Eighth North American, Central American and Caribbean Working Group (NACC/WG) Aeronautical Information Management Implementation Task Force Meeting (AIM/TF/08).
México City, Mexico, 8 to 11 July 2025

Agenda Item 6: **AIM & SWIM Implementation Roadmap. Tracking Website of the NAM/CAR Region**

ENABLING SWIM THROUGH AIM IMPLEMENTATION

(Presented by AIM/TF Rapporteur)

EXECUTIVE SUMMARY
This Working Paper provides a overview of the foundational prerequisites for enabling System Wide Information Management (SWIM) through a mature Aeronautical Information Management (AIM) framework. It clarifies the misconceptions that SWIM is a technology or system, rather than an operational concept and framework. It further outlines how AIM must be fully implemented, in order to allow for a successful SWIM deployment and proposes the establishment of a dedicated sub-group to draft a SWIM Implementation Checklist (agenda item 7 of the meeting).

Action:	States are invited to review the discussion and preliminary checklist and to provide input to establish a SWIM Implementation Sub-Group under the AIM/TF.
Strategic Objectives:	• Safety • Air Navigation Capacity and Efficiency • Economic Development of Air Transport • Environmental Protection
References:	• ICAO Doc 10039 – SWIM Concept • Doc 10066 – PANS-AIM • Annex 15 – Aeronautical Information Services • Doc 8126 – AIS Manual • Doc 9855 – Global ATM Operational Concept

1. **Introduction**

1.1   System Wide Information Management (SWIM) has been frequently misunderstood as a singular technical solution or centralized database. Nevertheless, SWIM is an operational framework for managing and sharing aeronautical, flight, and meteorological data in a digital, interoperable, and service-oriented manner.

1.2　　　　For SWIM to function as envisioned in ICAO's Global Air Navigation Plan (GANP), the information domains feeding into it must first be digitized, validated, and quality controlled. This begins with a complete and operationally developed implementation of AIM.

1.3　　　　While the global discussion on SWIM continues to evolve, this paper narrows the focus to what AIM stakeholders can and must do now to prepare their domain for SWIM and therefore implement this framework accordingly.

2.　　　　Discussion

2.1　　　　The foundational requirement for SWIM is the provision of high-quality, digital aeronautical information. Without fully implemented AIM capabilities, States will lack the necessary data structures, metadata tagging, and quality assurance frameworks to support interoperable exchange.

2.2　　　　AIM implementation should follow the ICAO Roadmap from AIS to AIM, which includes but is not limited to:

- Data originator responsibility and coordination
- Data quality and validation
- Digital Aeronautical information Publication (AIP) and Electronic Aeronautical Information Publication (eAIP) capability
- Structured data formats (e.g., Aeronautical Information Exchange Model/AIXM)
- Availability of Electronic Terrain and Obstacle Data (eTOD) and digital obstacle data
- Integrated Quality Management System (QMS) for data handling.

2.3　　　　States should prioritize the identification of existing gaps in AIM that may hinder their ability to exchange digital information under SWIM protocols. This action will be the first step for a true progress in this subject that has been part of previous AIM/TF without an evident advance.

2.4　　　　The AIM Task Force is invited to establish a SWIM Implementation Sub-Group that can:

- Draft a practical SWIM Readiness Checklist for AIM offices
- Share best practices across the region
- Develop regional training or webinars to clarify AIM-SWIM alignment.

3.　　　　Proposed SWIM Readiness Checklist for AIM

#	Checklist Item	Reference
1	AIM Implementation Phase 3 completed (Digital AIM)	ICAO AIS to AIM Roadmap
2	QMS includes digital data validation procedures	Annex 15, Doc 8126
3	AIXM 5.1 or higher structure in place	Doc 10066 PANS-AIM
4	eAIP implemented and updated per AIRAC cycle	Doc 8126
5	Data originator agreements formalized	Annex 15, Doc 10066
6	Obstacle/eTOD datasets digitized and validated	Doc 9881, Annex 15
7	AIM personnel trained in data modelling and metadata tagging	ICAO Training Guidance
8	Interface capability with SWIM-compliant systems assessed	Doc 10039
9	Inter-agency data sharing procedures in place	Annex 15, Doc 9855
10	Internal AIM-SWIM coordination committee formed	AIM/TF Initiative

4. Conclusion and Next Steps

4.1 While SWIM offers a transformative model for air traffic management information exchange, it can only be effective if its foundation —structured and reliable aeronautical data—is in place ⮕ AIM implemented. States are urged to have this in place.

4.2 States' AIM offices are encouraged to self-assess against the proposed checklist and submit gaps or challenges to the AIM/TF Rapporteur.

4.3 The AIM/TF should consider formalizing within the set Sub-Group to refine and maintain the SWIM Readiness Checklist and provide step by step regionally relevant guidance and training information.

5. Proposed actions

5.1 The Meeting is invited to

a) approve the SWIM task of the Action Plan to update the status of the implementation
b) draft a practical SWIM Readiness Checklist for AIM offices

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