | ACAO                                      | Completed |
|  | 3.6    | Feedback on V0.3.  |                | Feedback/comments   | ATFM TF members                |   | Completed |
|  | 3.7    | Consolidation of:  - ATFM Regional Framework draft V0.4,  - ATFM Common Operating Procedures draft V0.4. for presentation to ATM SG/7 meeting. | Nov 2021       | Consolidated version of<br>Draft ATFM Regional<br>Framework and draft<br>Common Operating<br>Procedures | Chairman and<br>Secretariat    | Chairman<br>ATFM Core<br>Team             | Completed |
|  | 3.8    | Presentation to ACAO Executive Council.  | TBD            | For Info and Support  | ACAO                           |   |           |
|  | 3.9    | Endorsement of MID ATFM Regional   | Feb 2022       | ATFM Regional   | MIDANPIRG/19                   |   | Completed |

| Key Activities                | Action |   | _                |  |                             | Supported          | Status /   |
|-------------------------------|--------|---|------------------|--|-----------------------------|--------------------|--|
|                               | No.    | Description   | Target date      | Deliverable  | Champion                    | by                 | RMKs   |
|                               |        | Framework and Common Operating<br>Procedures V1.0 by MIDANPIRG/19   |                  | Framework and<br>Common Operating<br>Procedures V1.0 |                             |                    |  |
|                               | 3.10   | Circulation of the endorsed versions of CONOPS, Regional Framework and Common Operating Procedures and posting on the ICAO MID Website. | Q1 2022          | State Letter   | ICAO                        | ACAO               | Completed  |
|                               | 3.11   | Council   | May 2022         | For Info and Support                                 | ACAO                        |                    |  |
| Key Activity 4                | 4.1    | Development of MID ATM Operational Data Exchange process  | 9 Nov 2020       | MID ATM Operational Data exchange                    | Chairperson and Secretariat |                    | Completed  |
| Implementation of ATFM in the | 4.2    | Presenting to the MIDANPIRG/18 for endorsement  | Feb 2021         | MIDANPIRG<br>Conclusion 18/XX                        |                             |                    | Completed  |
| MID Region                    | 4.3    | Establishment of the webpage under ICAO secure portal, including the ATM and Airspace user data   | Feb 2021         | Group name   |                             |                    | Completed  |
|                               | 4.4    | State nominated FPs briefings   | June 2021        |  |                             |                    | Completed  |
|                               | 4.5    | Procedure for Teleconferences between concerned stakeholders to exchange ATM related info   | 2022             | Teleconferences to exchange info                     | ICAO MID                    | States -<br>IATA   | Completed  |
|                               | 4.6    | Implementation of the MID ATFM<br>Regional Framework and Common<br>Operating Procedures   | Cont.            | Implementation roadmap                               | States                      |                    | On going<br>Phase 1A<br>implementat<br>ion = 56.5%<br>(as of TF/9) |
|                               | 4.7    | Implementation of ATFM framework at national level  | Cont.            | National ATFM framework                              | States                      |                    | On going   |
|                               | 4.8    | Development of Checklist and survey<br>States' compliance   | Q2 2023          | Consolidate State compliance with the ATFM checklist | ATFM TF<br>MID State        | ICAO MID<br>Office | Completed  |
| Key Activity 5                | 5.1    | Post implementation review  | Each 3<br>months | Post Implementation review                           | ATFM Core Team              |                    | Where required   |
| Post<br>Implementation        | 5.2    | Improvement of the ATFM Regional Framework and Common Operating Procedures  | 2024             | V 3.0  | ATFM TF                     | ATFM Core<br>Team  | Where required   |

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| Key Activities  | Action |  | T                 | - · · · · ·                                     |                      | Supported         | Status /  |
|---|--------|--|-------------------|---|----------------------|-------------------|-----------|
|   | No.    | Description  | Target date       | Deliverable                                     | Champion             | by                | RMKs      |
| Review of the<br>MID ATFM<br>Regional<br>Framework            | 5.3    | Review and continuous improvement of<br>the ATFM Implementation in the MID<br>Region with consideration of<br>establishment of centralized ATFM<br>system for the MID Region | TBD               | Continuous<br>improvement                       | ATFM TF              | ATFM Core<br>Team |           |
| Key Activity 6 Training and raising awareness related to ATFM | 6.1    | Development of National ATFM<br>Implementation Plan and Training<br>Programme Template for qualifying<br>ATFM Specialist   | 2023              | Training Programme Template for ATFM Specialist | MID States           |                   | On going  |
|   | 6.2    | Development of working arrangement<br>for the ATFM Visits to States that would<br>include ATFM Workshop and/or<br>training courses   | 2023              | working arrangement for the ATFM Visits         | MID States           |                   | On going  |
|   | 6.3    | Organizing an ATFM Workshop with the A-CDM Workshop  | 21-23 Oct<br>2019 | A-CDM/ATFM<br>Workshop                          | ICAO                 | ATFM TF           | Completed |
|   | 6.4    | Organizing ATFM Workshop/Training /webinars Awareness Courses: - Capacity calculation and declaration - ATFM Publications issues - Flight Planning systems capabilities      | Q1 2023           | ATFM Training<br>Awareness/Courses              | ICAO                 | TBD               | Completed |
|   | 6.5    | Conduct ATFM Support visits to States  | 2022 2023         | ATFM Support visits                             | ATFM support<br>Team | TBD               | On going  |
|   | 6.6    | Conduct familiarization visits/webinars of ICAO ATM/CDM CADENA, Singapore, India, EUROCONTROL, FAA, etc.   | On going          | ATFM Familiarization<br>Visits                  | ACAO<br>ICAO         |                   | On going  |

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| Key Activity x  Revision of MID  ATFM Plan | To incorporate the latest amendment of reference material in the MID Doc 014  | 2024 | Revised Doc 014   |  |  |
|--|---|------|---|--|--|
| Kev Activity x  Identification of Areas of | Based on the level and complexity of operations, the ATFM TF identify the areas of applicability as priority for the support. |      | Categorized priority list, based on operational criteria. |  |  |
| applicability                              |   |      |   |  |  |