International Civil Aviation Organization

MIDANPIRG/22 & RASG-MID/12 Meetings

(Doha, Qatar, 4 – 8 May 2025)

Agenda Item 5.3: ANS (AIM, PBN, AGA-AOP, ATM-SAR, CNS and MET

AIM MATTERS

(Presented by the Secretariat)

SUMMARY

This paper presents the outcome of the First meeting of the Aeronautical Information Management Digitalization & Planning Task Force (AIMDP TF/1).

Action by the meeting is at paragraph 3.

REFERENCES

- AIMDP TF/1 Report
- MIDANPIRG/21 Report

1. INTRODUCTION

1.1 The meeting may wish to recall that the Aeronautical Information Management Digitalization & Planning Task Force (AIMDP TF) was established by the MIDANPIRG/21 meeting, through Decision 21/29, to ensure alignment of the DAIM thread/elements with GANP latest Edition, develop appropriate monitoring tables for inclusion in ICAO eANP Vol. III. This task force is also entrusted to ensure a synchronized and harmonized deployment of digital AIS datasets in the MID Region, to address the challenges facing the AIM digitalization and to work together to foster harmonization and digitalization of the entire aeronautical data chain to meet future demand requirements.

1.2 The First meeting of the Aeronautical Information Management Digitalization & Planning Task Force (AIMDP TF/1) was graciously hosted by IATA AME and CARC Jordan in V Business Center VBC, King Hussain Business Park, Amman, Jordan from 20 to 21 January 2025. The meeting was attended by a total of forty-one (41) participants from seven (7) States (Egypt, Iraq, Jordan, Libya, Oman, Saudi Arabia and UAE) and three (3) Organizations/Industries (ADL, IATA, NGL).

2. DISCUSSION

2.1 The AIMDP TF/1 meeting recalled the procedure included in the MIDANPIRG Procedural Handbook (MID Doc 001) and unanimously elected Ms. Hind A. Almuhaimeed, ANS Senior Inspector, GACA, Saudi Arabia, as the Chairperson; and Mr. Tarek Mohammad Al-Rabee, AIS Officer, AISHQ CARC, Jordan, as the Vice Chairperson of the Aeronautical Information Management Digitalization & Planning Task Force (AIMDP-TF).

AIMDP TF TERMS OF REFERENCE

2.2 In drafting its Terms of Reference (ToRs), the AIMDP TF/1 meeting referenced MIDANPIRG/21 Decision 21/29, and agreed to:

- ***Develop a Strategic Framework***: Establish a unified vision, concept, and strategy for modernizing Aeronautical Information Services (AIS) to foster harmonization and digitalization in the AIS/AIM service domain across the MID Region.
- ***Align Regional Implementation Plans***: Formulate and harmonize a Regional Plan for Digital Dataset Provision, ensuring compliance with ICAO Annex 15, PANS-AIM (Doc 10066), and the AIS Manual (Doc 8126). This includes defining standardized formats, coding specifications, and phased timelines to guarantee consistent regional adoption.
- ***Address Digitalization Challenges***: Identify and address key barriers to Aeronautical Information Management (AIM) digitalization , such as data quality gaps, inconsistent standards, and a lack of qualified and trained staff.

2.3 Based on the above, AIMDP TF/1 meeting reviewed and endorsed the AIMDP TF Terms of Reference (ToRs), as outlined in **Appendix A**, agreeing to the following Draft Decision:

Why	To provide a clear structure of the AIMDP TF by defining its objectives, roles, scope, and deliverables
What	Endorse the AIMDP TF ToRs
Who	MIDANPIRG
When	2025

DRAFT DECISION 1/1: AIMDP TASK FORCE TORS

*That, the AIMDP Task Force Terms of Reference (ToR) at **Appendix A** are endorsed.*

2.4 The meeting is reminded that MIDANPIRG/21 Decision 21/29 called upon States to support the AIMDP Task Force by:

- Appointing a Focal Point to actively contribute to the Task Force's work; and
- Sharing national experiences, challenges, and best practices in Aeronautical Information Management (AIM) digitalization and planning.

2.5 To date, 7 of 15 MID States: Bahrain, Jordan, Libya, Qatar, Saudi Arabia, Sudan, and the UAE have formally designated Focal Points for AIMDP Task Force, marking a positive step toward regional collaboration. However, to achieve full alignment and maximize the benefits of shared expertise, we urgently call upon the remaining 8 States to appoint their Focal Points without delay. Broad participation is critical to ensuring harmonized implementation, addressing common challenges, and accelerating progress under regional and global aviation goals.

STRATEGIC PLANNING AND KEY IMPLEMENTATION PRIORITIES

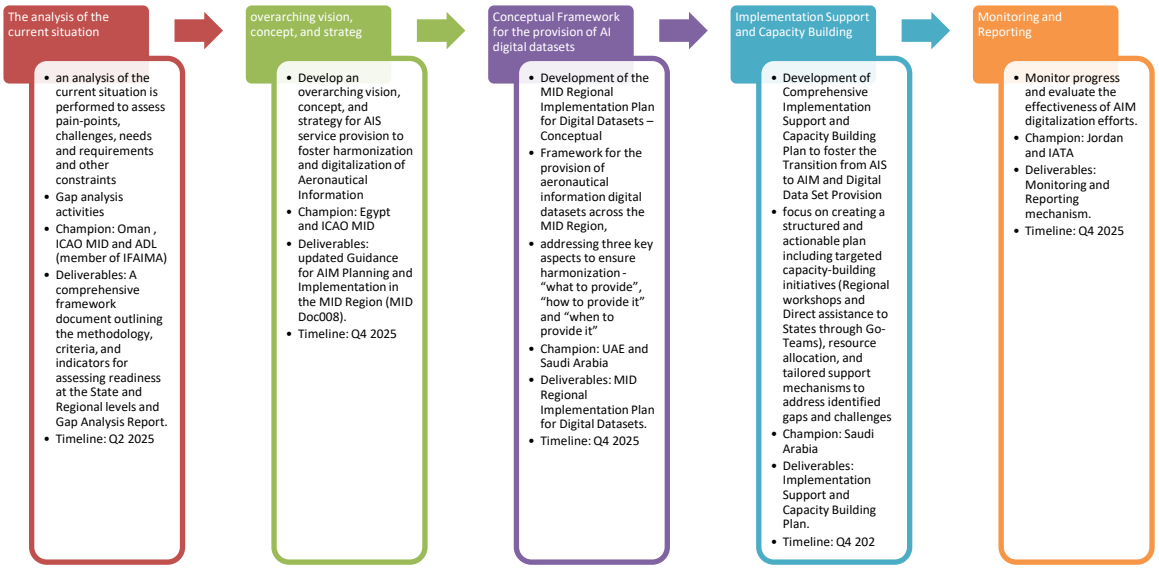
2.6 The AIMDP TF/1 meeting acknowledged that the digital transformation from Aeronautical Information Services (AIS) to Aeronautical Information Management (AIM) represents a significant shift in how aeronautical data is managed and utilized. However, while the global aviation industry is rapidly advancing towards digital data sets as part of this transformation, the MID Region continues to face considerable challenges in aligning with this progress, including:

- ***Institutional Issues:*** *No national policy for digital datasets → unclear responsibility assignments.*

– ***Financial Issues:*** *Higher costs for digital data processing vs. paper-based methods. Unclear cost-recovery policies for digital datasets.*

– ***Technical Issues:*** *Lack of procedures/guidance for managing/updating datasets. Shortage of technical expertise in digital datasets.*

2.7 To support States in addressing these challenges and to promote a synchronized and harmonized deployment of digital AIS datasets across the MID Region, the AIMDP TF/1 meeting outlined key strategic priorities and organized itself around workstreams which define activities, champions, deliverables and timelines.



2.8 These workstreams drive the MID Region's transition to data-centric aeronautical information management (AIM), enabling seamless delivery and consumption of integrated aeronautical information services in a System-Wide Information Management (SWIM) environment.

MID AIR NAVIGATION STRATEGY AND ANP VOLUME III

2.9 The AIMDP TF/1 meeting was apprised of the updated ASBU DAIM Thread/Elements and the monitoring table as per the revised MID Region Air Navigation Strategy (ICAO MID Doc 002) and in line with the Global Air Navigation Plan (GANP 7th edition). The meeting reviewed and updated the status of DAIM implementation in MID Region, as follows:

DAIM Elements	B1/1 Provision of quality-assured aeronautical data and information	B1/3 Provision of terrain digital data sets	B1/4 Provision of obstacle digital data sets
Average per Element	60 %	42.11 %	39.5 %
DAIM Thread Average	47.19 %		

2.10 The AIMDP TF/1 meeting emphasized the following critical points:

- **DAIM B1/1 (Provision of Quality-Assured Aeronautical Data and Information):** The implementation status currently stands at **60%**, falling short of the regional target of **80%** set for December 2021.
- **DAIM B1/3 (Provision of Digital Terrain Data Sets):** The implementation progress is at **42.11%**, significantly below the regional target of **60%** by December 2021.
- **DAIM B1/4 (Provision of Digital Obstacle Data Sets):** With an implementation rate of **39.5%**, this metric also lags behind the regional target of **60%** for December 2021.

2.11 The AIMDP TF/1 meeting urged States to consider the following key actions:

(1) **Secure High-Level Commitment and Funding:**
- Raise awareness among high-level decision-makers to prioritize AIM projects and allocate dedicated funding within national aviation budgets.
- Explore additional funding opportunities from international organizations, development banks, and other financial mechanisms to support implementation efforts.

(2) **Foster Collaboration and Resource Sharing:**
- Strengthen partnerships with aviation authorities, air navigation service providers (ANSPs), and industry stakeholders to align efforts, share resources, and avoid duplication of work.

REVIEW AND UPDATE OF THE MID AIR NAVIGATION STRATEGY DAIM THREAD/ELEMENTS (MID DOC 002)

2.12 The AIMDP TF/1 meeting acknowledged that the evolution of AIS/AIM services in the MID Region must prioritize harmonization and digitalization across the entire aeronautical data chain. To achieve this, strategic updates to the Air Navigation Strategy, particularly the DAIM component, are essential. Key changes include transitioning to an automated, data-centric AIM environment, enhancing quality assurance processes, and expanding the provision of digital products. These steps will ensure alignment with ICAO's Global Air Navigation Plan (GANP) and drive the digital transformation of Aeronautical Information Management in the region.

2.13 To align with ongoing developments, the meeting agreed to the changes outlined in the tables at **Appendix B**, with modifications highlighted in yellow.

MID ANP Volume III (DAIM Tables)

2.14 The AIMDP TF/1 meeting recalled that the MIDANPIRG/21 meeting acknowledged the need to analyze changes in the GANP, review the structure of the MID B0-DATM tables, and develop appropriate tables for inclusion in ICAO ANP Volume III. Furthermore, the MIDANPIRG/21 meeting tasked the AIMDP Task Force (TF) with developing these tables.

2.15 The AIMDP TF/1 meeting reviewed and updated ICAO ANP Volume III DAIM Tables at **Appendix C** to align with the Seventh Edition of the Global Air Navigation Plan (GANP), as follows:

- Table DAIM 3-1: Automated Data-Centric Environment
- Table DAIM 3-2: Aeronautical Data Quality
- Table DAIM 3-3: Provision of Digital Data Sets

2.16 It is essential to highlight that the associated sub-elements of the above Tables were defined based on the provisions of Doc 8126, Annex 15, PANS AIM and GANP 7th Edition.

2.17 The Task Force has made strong initial progress in advancing the AIM Digitalization, including updates to the *Air Navigation Strategy (Doc002) and ICAO ANP Volume III DAIM Tables*, commendable steps that mark promising progress toward digitalizing aeronautical data management and aligning with global standards. While this work is promising, continued effort is needed to tackle remaining challenges and ensure long-term success.

Well done so far and keep up the momentum!

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

a) note the outcomes of the AIMDP TF/1 meeting;

b) discuss and endorse the Task Force's proposed structure, key priorities, and workstreams, and offer further guidance as needed;

c) discuss and endorse the draft ToRs; and

d) urge States that have not yet nominated a Focal Point to do so as a matter of urgency in support of the AIMDP Task Force

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APPENDIX A

TERMS OF REFERENCE (TOR) OF THE MIDANPIRG THE AERONAUTICAL INFORMATION MANAGEMENT DIGITALIZATION & PLANNING TASK FORCE (AIMDP TF)

I. TERMS OF REFERENCE

1.1 The Aeronautical Information Management Digitalization & Planning Task Force (AIMDP TF) was established by the MIDANPIRG/21 meeting to align the DAIM elements with the latest edition of the GANP, develop monitoring tables for inclusion in ICAO eANP Volume III, and ensure the synchronized and harmonized deployment of digital AIS datasets across the MID Region. The AIMDP TF aims to foster the harmonization and digitalization of the aeronautical data chain. Its Terms of Reference are as follows:

a) develop a clear vision and strategy for AIS service provision in MID Region, ensuring alignment and update of the Guidance for AIM Planning and Implementation in the MID Region (MID Doc 008).

b) Maintain regular updates to the MID Air Navigation Strategy parts related to the DAIM thread and its elements, ensuring alignment with the latest edition of the GANP.

c) Develop, review and maintain monitoring tables of DAIM elements for inclusion in ICAO ANP Volume III to track progress and implementation.

d) Promote synchronized and harmonized deployment of digital aeronautical information datasets across the MID Region.

e) Develop and align the Regional Plan for the provision of digital datasets, in accordance with ICAO Annex 15 , PANS-AIM and AIS Manual. This includes defining the required formats, coding specifications, and implementation timelines to ensure consistent deployment across the MID Region.

f) Identify and address challenges related to AIM digitalization, including data quality, standardization, and technological barriers.

g) Act as a forum for AIM specialists in the MID Region to collaborate, share best practices, and promote capacity building to foster the harmonization and digitalization of the aeronautical data chain.

1.2 The TF should organize its work and deliverables in different steps. After accomplishment of each step a milestone report will be provided to AIM SG and MIDANPIRG.

II. COMPOSITION

2.1 The TF aims to include a broad variety of competences from different stakeholders contributing to the entire aeronautical data chain. This should include, SMEs from:

a) MIDANPIRG Member States;
b) concerned International and Regional Organizations as observers; and
c) other representatives from provider States and Industry may be invited on ad hoc basis, as observers, when required.

2.2 Secretariat support will be provided by ICAO MID.

III. WORKING ARRANGEMENTS

3.1 The Chairperson, in close co-operation with the Secretariat, shall make all necessary arrangements for the most efficient working of the Task Force. The Task Force shall at all times conduct its activities in the most efficient manner possible with a minimum of formality and paperwork (paperless meetings). Permanent contact shall be maintained between the Chairperson, Secretary and Members of the Task Force to advance the work. Best advantage should be taken of modern communications facilities, particularly videoconferencing (Virtual Meetings) and e-mails.

3.2 Face-to-face meetings will be conducted when it is necessary to do so.

APPENDIX B

MID REGION ASBU THREADS & ELEMENTS (BLOCK 0 & 1) PRIORITIZATION AND MONITORING

Thread	Element code	Title	Priority	Start Date	Monitoring		Remarks
					Main	Supporting	
Information Threads							
DAIM							
DAIM	**B1/1**	Provision of quality-assured aeronautical data and information	**1**	2021	AIMDP TF and AIM SG	RANP/NANP TF	
	B1/2	Provision of digital Aeronautical Information Publication (AIP) data sets	1	2025	AIMDP TF and AIM SG		
	B1/3	Provision of digital terrain data sets	**1**	2021	AIMDP TF and AIM SG	RANP/NANP TF	
	B1/4	Provision of digital obstacle data sets	**1**	2021	AIMDP TF and AIM SG	RANP/NANP TF	
	B1/5	Provision of digital aerodrome mapping data sets	2				
	B1/6	Provision of digital instrument flight procedure data sets	2				
	B1/7	NOTAM improvements	2				

MONITORING THE IMPLEMENTATION OF THE PRIORITY 1 ASBU THREADS/ELEMENTS (Block 0 & 1) IN THE MID REGION

Element	Applicability	Performance Indicators/ Supporting Metrics	Baseline (2023)	Target	Timeline	KPA/ KPI
Information Threads						
DAIM						

Element		Applicability	Performance Indicators/ Supporting Metrics	Baseline (2023)	Target	Timeline	KPA/ KPI
DAIM B1/1	Provision of quality-assured aeronautical data and information	All States	Indicator*: Regional average implementation status of DAIM B1/1 (provision of quality-assured aeronautical data and information). Supporting Metrics: ~~1. Number of States that have implemented an AIXM-based AIS database (AIXM V5.1+)~~ 1. Number of States that have migrated to AIM automated data-centric environment based on (AIXM V5.1+) 2. Number of States Implementing Quality Assurance and Quality Control (QA/QC) Processes 3. Number of States that have established formal arrangements with at least 50% of their AIS data originators.	45%	80%	Dec 2021	N/A
DAIM-B1/2	Provision of digital Aeronautical Information Publication (AIP) data sets	Egypt, Jordan, Oman, Qatar,Saudi Arabia and UAE	Indicator*: Regional average implementation status of DAIM B1/2 (Provision of digital Aeronautical Information Publication (AIP) data set). Supporting Metrics: Number of States that provide digital Aeronautical	15%	75%	Dec 2027	N/A

Element		Applicability	Performance Indicators/ Supporting Metrics	Baseline (2023)	Target	Timeline	KPA/ KPI
			Information Publication (AIP) data sets				
DAIM B1/3	Provision of digital terrain data sets	All States	Indicator*: Regional average implementation status of DAIM B1/3(Provision of Terrain digital datasets). Supporting Metric: Number of States that provide required Terrain digital datasets	35%	60%	Dec 2021	N/A
DAIM B1/4	Provision of digital obstacle data sets	All States	Indicator*: Regional average implementation status of DAIM B1/4(Provision of obstacle digital datasets). Supporting Metric: Number of States that provide required obstacle digital datasets	35%	60 %	Dec 2021	N/A

APPENDIX C

DAIM: Digital Aeronautical Information Management

TABLE ASBU-MID-DAIM 3-1

Automated Data-Centric Environment

EXPLANATION OF THE TABLE

Column:

1 Name of the State or territory.

2 *Level of Automation*, shown by:

0 – Manual
1 – Data Centric
2 – Automated Workflow
3 – Full AIM Integration

Note 1 – Guidance on automation and description of different levels of automation are contained in Doc 8126 (Aeronautical Information Services Manual), Part II, Chapter 7 (7.4).

3 Implementation of *Automated processes - Data collection (interfaces with data originators)*, shown by:

FI – Fully Implemented: *when Data collection is at level 3 automation*
PI – Partially Implemented: *when Data collection is at level 1 or 2 automation*
NI – Not Implemented: *when Data collection is at level 0 automation*

Note 2 — Guidance on the levels of automation are contained in Doc 8126 (Aeronautical Information Services Manual), Part II, 7.4.

Note 3 — Additional guidance on the components of an automated AIM system (Data Input) are contained in Doc 8126 (Aeronautical Information Services Manual), Part II, 7.5.1.

4 Implementation of *Automated processes - Data processing*, shown by:

FI – Fully Implemented: *when Data processing is at level 3 automation*
PI – Partially Implemented: *when Data processing is at level 1 or 2 automation*
NI – Not Implemented: *when Data processing is at level 0 automation*

Note 5 — Guidance on the levels of automation are contained in Doc 8126 (Aeronautical Information Services Manual), Part II, 7.4.

Note 6 — Additional guidance on the components of an automated AIM system (Core Processing System and Data Storage) are contained in Doc 8126 (Aeronautical Information Services Manual), Part II, 7.5.2 and 7.5.3.

5 Implementation of *Automated processes - Data provision/distribution*, shown by:

FI – Fully Implemented: *when Data provision/distribution is at level 3 automation*
PI – Partially Implemented: *when Data provision/distribution is at level 1 or 2 automation*
NI – Not Implemented: *when Data provision/distribution is at level 0 automation*

Note 7 — Guidance on the levels of automation are contained in Doc 8126 (Aeronautical Information Services Manual), Part II, 7.4.

Note 8 — Additional guidance on the components of an automated AIM system (Data Product Preparation) are contained in Doc 8126 (Aeronautical Information Services Manual), Part II, 7.5.4.

6 Implementation of Automated data-centric environment based on (AIXM V5.1+), shown by:

FI – Fully Implemented: when State has migrated to AIM automated data-centric environment based on (AIXM V5.1+)

NI – Not Implemented: when no AIS database available or when State has not migrated to an AIM automated data-centric environment based on AIXM V5.1+

7 Action Plan – short description of the State's Action Plan with regard to the implementation of the items 2 to 5, especially for items with a "PI" or "NI" status, including planned date(s) of full implementation, as appropriate.

8 Remarks – additional information, including detail of "PI" and "NI", as appropriate.

State	**Level of Automation (Overall)**	**Automated Processes**			**Automated data-centric environment based on (AIXM V5.1+)**	**Action Plan**	**Remarks**
		Data collection (interfaces with data originators)	Data Processing	Data provision/ distribution			
1	***2***	***3***	***4***	***5***	***6***	***7***	***8***

TABLE ASBU-MID- DAIM-3-2

Aeronautical Data Quality

EXPLANATION OF THE TABLE

Column:

1 Name of the State or territory.

2 Implementation of Quality Assurance and Quality Control, shown by:

FC – Fully Compliant
PC – Partially Compliant
NC – Not Compliant

Note 1 – Guidance on the implementation of Quality Assurance and Quality Control are contained in Doc 8126 (Aeronautical Information Services Manual), Part II, Chapter 6.

3 Establishment of formal arrangements with originators, shown by:

FC – Fully Compliant
PC – Partially Compliant
NC – Not Compliant

Note 4 – Provisions and guidance on formal arrangements with originators are contained in Annex 15, 2.1.5 and Doc 8126, 3.3.

Note 5 – Fully compliant (FC) means that the AIS has established formal arrangements with all data originators.

Note 6 – Relevant data quality requirements should be considered in the formal arrangements with originators. Since the Aeronautical Data Catalogue contains all the data elements that the AIS manages, each one being assigned an owner, the AIS can use the Aeronautical Data Catalogue to systematically establish and document formal arrangements with all identified data originators.

Note 7 – Formal arrangements with originators should include requirements related to the provision of metadata.

4 Action Plan – short description of the State's Action Plan with regard to aeronautical data quality requirements implementation and the establishment of formal arrangements with originators, especially for items with a "PC" or "NC" status, including planned date(s) of full compliance, as appropriate.

5 Remarks – additional information, including detail of "PC" and "NC", as appropriate.

State	Quality Assurance /Quality Control	Formal Arrangement with Originators	Action Plan	Remarks
1	*2*	*3*	*4*	*5*

TABLE ASBU-MID - DAIM-3-3

Provision of Digital Data Sets

EXPLANATION OF THE TABLE

Column

1 Name of the State

2 Terrain Data Set for area 1

3 Terrain Data Sets for airports (area 4, as applicable)

4 Terrain Data Sets for airports (area 2a)

5 Terrain Data Sets for airports (TOFP area)

6 Terrain Data Sets for airports (OLS)

7 Obstacle Data Set for area 1

8 Obstacle Data Sets for airports (area 4, as applicable)

9 Obstacle Data Sets for airports (area 2a)

10 Obstacle Data Sets for airports (TOFP area)

11 Obstacle Data Sets for airports (OLS)

12 AIP data sets

12 Action plan — short description of the State's Action Plan with regard to compliance with the requirements for provision of Terrain and Obstacle data sets "PC" and "NC" status.

13 Remarks— additional information, including detail of "PC" and "NC"

Note – when status of implementation is reflected in the table, it is shown by: FC (Fully Compliant), PC (Partially Compliant), NC (Not Compliant), N/A (Not Applicable)

State	Terrain data sets					Obstacle data sets					AIP data sets	Action Plan	Remarks
	Area 1	Area 4	Area 2a	TOFP	OLS	Area 1	Area 4	Area 2a	TOFP	OLS			
1	2	3	4	5	6	7	8	9	10	11	12	13	14

- END -