



International Civil Aviation Organization

MIDANPIRG/19 and RASG-MID/9 Meeting

(Riyadh, Saudi Arabia, 14 - 17 February 2022)

Agenda Item 3.3: Air Navigation Subjects of interest to RASG-MID including RVSM operations and Monitoring

**MID REGION READINESS FOR THE AIRPORT
COLLABORATIVE DECISION MAKING (ACDM) IMPLEMENTATION**

(Presented by the Secretariat)

SUMMARY

This paper presents the MID Region Readiness for the Airports Collaborative Decision Making (ACDM) Implementation; and proposes the establishment of a MID ACDM Task Force.

Action by the meeting is at paragraph 3.

REFERENCES

- ICAO GANP 6th Edition
- ASPIG/3 Report

1. INTRODUCTION

1.1 All stakeholders involved in aerodrome operations have their own processes that are conducted as efficiently as possible. However, there is not enough effective information sharing among them. As some basic coordination between ATC and ramp control (which may also be provided by ATC) may exist, other aerodromes units may operate in isolation from the ATM network and aircraft operators manage their operations independently from each other. The Airport Collaborative Decision Making (ACDM) provide the appropriate framework to enhance that connectivity between those stakeholders.

2. DISCUSSION

Operational thread: Airport Collaborative Decision Making (ACDM)

2.1 The meeting may wish to note that aerodrome operators, aircraft operators, air traffic controllers, ground handling agents, pilots and air traffic flow managers should use the ACDM solutions to share live information that may be dynamic, in order to make better and coordinated decisions. This applies notably in day-to-day operations and also in case of severe weather conditions or in case of emergencies of all kinds. The meeting may wish to note that aerodromes should consider establishing the adequate connection to the ATM network via the ATFM function or to ATC through data exchange channels.

2.2 The meeting may wish to note the following benefits to all stakeholders concerned by the implementation of the ACDM, including but not limited to:

- **Airport Operators** A-CDM improves the efficient use of stands/gates and increase airport capacity.
- **Aircraft Operators**: A-CDM will help them reduce surface movement costs due to lower fuel consumption as a result of reduced taxiing and runway end holding times, also reducing environmental impact.
- **Ground Handling Service Providers**: A-CDM will make data available more in advance, permit better planning of tasks, and improve, inter alia, awareness of aircraft status on the ground, thus reducing delays.
- **Air traffic Service Providers**: A-CDM can improve flow control and increase airspace capacity.
- **Air Traffic Controllers**: A-CDM can assist in the development of runway improvements and capacity planning.
- **Passengers**: Passengers will also obtain significant benefits since it will improve punctuality, increase customer satisfaction, reduce lost connections, and they will have better information and service when incidents occur.

2.3 The meeting may wish the review and update the status of MID Region Readiness for the ACDM Implementation as at **Appendix A** (as per the ACDM applicability area, agreed upon by the MID States), and take action as appropriate. The meeting may wish to encourage States to provide their updates on the ACDM Dashboard in order to be used to amend the MID Air Navigation Strategy (Ref: MID Doc 002) and the MID Air Navigation Annual Report.

2.4 The meeting may wish to note with concern that some States are facing serious challenges to fully implement the ACDM. Considering the challenges and the benefits that accrue by the implementation of ACDM at the concerned Airports listed in the MID Air Navigation Plan, it is proposed to establish an ACDM Task Force (ACDM-TF) to support and assist in the implementation of ACDM in the MID Region. The draft Terms of Reference of the ACDM Task Force is available at **Appendix B** for review and endorsement.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) urge States to continuously provide ICAO MID Office with their ACDM Implementation Plan within the defined applicability area as at **Appendix A**;
- b) endorse the establishment of the MID ACDM-TF in accordance with the Terms of Reference as at **Appendix B**. Accordingly, the meeting may wish to agree on the following Draft Decision:

| | |
|-------------|--|
| Why | to endorse the establishment of the MID ACDM-TF/TORs |
| What | MID ACDM-TF/TORs |
| Who | MIDANPIRG/19 & RASG-MID/9 |
| When | Feb. 2022 |

PIRG/RASG DRAFT DECISION XX: ESTABLISHMENT OF THE MID REGION ACDM TASK FORCE (MID ACDM-TF)

That, the MID Region Airport Collaborative Decision Making Task Force (MID ACDM-TF) be established in accordance with the Terms of Reference at Appendix B.

APPENDIX A

**Aerodromes Readiness for ACDM Operations
 based on the MID Region ACDM Implementation Plan**

| State | Country Code | Total # of AD as defined in the Applicability Area | City | Aerodrome Name (AOP Table I-1) | Location Indicator (AOP Table I-1) | Designation (AOP Table I-1) | ICAO Reference Code | | Aerodrome Traffic Density | | | Information Sharing | Milestones Approach | Variable Taxi Time | Collaborative Management of Flight Updates | Collaborative Pre-departure Sequence | ACDM in Adverse Conditions | Full ACDM Implementation | Integration with ATFM/ATM Solution | ACDM Elements Implementation Progress |
|---------|--------------|--|--------|--|--------------------------------------|-------------------------------|---------------------|--------|---------------------------|--------|-------|---------------------|---------------------|--------------------|--|--------------------------------------|----------------------------|--------------------------|------------------------------------|---------------------------------------|
| | | | | | | | Number | Letter | Light | Medium | Heavy | | | | | | | | | |
| Bahrain | BHR | 1 | Manama | Bahrain International Airport | OBBI | RS | 4 | F | | | | | | | | | | | | |
| Egypt | EGY | 1 | Cairo | CAIRO INTERNATIONAL AIRPORT | HECA | RS | 4 | F | | | | | | | | | | | | |
| Iran | IRN | 1 | Tahran | Mehrabad International Airport | OIII | RS | 4 | E | | | | | | | | | | | | |
| Kuwait | KWT | 1 | Kuwait | Kuwait International Airport | OKBK | RS | 4 | F | | | | | | | | | | | | |
| Oman | OMN | 1 | Muscat | Muscat International Airport | OOMS | RS | 4 | F | | | | | | | | | | | | |

This Dashboard is based on the MID States inputs as of December 2021.

| Aerodromes Readiness for ACDM Operations based on the MID Region ACDM Implementation Plan | | | | | | | | | | | | | | | | | | | | |
|--|--------------|--|-----------|--|--------------------------------------|-----------------------------|---------------------|--------|---------------------------|--------|-------|---------------------|---------------------|--------------------|--|--------------------------------------|----------------------------|--------------------------|------------------------------------|---------------------------------------|
| State | Country Code | Total # of AD as defined in the Applicability Area | City | Aerodrome Name (AOP Table I-1) | Location Indicator (AOP Table I-1) | Designation (AOP Table I-1) | ICAO Reference Code | | Aerodrome Traffic Density | | | Information Sharing | Milestones Approach | Variable Taxi Time | Collaborative Management of Flight Updates | Collaborative Pre-departure Sequence | ACDM in Adverse Conditions | Full ACDM Implementation | Integration with ATFM/ATM Solution | ACDM Elements Implementation Progress |
| | | | | | | | Number | Letter | Light | Medium | Heavy | | | | | | | | | |
| Qatar | QAT | 1 | Doha | Hamad International Airport | OTHH | RS | 4 | F | | | | | | | | | | | | |
| Saudi Arabia | SAU | 2 | Jeddah | King Abdulaziz International Airport | OEJN | RS | 4 | F | | | | | | | | | | | | |
| | | | Riyadh | King Khalid International Airport | OERK | RS | 4 | E | | | | | | | | | | | | |
| UAE | ARE | 2 | Abu Dhabi | ABU DHABI/Abu Dhabi Intl | OMAA | RS | 4 | F | | | | | | | | | | | | |
| | | | Dubai | Dubai International Airport | OMBD | RS | 4 | F | | | | | | | | | | | | |

| Aerodromes Readiness for ACDM Operations based on the MID Region ACDM Implementation Plan | | | | | | | | | | | | | | |
|--|--------------|--|---------------------------|--------|-------|---------------------|---------------------|--------------------|--|--------------------------------------|----------------------------|--------------------------|------------------------------------|---------------------------------------|
| State | Country Code | Total # of AD as defined in the Applicability Area | Aerodrome Traffic Density | | | Information Sharing | Milestones Approach | Variable Taxi Time | Collaborative Management of Flight Updates | Collaborative Pre-departure Sequence | ACDM in Adverse Conditions | Full ACDM Implementation | Integration with ATFM/ATM Solution | ACDM Elements Implementation Progress |
| | | | Light | Medium | Heavy | | | | | | | | | |
| MID REGION | MID | 10 | 6 | 7 | 1 | | | | | | | | | |

Useful links:

- [Global Air Navigation Plan \(GANP\)](#)
- [MID eANP](#)
- [MID Air Navigation Strategy](#)
- [MID Air Traffic Flow Management - Concept of Operations](#)
- [MID Air Navigation Report](#)

This Dashboard is based on the MID States inputs as of December 2021.

APPENDIX B

Proposed

MID Region Airports Collaborative Decision Making Task Force (MID ACDM-TF)

Terms of Reference

Scope

The scope and objective of the MID ACDM-TF is to identify, plan and assist in the implementation of A-CDM at the list of Airports concerned by the ACDM Implementation, as defined on the MID Air Navigation Plan (ACDM applicability area agreed by the MID States).

To achieve the above objective, the Task Force shall:

1. Review the Current status of ACDM Implementation Plan in MID Region;
2. Review the effectiveness of existing ACDM Programmes/Plans in the MID Region and the degree of harmonization with global guidance material;
3. Check the Readiness of the newly Implemented Elements/Enablers of any ACDM Project,
4. Provide Technical Assistance to the States to implement ACDM at their concerned Airports and monitor the progress of their Effective Implementation;
5. Support planned Workshops/Seminars/Symposiums on ACDM Implementation for the MID Region;
6. Promote the interoperability of ACDM systems with tactical ATM (AMAN and DMAN), ATM automation, ATFM and Aircraft Operator systems; and
7. Establish close working arrangements with the Air Traffic Flow Management Task Force (ATFM-TF) and report directly to the Aerodromes Safety, Planning and Implementation Group (ASPIG) which will coordinate accordingly with with other relevant ICAO Regional sub-groups such as the Air Traffic Management Sub Group (ATM SG), and other groups as deemed necessary.

Composition:

The MID ACDM-TF will be a multidisciplinary group composed by States ACDM Focal Points from both CAAs and Airports concerned by the ACDM Implementation.

The nominated focal points must be Subject Matter Experts on the ACDM Implementation, supplemented with other technical members as and when required.

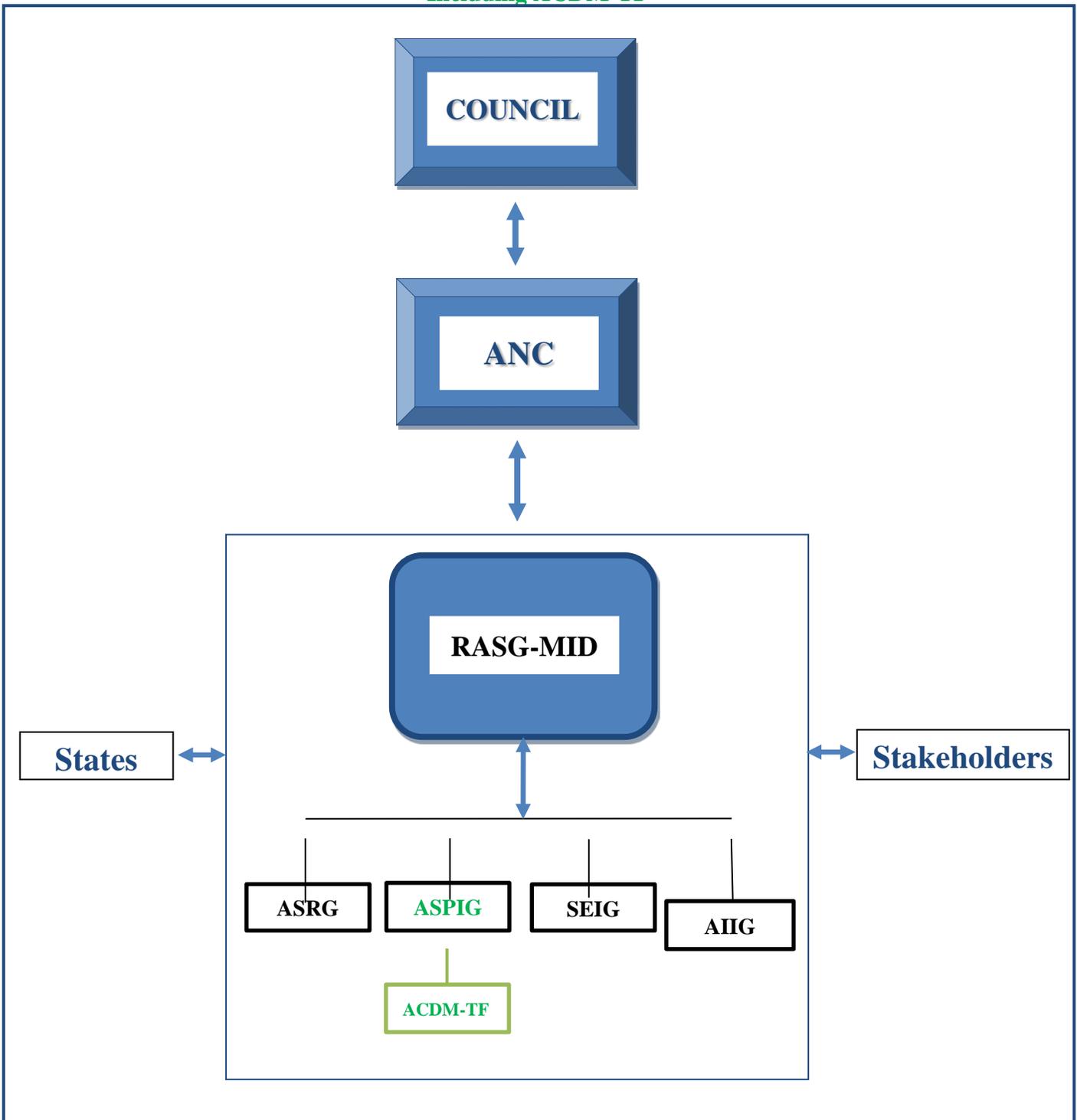
Working Methods:

The Task force meeting should be held at least once a year for three-days (face-to-face meeting).

B-2
 RASG-MID

ORGANIZATIONAL STRUCTURE

Including ACDM-TF



| | | | |
|---------|---|------|---|
| ASRG | Annual Safety Report Group | SEIG | Safety Enhancement Implementation Group |
| SPIG | Aerodromes Safety & Planning Implementation Group | AIIG | Accident & Incident Investigation Group |
| ACDM-TF | Airport Collaborative Decision Making Task Force | | |