



International Civil Aviation Organization

Aerodrome Safety & Planning Implementation Group

Third Meeting (ASPIG/3)
(Virtual, 25 – 27 October 2021)

Agenda Item 3: Regional Performance Framework for Aerodrome Capacity and Efficiency

AERODROMES CAPACITY AND EFFICIENCY DASHBOARD

(Presented by the Secretariat)

SUMMARY

This paper presents the MID States Needs related to the concept of the Basic Building Block (BBB) and the status of the Airport Collaborative Decision Making (ACDM) implementation in the MID Region.

Action by the meeting is at paragraph 3.

REFERENCES

- ICAO GANP 6th Edition

1. INTRODUCTION

1.1 The Basic Building Block (BBB) framework outlines the foundation of any robust air navigation system. It is nothing new but the identification of the essential services to be provided for International Civil Aviation in accordance with ICAO Standards. These essential services are defined in the areas of aerodromes, air traffic management, search and rescue, meteorology and information management.

1.2 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

GANP BBB

2.1 The meeting may wish to recall that during the ASPIG/1 meeting States were requested to provide their needs on the essential services defined by the BBBs and which are necessary for International Civil Aviation. The meeting may wish to note that once these essential services are provided, they will be constituting the baseline for any operational improvement.

2.2 The meeting may wish to note the MID States needs on capacity Building (Technical Assistance/Training/Tools/Technical Guidance) available at the **Appendix A**. The meeting may wish to encourage States to review and update their needs on Capacity Building and take action as appropriate.

Operational thread: Airport Collaborative Decision Making (ACDM)

2.3 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 where. 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.

2.4 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.

2.5 The meeting may wish the review their ACDM Implementation Plans Status presented at **Appendix B** and take action as appropriate. The meeting may wish to encourage State 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 annual MID Air Navigation Report.

2.6 The meeting may wish to note with concern that some States are facing serious challenges to implement the ACDM. In addition, considering the benefits that accrue by the implementation of ACDM 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).

2.7 Therefore, 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 C** for approval.

2.8 Accordingly, the meeting may wish to review the new structure of ASPIG, in addition to draft Terms of Reference of MID ACDM-TF and, agree on the following Draft Decision for its endorsement by the upcoming MIDANPIRG Meeting:

DRAFT DECISION 3/1: 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 C.

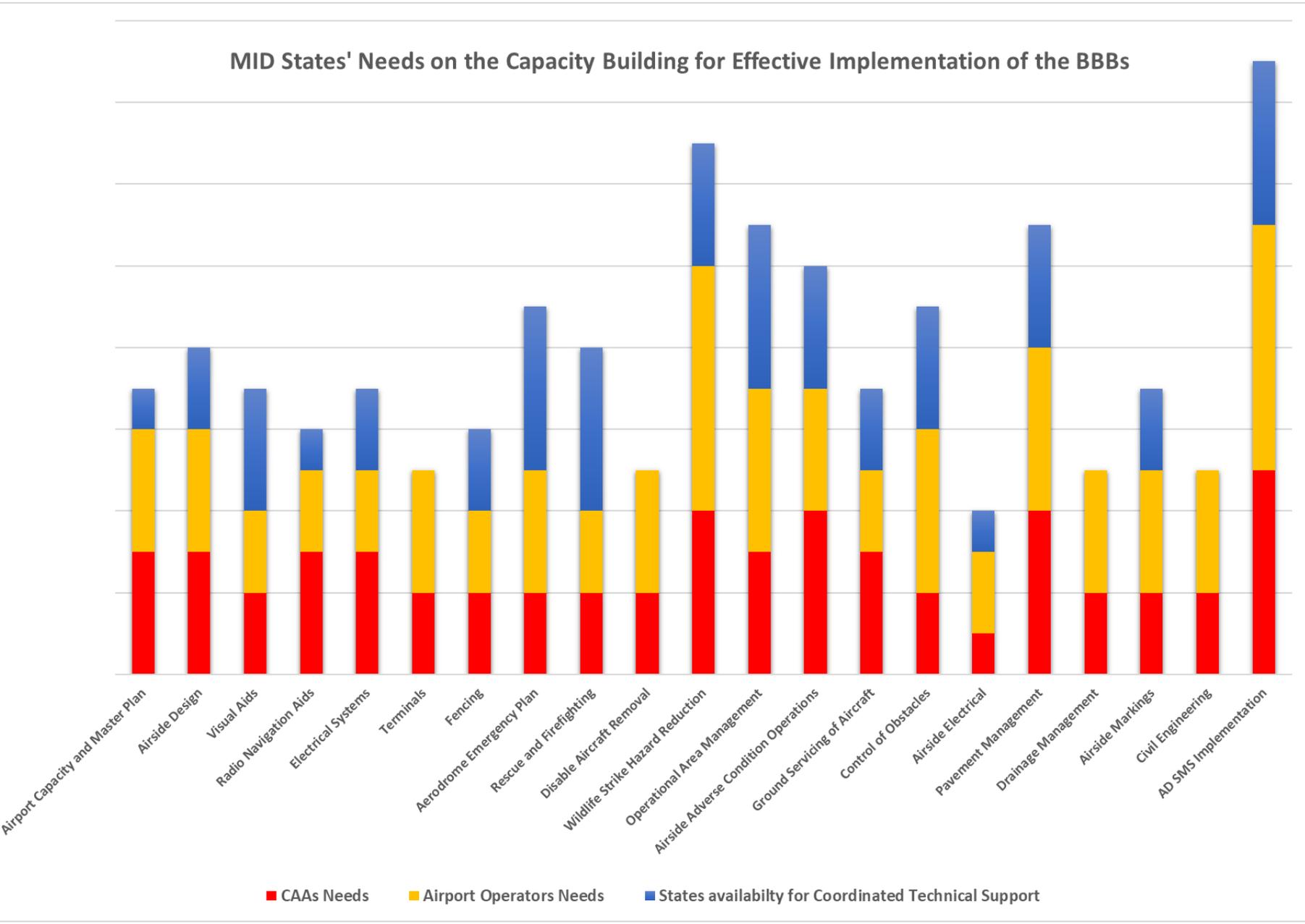
3. ACTION BY THE MEETING

3.1 The meeting is invited Sates to:

- a) seek for the complete implementation the essential services (BBBs) for International Civil Aviation in accordance with ICAO Standards and continuously provide the ICAO MID Office with their needs on Capacity Building to facilitate the implementation the BBBs;
- b) continuously provide ICAO MID Office with their ACDM Implementation Plan within the defined applicability area as at **Appendix B**;
- c) review and agree on the proposed structure of ASPIG to include the ACDM-TF and its Terms of Reference, as at **Appendix C**; and
- d) review and agree to the Draft Decision under paragraph 2.8 of this working paper.

APPENDIX A

MID States' Needs on the Capacity Building for Effective Implementation of the BBBs



APPENDIX B

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												

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							Number	Letter	Light	Medium	Heavy									
Qatar	QAT	1	Duha	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						✓	✓	✓	✓	✗	✗	

This Dashboard is based on the MID States inputs as of 20 October 2021.

Aerodromes Readiness for ACDM Operations based on the MID Region ACDM Implementation Plan														
State	Region 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	9	7	3									

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 20 October 2021.

APPENDIX C

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:

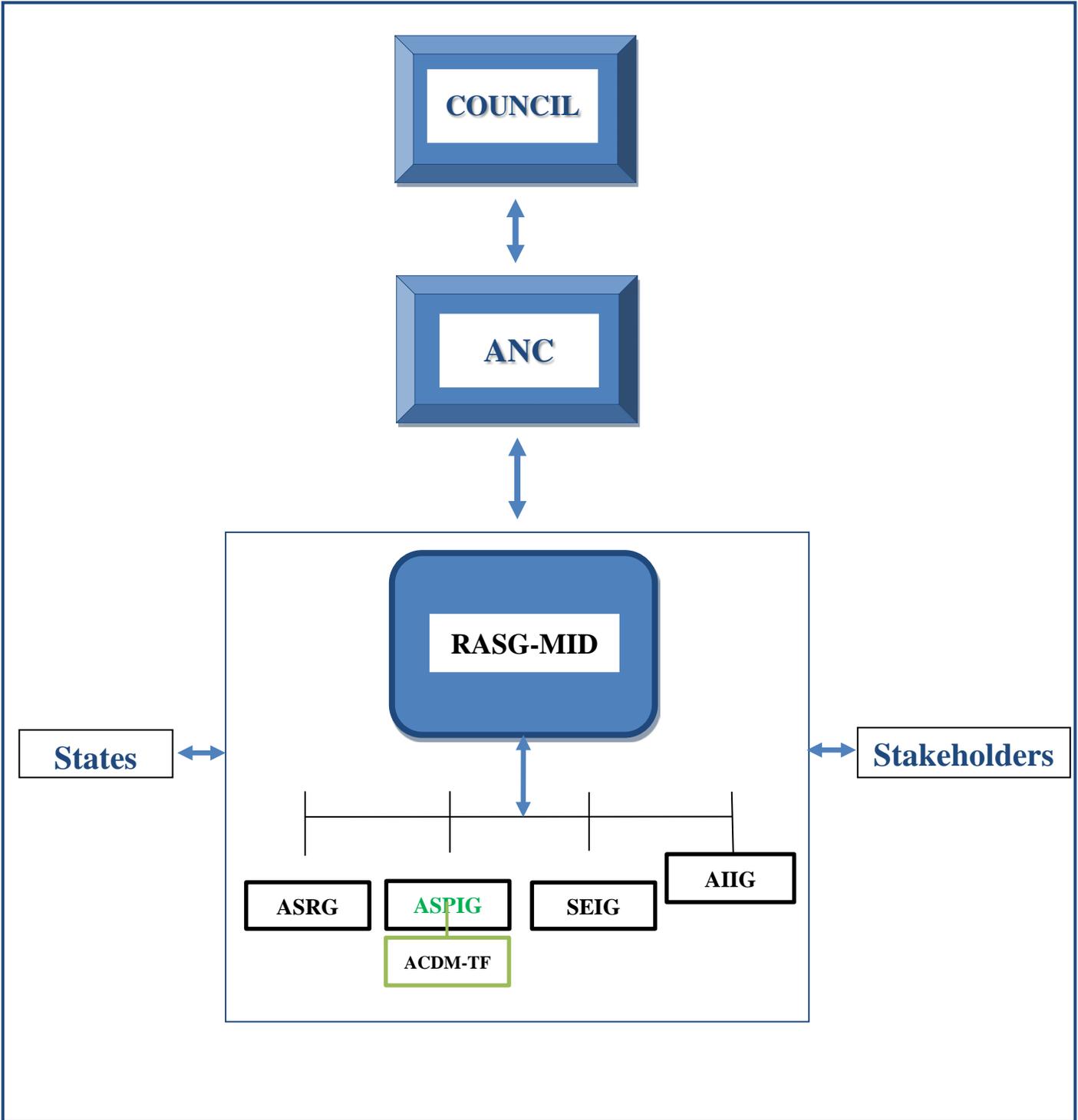
The MID ACDM-TF will be a multidisciplinary group composed by States ACDM Focal Points from both CAAs and Airports concerned by the ACDM Implementation.

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).

RASG-MID
ORGANIZATIONAL STRUCTURE
 Including ASPIG proposed New Structure



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