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WORKING PAPER

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**Sixth North American, Central American and Caribbean Working Group (NACC/WG) Aeronautical Information Management Implementation Task Force Meeting
(AIM/TF/6)**

Mexico City, Mexico, and on-line, 21 – 24 August 2023

Agenda Item 4: AIM Aviation System Block Upgrade (ASBU), Basic Building Blocks (BBB) and action Plan Update

ASBU AIM, BBB AND ACTION PLAN UPDATE IN THE CAR REGION

(Presented by the Secretariat)

EXECUTIVE SUMMARY	
This paper is in line with the follow-up to Annex 15 and the related documents of the Aeronautical Information Services (AIS), as well as the requirements of the Global Air Navigation Plan (GANP) and the Basic Building Blocks (BBB), against the challenges that prevail in the AIM Area in the CAR Region.	
Action:	Suggested actions are presented in Section 5.
Strategic Objectives:	<ul style="list-style-type: none">• Strategic Objective 1 – Safety• Strategic Objective 2 – Air Navigation Capacity and Efficiency
References:	<ul style="list-style-type: none">• Annex 15 – Aeronautical Information Services (AIS)• 7th edition of the Global Air Navigation Plan (GANP)• PANS – AIM (Doc 10066)• Global Air Navigation Plan https://www4.icao.int/ganpportal/• Aviation System Block Upgrade (ASBU) Framework https://www4.icao.int/ganpportal/ASBU• Aviation System Block Upgrade (ASBU) Performance Framework https://www4.icao.int/ganpportal/ASBU/KPI

1. Introduction

1.1 Pursuant to its Terms of Reference (ToR), the Aeronautical Information Management Task Force (AIM/TF) is expected to monitor and address relevant global and regional developments, such as those relating to ICAO Assembly 41 from the following link: <https://www.icao.int/Meetings/a41/Pages/default.aspx>, and derived from it the 7th edition of the Global Air Navigation Plan (GANP), which was approved by said ICAO Assembly, and whose main objectives of the GANP are found in the link: <https://www4.icao.int/ganpportal/>.

1.2 This edition of the GANP promotes, among other aspects, investment in innovation through regional development programs, in support of implementation at a technical level, to facilitate a change with aviation system block upgrades (ASBU), such as framework to optimize the allocation and use of resources through the performance-based decision-making method with 4 levels to consider:

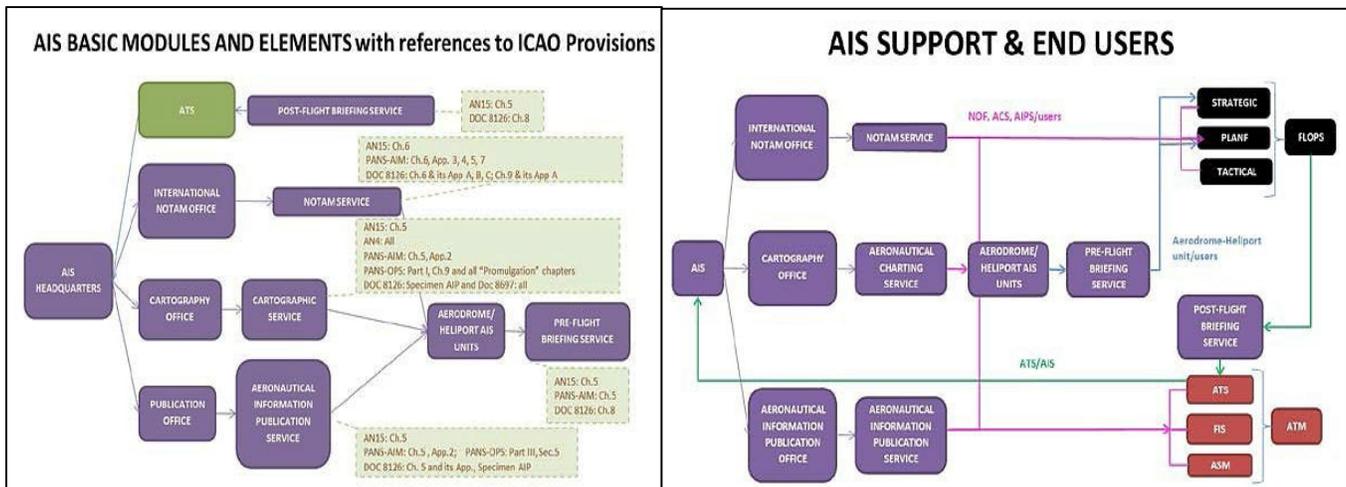
• Global Strategic: includes the ambitious global performance and conceptual roadmap AIM
• Global Technical: includes the Basic Building Blocks (BBB), ASBU, and the performance-based decision-making method
• Regional: includes Regional Air Navigation Plans and Regional Information and Data Programs.
• National: includes the National Plans and their deployment

2. Discussion

1.2 The Basic Building Blocks (BBB) framework, at a technical level, describes the basis of any robust air navigation system and consists of the identification of essential services to be provided to international civil aviation in accordance with the SARPs of ICAO. These essential services are defined for AIM in Annexes 15 and 4. The BBB framework identifies the end users of the essential services, as well as the infrastructure assets that are necessary for their delivery.

1.3 The BBBs are considered separate from the ASBU framework and represent a baseline rather than an evolutionary step. Once these essential services are delivered, they form the baseline for any operational improvements at AIM.

1.4 The BBBs provide two reference frameworks for aeronautical information services (AIS):



1.5 The ASBU Framework is simplified in the following table describing the ASBU of the 7th Edition of the GANP compared to its previous version. Details about the 7th edition of the GANP and ASBU framework can be found at <https://www4.icao.int/ganportal>

DAIM	B0 2013-18	B1 2019-24	B2 2025-30	B3 2031-36	B4 2036+ (New)
Digital Aeronautical Information Management		X (New)	X (New)		

1.6 The DAIM framework is oriented toward System-Wide Information Management (SWIM), as defined, consisting of infrastructure and governance standards that enable the management of information for Air Traffic Management (ATM) and its exchange between parties qualified through interoperable services (AIXM).

1.7 ICAO is preparing the SWIM provisions in the new Procedures for Air Navigation Services – Information Management (**PANS-IM**) and the **SWIM Manual Volume I and II** (Doc 10039). In addition, recently at the 2023 World Conference of the International Federation of Aeronautical Information Management Associations (IFAIMA) some important recommendations were given:

AIS to AIM 2.0 means even better information (quality), more qualified personnel, as well as the digitization of information to be disseminated through SWIM;
AIM 2.0 does not equal "SWIM implementation"; it is a prerequisite as one of the information domains within SWIM;
AIM 2.0 is about more efficient service delivery and the ability to freely select providers and integrators (service delivery context must be considered);
AIM 2.0 is required to address new entrants to our air navigation system, such as drones, high-altitude flights, etc.; and
Before undertaking the final stage of the migration towards AIM 2.0, the progress of the implementation of AIM 1.0 at a global level must be strengthened, since investments for the implementation are still lacking, the benefits of AIM as an axis of operational improvements have not been clearly communicated to States and awareness needs to be raised among executives/decision makers

3. Challenges and Initiatives

3.1 Challenges identified in CAR.

a) Lack of commitment and human resources from the State to effectively implement the safety oversight system.
b) Political issues/Technological challenges of some States, thus limiting the effectiveness of remote assistance.
c) Lack of strategic planning by States/industry in activities related to air navigation capacity and efficiency
d) Lack of awareness of States on the impact of the implementation of ASBU elements
e) Difficulties in providing assistance to some States due to political crises and travel restrictions
f) Lack of commitments of the States with the resolution of the current SSeC
g) Lack of availability/responsiveness of counterparties
h) Lack of commitment from States
i) Lack of coordination with regional organizations

3.2 Some project initiatives in CAR

a) High-level interventions to sensitize the authorities of the States about the importance of civil aviation in the priority agenda of the Governments
b) Implementation of specific projects under iPACK to help States establish robust aviation systems
c) Automation of the identification and management of ANS Deficiencies - DASHBOARD
d) Automation of ANS Regional Planning, Reporting, and Implementation Monitoring - DASHBOARD
e) Remote assistance to States
f) Communication and high-level missions with state authorities to address SSeC, if any
g) Development of specific State projects to improve capacities to promote areas of supervision

4. Conclusion

4.1 Carrying out an evaluation of the information in this Note, adjustments to the work program of the AIM Group will be obtained or other activities will be added to the next period until the next Meeting (AIM/TF) next year 2024, so that the priorities can be modified. in our matter within the processes of implementation of the Air Navigation Services (ANS) in a harmonious way:

a)	It is necessary to ensure that the AIM implementation in the CAR Region is coherent and compatible with the developments in the adjacent regions, and is in line with the Global Air Navigation Plan (GANP), the framework of Block Improvements of the Aviation (ASBU) and Navigation of the CAR Region Air Program strategy;
b)	Supervise the implementation status of the ASBU sub-processes related to the AIM elements of the CAR region included in the AIM Collaborative Plan, as well as other required AIM facilities and services;
c)	identify associated difficulties and deficiencies and provide progress reports, as necessary;
d)	Keep under review the AIM performance objectives/priorities of the CAR Region, develop action plans to achieve the agreed performance objectives and propose changes to the AIM plans/priorities of the CAR Region;
e)	try to achieve a common understanding and support of all interested parties involved or affected by AIM developments/activities in the CAR Region;
f)	Provide a platform for the harmonization of developments and deployments in the AIM domain;
g)	Monitor and review the latest developments in AIM and procedure design issues associated with AIM, provide expert input for AIM related issues; and propose solutions to meet ATM operational requirements;
h)	Provide regular progress reports to GREPECAS regarding its work programme; and
i)	Periodically review its Terms of Reference and propose modifications, as necessary.

5. Suggested actions

5.1 The meeting is invited to:

- a. take note of the information provided in the er; Working Paper;
- b. align the National Air Navigation Plan with ASBU and BBB;
- c. support efforts that promote the regional implementation of ASBU and BBB; and
- d. report to the ICAO NACC Office the progress in ASBU and BBB, as well as report on possible difficulties faced by States.