



# ICAO

International Civil Aviation Organization  
North American, Central American and Caribbean Office

WORKING PAPER

AIM/TF/5 — WP/07  
11/22/22

**Fifth North American, Central American and Caribbean Working Group (NACC/WG) Aeronautical Information Management Implementation Task Force Meeting  
(AIM/TF/5)**

Mexico City, Mexico, 26 – 28 October 2022

**Agenda Item 9: Review of the AIM Field Future Work Programme, Terms of Reference (ToRs) related to System Wide Information Management (SWIM)**

**DEVELOPMENTS RELATED TO AIM TOWARDS SWIM**

(Presented by Secretariat)

<b>EXECUTIVE SUMMARY</b>	
This working paper presents important developments related to AIM towards SWIM implementation	
<b>Action:</b>	Action required is in Section 3
<b>Strategic Objectives:</b>	<ul style="list-style-type: none"><li>• Strategic Objective 1 – Safety</li><li>• Strategic Objective 2 – Air Navigation Capacity and Efficiency</li></ul>
<b>References:</b>	<ul style="list-style-type: none"><li>• ICAO Assembly 41</li><li>• GANP – 7<sup>th</sup> Edition</li></ul>

**1. Introduction**

1.1 In accordance with its Terms of Reference (TORs), AIM Sub-Group is expected to monitor and address relevant Global and Regional developments. This Working Paper provides information on the ICAO Assembly 41 and the 7<sup>th</sup> Edition of GANP activities.

**2. Discussion**

2.1 The Assembly 41 documentation is available on the ICAO website at:

<https://www.icao.int/Meetings/a41/Pages/default.aspx>

2.2 New Edition of the Global Air Navigation Plan – GANP (ICAO DOC 7950) was endorsed by the ICAO Assembly 41. The main goals of GANP are:

<https://www4.icao.int/ganpportal/>

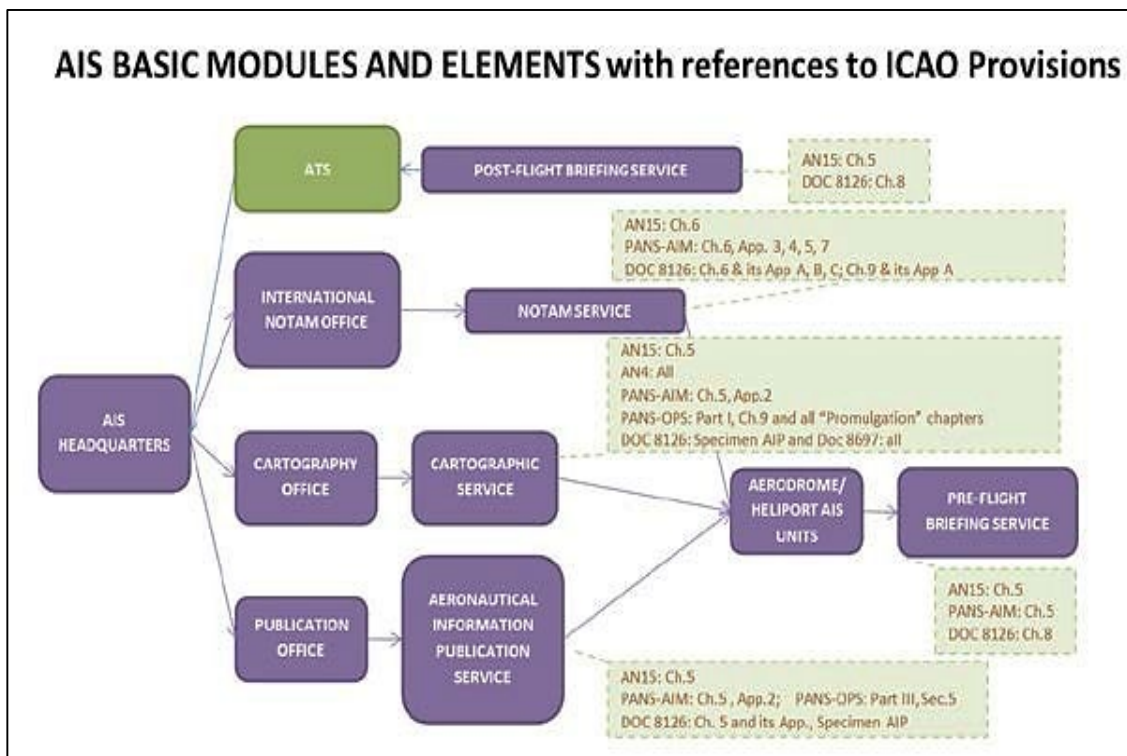
2.3 The Global Air Navigation System Promote investment in innovation through research and development activities and align Regional research and development programmes support implementation at Global Technical Level with the Air Navigation System (BBBs) to facilitate a transformational change: ASBU framework to optimize allocation and use of resources for air navigation throughout performance-based decision making method with 4 levels to be consider:

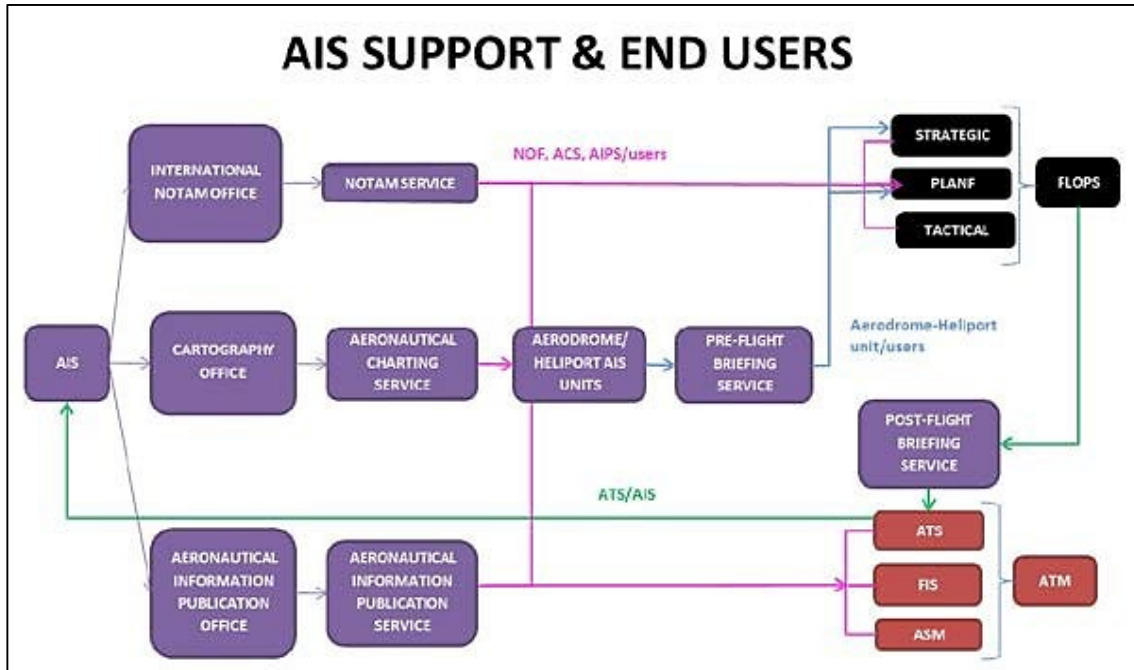
- **Global Strategic Level:** includes Global performance ambitious and the conceptual roadmap
- **Global Technical Level:** includes the BBBs, ASBUs and the performance-based decision-making method
- **Regional Level:** includes Regional Air Navigation Plans and the Regional R&D programmes
- **National Level:** includes National Plans and their deployment

2.4 Basic Building Blocks (BBBs) framework. At the Global Technical Level, 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 ANS areas including information management (AIM). In addition to essential services, the BBB framework identifies the end users of these services as well as the assets (CNS infrastructure) that are necessary to provide them.

2.5 The BBBs are considered an independent framework and not a block of the ASBU framework as they represent a baseline rather than an evolutionary step. Once these essential services are provided, they constitute the baseline for any operational improvement

2.6 BBBs provide two baseline frameworks for the Aeronautical Information Services:

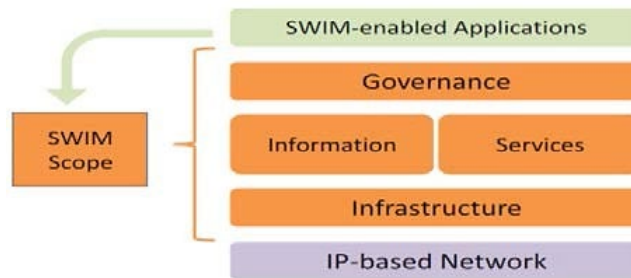




2.7 ASBUs framework. The following table outlines the ASBUs in the 7<sup>th</sup> Edition of GANP compared to its previous version. Details on the 7<sup>th</sup> Edition of the GANP and ASBU framework could be found at: <https://www4.icao.int/ganportal>

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

2.8 SWIM consists of standards, infrastructure and governance enabling the management of ATM information and its exchange between qualified parties via interoperable services:



2.9 The Information Management Panel (IMP) was established in 2014 to develop a globally harmonized and interoperable approach and elaborate on necessary concepts to ensure effective management of information, including identifying the need for new information exchange formats, on a system-wide basis within the air navigation system. The objectives of IMP are:

- Lead (Develop and Propose to the Air Navigation Commission (ANC)) on provisions for SWIM
- Contribute (Develop and Propose to the ANC) to the evolution of the ICAO SWIM Concept
- Lead (Develop and Propose to the ANC) on the development of required (implementation) guidance on ICAO SWIM

2.10 The meeting is informed about the draft material in progress by ICAO for the SWIM Provisions in the new *Procedures for Air Navigation Services – Information Management* (PANS-IM) and Volume II of the *SWIM Manual* (DOC 10039).

2.11 In addition, recently in the IFAIMA conference provided some valid and important recommendations:

AIS to AIM 2.0 means yet better information (quality), increased qualified personnel as well as digitalization of information to be disseminated via SWIM;
AIM 2.0 does not equal “SWIM implementation”; it is a pre-requisite as one of the information domains within SWIM;
AIM 2.0 is about a more efficient delivery of service and the ability to select providers and integrators freely (there is the need to consider the service delivery context);
AIM 2.0 is required to address the new entrants in our air navigation system, such as drones, high altitude flight etc.; and
Before embarking the final stage of migration towards AIM 2.0, the implementation progress of AIM 1.0 globally should be strengthened, as there is still lack of investments for implementation, benefits of AIM as being the backbone for operational improvements, have not been clearly communicated to States and more awareness must be created among executives/decisions makers

### 3. Action by the meeting

3.1 The meeting is invited to:

- a) consider the AIM-related developments in the Regional AIM Work program, planning and ToRs; and
- b) suggest some additional actions related to AIM