



**Fourth GREPECAS–RASG-PA Joint Meeting and
 Twenty-second Meeting of the CAR/SAM Regional Planning and Implementation Group
 (GREPECAS/22)**

Virtual Phase (Asynchronous, 16 September to 11 October 2024)
 In-Person Phase (Lima, Peru, 20 to 22 November 2024)

Agenda Item 5: CAR/SAM Air Navigation Services (ANS) Implementation

5.4 Aeronautical Information Management

PROGRESS IN THE AIM PROGRAMMES AND PROJECTS OF THE CAR/SAM REGIONS
 (Presented by the Secretariat)

EXECUTIVE SUMMARY	
This Working Paper is presented with the progress in the activities and projects, as well as the priority topics of implementation of Aeronautical Information Management (AIM) for the CAR/SAM regions, as part of the 2009 ICAO Roadmap and the introduction of the new ICAO Roadmap towards the 2021 DAIM, carried out by States, Territories and International Organizations in the CAR and SAM Regions.	
Action:	Suggested Actions are included in Section 4
<i>Strategic Objectives:</i>	<ul style="list-style-type: none"> • Safety • Air Navigation Capacity and Efficiency
<i>References:</i>	<ul style="list-style-type: none"> • Twenty-First Meeting of GREPECAS (GREPECAS/21) • Follow-up meeting to SAM/AIM/17 • Meeting NACC WG AIM/TF/07 • Document 8126 – AIS Manual • Doc 10066 - PANS AIM • Doc. 9839 – Quality Management System Manual for AIS • Doc. 9991 – AIS Staff Training Manual • Complementary NACC WG AIM/TF meetings for the advancement of priority issues • ICAO Roadmap, Ed. 2009 and ICAO Roadmap to DAIM, Ed. 2021 • Cybersecurity Action Plan, 2nd. Ed. 2022

1. Introduction

1.1 The CAR and SAM Secretariat continues to provide timely follow-up to the implementation of Aeronautical Information Management (AIM) and the transition process, as well as the Implementation of the Digital Data Sets (DDS), of the e-AIP Standard Information Exchange Model. It also emphasizes the importance of updating WGS84 and Terrain and Obstacle (TOD) Data, which represent a special task for States in relation to the implementation of Performance-Based Navigation (PBN), to PANS-OPS, Aeronautical Charts, Airspace, Aerodrome data, etc.

1.2 Follow-up has been given to the Conclusions and Decisions of GREPECAS/21 that are relevant to the AIM, the progress in the Electronic Air Navigation Plan (eANP) by the States and the requests for assistance within the framework of the AIM Transition of the CAR/SAM States

1.3 The NACC/WG AIM/TF tracked the status of the Electronic Air Navigation Plan (eANP) Table by State and requests for assistance in transitioning to AIM. In this sense, some elements for the planning and implementation of the missing phases (2 and 3) of the AIM in the CAR Region were discussed, seeking to develop a harmonization in the transition from AIS to AIM, considering the global and regional issues of planning and implementation of Aeronautical Information Management according also to the roadmap for the implementation of the Digital AIM (DAIM).

1.4 The SAM region held the Seventeenth AIM Multilateral Workshop/Meeting of the SAM Region for the transition from AIS to AIM (SAM/AIM/17), where the progress of the States of the region in the transition to the AIM was monitored. This meeting took place at the ICAO office from May 27 to 31, 2024.

2. Analysis

2.1 The ICAO Secretariat has emphasized the new AIM documentation and the new edition of Doc 8126. In addition, information from the new PANS IM document was presented in the SWIM Framework (System-wide Information Management), and the event RLA/06/901 - RAC/SAM Seminar/Workshop on Doc. 8126 AIS Manual, Part I and PANS-IM 10199 – Air Navigation Services Procedure for Information Management (PANS-IM), was jointly held by both CAR and SAM Regional Offices. in Panama City, Panama, March 11 to 14, 2024, for more information visit the link;

icao.int/SAM/Pages/MeetingsDocumentation.aspx?m=2024-RLA06901-DOC8126yPANSIM&t=1

CAR Region

2.2 The reference of the DAIM Aviation System Blocks Upgrade (ASBU) and the Basic Building Blocks (BBB) is incorporated into the updating of the Action Plan, AIM TF Work Plan and the AIM Collaborative Plan, under the guidelines of the AIM Implementation Roadmaps Ed. 2009 and Ed. 2021, in the NAM/CAR Regions.

2.3 Considering the new edition of the Global Air Navigation Plan (GANP), 7th. edition, as well as the BBBs related to the AIM, their impact on the CAR States and on the level of regional implementation in terms of time was discussed, for which the AIM TF elaborated within the group, with the execution of the actions required for the update of the AIM Action Plan, the so-called AIM Subgroups, for which they established five Subgroups, as follows:

AIM subgroups by theme	
AIM TF 07	Support for airspace optimization with the update of the AIM Action Plan
	eAIP Centralizing Direct Links and AIP Errors
	NOTAM Consideration for Aerospace and DRONE Operations: Define Title, Type, Template, and Process for Each
	AIM Curriculum and Training Standardization
	English Language Proficiency for AIM Staff

2.4 The objective of these Subgroups is to have a more efficient approach to carrying out the tasks and discussions assigned to the TF. With the intention of enabling and maintaining the subgroups and meeting frequently, plus the main meetings of the AIM TF, to present their analyses, research and comments to the AIM Rapporteur and to complete the work of the TF, so that the next steps can be more easily developed, with regard to the submission of AIM TF Decisions and Conclusions to the GREPECAS meetings, NACC WG and NACC DCA directors, as applicable.

2.5 The Review of the AIM Work Programme, System-Wide Information Management (SWIM) Terms of Reference (ToR) was carried out, which after an assessment of the actions required by the NACC AIM TF Member States, presented the updated Action Plan to 2025 and urged TF members to prioritize the remaining tasks, review it and give suggestions for an efficient way to comply with the TF AIM Action Plan: (see Appendix A)

2.6 The Meeting returned to the topic of English language proficiency for AIM personnel, with appropriate levels for the development and/or integration of electronic documentation and AIM Product Databases (eAIP, eCharts, SUP AIC, NOTAM, PIB, etc.), as well as for the international exchange of information to the aviation community. In that regard, the importance of a review of the current levels of English language instruction established for the various operational functions of aviation was discussed, whereby the required level of language proficiency of AIM personnel was deliberated.

2.7 The AIM TF has concluded that it needs to be reviewed and addressed in order to adapt it to the functionality of AIM personnel, and not to compare it with the method applicable to ATC and Pilots. The purpose of introducing this language proficiency is to comply with uniformity in the handling of data, especially at the level of writing and comprehension, which impacts on operational safety risks due to possible misinterpretation, considering that:

1. All aeronautical information products are intended for international distribution and shall include English text for those parts expressed in plain language (Annex 15, 1.3.1).
2. The members of the group have knowledge of air traffic controllers and pilots evaluated in the English language.
3. Members of the group are familiar with ICAO Operational Level 4.
4. The ICAO Rating Scale is used only to assess speaking and listening and not to assess reading and writing.
5. Cuba has experience in the evaluation of AIM personnel.

***Note:** The levels presented are reflected in the AIM area for a more appropriate evaluation. The Required Basic level must be equivalent to ICAO English Prof. Level 4, and the Higher Level to ICAO English Prof. Level 5 or 6.*

2.8 The volume of tasks associated with the AIM TF Action Plan has been assessed, which will require timelines that establish linkages with other agencies/subgroups. It is recognized that States have specific conditions that must be considered for planning. Therefore, data will be collected from relevant agencies/subgroups to update the Action Plan. The data collected will be compiled and submitted to the ICAO Secretariat and the TF AIM Rapporteur for their actions. In addition, from the initial verification of the AIM TF Action Plan, priority tasks will be identified and highlighted

2.9 Recommendations of the AIM TF 07 Meeting

Submit the AIM TF Action Plan to AIM TF States and subgroups for comments
To identify Tasks that can be prioritized
Compile and compile responses from States and subgroups
Report to the ICAO Secretariat and the TF AIM Rapporteur by the end of December 2024.
Obtain contact points from AIM TF members for the sub-groups (with assistance from the ICAO Secretariat).

2.10 Finally, it is necessary to recognize that AIS/AIM personnel should have an adequate performance in the English language as Operational Personnel. That is, it is established in Annex 15, 1.3.1: Aeronautical information products intended for international distribution must include text in English for those parts expressed in plain language. In addition, it is established in Annex 19 in the definitions of chapter 1, that Operational Personnel are those who participate in aviation activities and who are able to report operational safety information. In view of the above, States should make the necessary efforts to improve the English language proficiency of AIS/AIM personnel.

SAM Region

G2 Project, Aeronautical Information Exchange (AIXM)

2.11 With regard to the SAM region, it is worth noting the important support received from Brazil in the regional tasks in the transition to the AIM. Within this support, the Workshop on Digital Dataset and Phase 2 of the AIS to AIM Transition Roadmap, held in Rio de Janeiro, in April, with the support of Project RLA/06/901, stands out.

2.12 From the workshops held in Panama City and Rio de Janeiro, important recommendations related to implementations that will need to be strengthened in the SAM region stand out, including the AIS/AIM Staff Competency Assessment, Digital Ensemble Implementation (DDS), the Implementation Readiness Assessment of System-Wide Information Management (SWIM), and the implementation of SNOWTAM.

2.13 With regard to DDS (Digital Data Sets), only Brazil has achieved 100% implementation, and Colombia with a significant advance of close to 90%; however, it is a task that needs to be prioritized by States for the transition to AIM. Progress in the Exchange Model, 20% of the SAM States (3 States) have achieved 100% implementation, a State is identified with an advance of more than 90%, and 70% of the SAM States are still in the process of implementation

2.14 Brazil has achieved 100% in the implementation of the Data Catalogues, and Colombia has achieved close to 80% progress; the rest of the States in the region are still in the development phase, placing this task among the priorities in the SAM region.

2.15 Specifically related to SNOWTAM, the SAM region has achieved 100% implementation in 55% of the States (7 SAM States), one SAM State has achieved significant progress of 90% in implementation, and the remaining five States have not yet identified an implementation date. The SAM Regional Office is working closely with the latter to achieve effective implementation.

G3 Project, Implementation of the QMS in the AIM.

2.16 With regard to progress in the establishment of the Quality Management System in AIS/AIM, 48% of SAM States (6 States) have now implemented and certified the Quality Management System, 30% of

the States (4 States) have an implemented system that has not been certified, and the rest of the SAM States are still in the development and implementation phase of their quality system.

2.17 With regard to Phase 2 of the Transition from AIS to AIM and preparation for SWIM, the SAM region continues to make progress in the tasks. With regard to e-AIP, 30% of SAM States (4 States) have achieved 100% implementation, one State is 95% complete, while 60% of SAM States (8 States) are still in the implementation of the system.

2.18 With regard to training, Doc. 9991 – AIS Personnel Instruction Manual includes the requirements for training with a competency-based approach. The meeting will recall that the AIS/AIM Staff Training Manual, adopted at GREPECAS/20, already included a competency-based approach. The meeting should review the competency assessment processes, as requested by Doc. 8126, AIS Manual, Part I

3. Conclusions

3.1 Regarding the G2 - Aeronautical Information Exchange (AIXM) project, it is necessary for the CAR/SAM States to prioritize the tasks related to the project for the exchange of aeronautical information as part of the transition to AIM.

3.2 With regard to the G3 project – implementation of QMS, although there have been important advances in the CAR/SAM States, it is necessary to continue supporting quality management in AIS/AIM, as an essential function of aeronautical information services.

3.3 The Secretariat supports the implementation of Phase 2 of the AIS Roadmap with the aim of implementing Aeronautical Information Management in an electronic environment and preparing the enablers for the AIM area for System-Wide Information Management (SWIM)

3.4 The Secretariat, once again, would like to draw the attention of the Meeting to the importance of States observing the deadline of the GREPECAS Conclusion 19/03 (2024), related to the implementation of Digital Data Sets (DSDs), in order not to delay the implementation of SWIM

3.5 In addition, the Meeting may consider and highlight the importance of betting on the creation of capacities to manage all aeronautical information in an electronic environment. The training and skills of the staff is one of the fundamental pillars to implement all the steps of the Roadmap for the Transition from AIS to AIM, and thus, finally, implement SWIM.

3.6 The meeting should note that AIS/AIM, that providers and users of aeronautical information services need to have Contingency Plans to deal with extreme situations, in order to ensure continuity in the provision of essential services related to aeronautical information and data, for the planning, monitoring and execution of safe air operations.

3.7 States need to reprioritize support for AIS/AIM to achieve an effective transition, bearing in mind that AIS/AIM represents a key pillar of the ATM.

4. Suggested Actions

4.1 The meeting is invited to:

- a) Take note of the information presented in this Working Paper;
- b) Urge States to complete the process of implementing the Phase 2 Steps and continue with Phase 3 of the Roadmap for the transition to AIM; and
- c) Consider other appropriate actions,

APPENDIX A / APÉNDICE A
AIM TF NACC ACTION PLAN / PLAN DE ACCIÓN AIM TF NACC

AIM TF ICAO NACC Action Plan																
Task	Responsible	2023				2024				2025				DEADLINE 1	DEADLINE 2	
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
AIM COLLABORATIVE PLAN																
Update the NAMCCAR State - AIM Transition Implementation Status every 2 quarters	All TF members														30-Jun-23	CP
NAMCCAR State - GRF Implementation Status	All TF members														30-Jun-23	CP
eANP Tables (GREPECAS20) fill out & follow up	All TF members														26-May-23	
Aeronautical Charts																
Review of data sets on new charts	All TF members														30-Nov-23	
Status of eChart implementation	All TF members														30-Nov-23	30-Nov-24
Flight Procedures Program FPP - NAMCCAR States (COCESNA). Elaborate/Develop regulations - ICAO guideline. DOC ???	All TF members														31-Mar-24	
AIM TRAINING - CURRICULUM OFFICIALIZE																
Training Curriculum Submission process preparation with TF	All TF Members														15-Dec-23	
Training Curriculum Submission to TRAINAIR PLUS	AIM Rapp														15-Mar-24	
Coordinated activities between RASG-PA and GREPECAS for the assessment of skills of the Aeronautical Information Service (AIS) personnel - WP24 of the NACC/WG/RAP/02															15-Dec-24	
AIM TRACKING WEBSITE																
Provide website status and input request to AIM TF Rapp	Regional Officer														31-Oct-23	
Provide feedback on Website structural setup proposal with TF	AIM Rapp														29-Feb-24	
Launch AIM Tacking Website to AIM TF.	AIM Rapp & Regional Officer														30-Jun-24	
AIM TF State members' to submit required (pending) data.	All TF members														1-Apr-24	
AIM Tracking Website Official Launch.	Regional Officer															31-Mar-24
AIP centralized accessibility of each State (redirect)	AIM Rapp, All TF members & Regional Officer															
CONTINGENCY PLANS																
Review of existing plans within the NACC region.	All TF members														30-Sep-24	
Implement contingency in the region, with one or more States	All TF members														30-Jun-25	
SWIM Implementation																
Provide SWIM Implementation readiness to AIM Rapp	All TF members														30-Sep-24	
SWIM data exchange testing with other regional AIM Units	All TF members														31-Mar-25	
Provide feedback on SWIM interoperability tests	All TF members														30-Sep-25	
Implement SWIM	All TF members														15-Dec-25	
Global Air Navigation Plan (GANP), Seventh Edition - Aviation System Block Upgrades (ASBU)																
Analyse the information presented in WP03, the GANP and the ASBU Portal of NACC/WG/RAP/02	All TF members														31-Oct-23	15-Dec-24
Review of the AIM related KPAs sand KPIs presented in WP04 of NACC/WG/RAP/02	All TF members														31-Oct-23	15-Dec-24
Establish and indicate status on regional KPA and KPI	All TF members														31-Oct-23	15-Dec-24
Establish the regional implementation status through the BBBs	All TF members														31-Oct-23	15-Dec-24
Airspace Optimization: AIM products and Costs																
eTOD data and publication	AIM Rapp & Regional Officer														1-Feb-24	31-Dec-24
AIP centralized accessibility: State to provide direct links to AIM unit and eAIP	All TF members														31-Oct-23	
Costs of AIP: Assessment of each State	All TF members														31-Oct-23	
Costs of AIP: Create a standard on billing of AIP	All TF members & Regional Officer														31-Oct-23	
Publication of Free Routes: Standardization method (SUP)	All TF members														31-Dec-24	
Publication of electronic Flight Procedures	All TF members														31-Dec-24	
FPL Reject standard formats publication.	All TF members														31-Dec-24	
FF-ICE (AIDC TF) implementation/update by States	All TF members														31-Dec-24	
Singled out Tasks																
Dissemination of Part I of Doc 8126 – AIS manual	All TF members														31-Dec-23	
Standardize and define AIM (AIS / ARO / FPL) personnel required minimum skills and educational background	All TF members, AIM Rapp & Regional Officer														30-Sep-23	
Work along side with other TF Rapps on AIM related aspects	AIM Rapp														31-Dec-23	
ANC NOTAM For Aerospace Operations	All TF members, AIM Rapp & Regional Officer														31-Jul-24	