



# Workshop on the management of Air Navigation Deficiencies & ASBU Monitoring

## Overview of ASBU Monitoring Tool

September 2025



# Outline

- Introduction
- Access to the system
- Switching to AANDD or ASBU Applications
- ASBU Home page
- Threads & Modules
- ASBU Elements
- ASBU Implementation
- ASBU Dashboard
- ASBU Reports



# Introduction

- The ASBU monitoring Tool offers functionalities including:
  - configuration of the ASBU concepts in the system,
  - reporting on planning and implementation of the ASBU elements by States,
  - generating dashboards and reports.
- The ASBU monitoring Tool is an Application of the AANDD platform accessible through the link: <https://aandd.icao.int>.



# Access to the system - Users

- The following users can have access to the system, provided they were nominated by their Administration/Organization:
  - ICAO Regional Offices users,
  - States users (Focal points and DGCA, ANSP users),
  - RSOOs Focal points
  - Users Organizations Focal points,
  - Professional Organizations Focal points.
- User must authenticate through a valid user account.



# Access to the system - Login

- **Login** with your email and password
- Were you nominated by an Administration/Organization and you still don't have a user account in the system, then **Sign up**, and wait for the activation of your account by the system administrator.
- Did you forget your password, click on "**Forgot password?**" to reset it.

**LOGIN**

Welcome to the Afi air navigation deficiencies database - AANDD

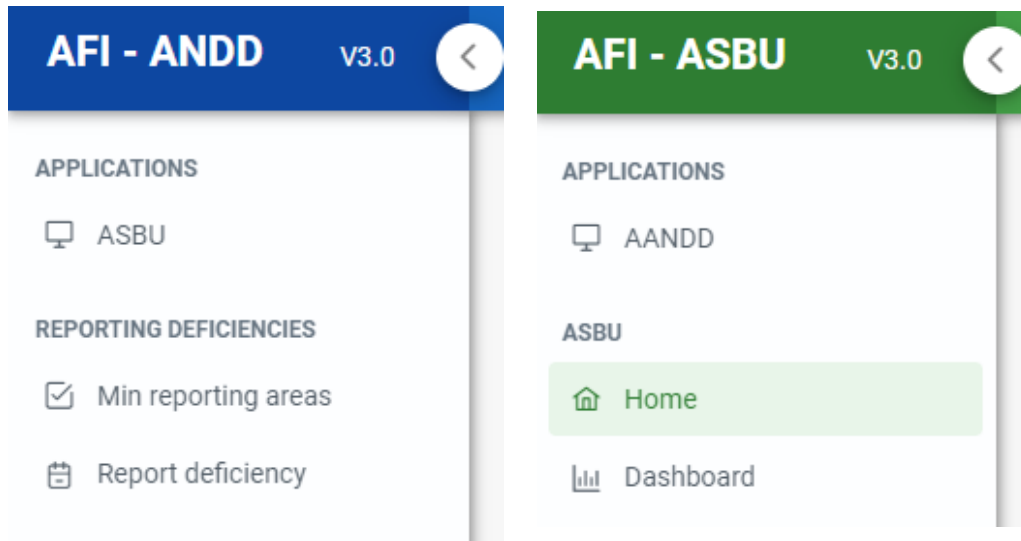
☐ Remember me

Log in

Don't have an account? [Sign Up](#) [Forgot password?](#)



# Switching to AANDD or ASBU Applications












- Once the user is logged in, the default application is displayed as follows:
  - AANDD
  - ASBU

- Possible to switch to other application by clicking on the corresponding menu item under “**APPLICATIONS**” heading




# ASBU Home page


**AFI - ASBU** V3.0 

**APPLICATIONS**  
 AANDD  
  
**ASBU**  
 **Home**  
 Dashboard  
 Threads & Modules  
 Elements applicable  
 Implementation  
 Reports  
  
 **Fanfe B**  
State focal point  
  
WACAF-TEST


## AFI ASBU Monitoring & Reporting

**Blocks**


The end date of a six years timeframe that defines a deadline for an element to be available for implementation.

**Modules**


The group of elements from a thread that will be available for implementation within the defined deadline established by the ASBU Block.

**Monitoring**


States reports through this online platform on their planning and implementation of the applicable ASBU Elements. Dashboards are generated with different layers of granularity.

**Threads**

Key feature areas of the air navigation system where improvements are needed in order to achieve the vision outlined in the Global ATM Operational Concept.

**Elements**

Specific change in operations designed to performance of the air navigation system under specified operational conditions. The AFI region identifies ASBU Elements to be implemented at the regional level.

**Reporting**

Annual reports on the regional performance in ASBU implementation are automatically generated from this online platform.



# Home page – ASBU concepts

- The home page provides short description of following key ASBU concepts, with link to related menu items:

- Blocks
- Threads
- Modules
- Elements

## Blocks

The end date of a six years timeframe that defines a deadline for an element to be available for implementation.

## Modules

The group of elements for implementation within a Block.

## Threads

Key feature areas of the air navigation system where improvements are needed in order to achieve the vision outlined in the Global ATM Operational Concept.

## Elements

Specific change in operations designed to performance of the air navigation system under specified operational conditions. The AFI region identifies ASBU Elements to be implemented at the regional level.





# Threads & Modules – ASBU Threads

## ASBU Threads and Modules

AIM

AOP

ATM

CNS

MET

SAR

DAIM

Digital Aeronautical Information Management

Information



SWIM

System Wide Information Management

Information



- **ASBU Threads** are displayed through the menu item **Threads & Modules**. The list is organized by technical areas as follows: AIM, AOP, ATM, CNS, MET & SAR



# Threads & Modules – ASBU Modules

DAIM Digital Aeronautical Information Management Information	
Module	Description
DAIM Baseline	Provision of aeronautical information services (AIS) is a State responsibility. States provide an Aeronautical Information Service that focuses on making available the following products: Aeronautical Information publication (AIP), Aeronautical Information Circular (AIC), Aeronautical charts, AIP supplements and NOTAMs.
DAIM-B1	Improved aeronautical information based on enhanced data quality (accuracy, resolution, integrity, timeliness, traceability, completeness, format) to support Performance-Based Navigation (PBN), airborne computer-based navigation systems and ground automation. In addition, digital exchange and processing of aeronautical information allows a more efficient management of information by avoiding reliance on manual processing and manipulation.
DAIM-B2	<p>"The exchange of aeronautical information is now based on service orientation in accordance with the SWIM concept.</p> <p>Fully digital aeronautical information should be the standard and paper aeronautical information should have been abandoned. All airspace users and ANSPs are required to continuously provide and subscribe airspace constraint alerts so that any changes to any constraint are immediately available.</p> <p>Improvement in the position and time accuracy of the data. All airspace constraints have an applicability time, including static constraints. Additional aeronautical information is provided in support to network operations.</p>

- **ASBU Modules** of a Thread are displayed by expanding the said Thread



# ASBU Elements – Elements

ASBU Elements				
AIM	AOP	ATM	CNS	MET SAR
ACDM-B0/1	Airport CDM Information Sharing (ACIS)		Ready for implementation	Applicable
ACDM-B0/2	Integration with ATM Network function		Ready for implementation	Applicable

- **ASBU Elements** are displayed through the menu item **Elements applicable**. The list is organized by technical areas as follows: AIM, AOP, ATM, CNS, MET & SAR



# ASBU Elements – Enablers & Deliverables

AIM	AOP	ATM	CNS	MET	SAR
<div>ACDM-B0/1</div> <div>Airport CDM Information Sharing (ACIS)</div> <div>Ready for implementation</div> <div>Applicable</div> <div></div>					
Purpose	To generate common situational awareness, which will foster improved decision making within aerodromes, by sharing relevant surface operations data among the local stakeholders involved in aerodrome operations.				
Capabilities	Stakeholders will be able to collaborate and take actions towards the achievement of a set of defined milestones by being aware of the status of an individual flight measured against known target times and milestones.				
Description	This element represents the first collaboration step among stakeholders involved in aerodrome operations. It consists in the definition of common specific milestones for several flight events taking place during surface operations. The stakeholders involved have to, based on accurate operational data, achieve the agreed milestones.				
Element enablers					
Element deliverables - Expected procedures, services and facilities					

- ASBU Elements are associated with **Enablers and Deliverables**. These features are accessible by expanding a given Element.



# ASBU Elements – Enablers

## Element enablers

Enabler code	Enabler name	Enabler reference	Stakeholders
ACDM-B0/1-ENB1	Surface operation milestones procedure	Reference: Manual on Collaborative Air Traffic Flow Management (ATFM) ICAO Doc 9971	Airport operator, ANSP, Aircraft operator, Ground handling agent
ACDM-B0/1-ENB2	ACIS system	A simple A-CDM dialog system to a more advanced A-CDM Information sharing platform (ACISP) to achieve A-CDM information sharing.	Airport operator, ANSP, Aircraft operator, Ground handling agent

- While ASBU Elements identify operational improvements, **ASBU enablers** are the different components necessary for their implementation.



# ASBU Elements – Deliverables

Element deliverables - Expected procedures, services and facilities

Deliverable code	Deliverable name
ACDM-B0/1-DEL1	ACIS Platform
ACDM-B0/1-DEL2	A-CDM Procedures
ACDM-B0/1-DEL3	Apron Management

- The eANP volume III provides tables for collecting ASBU implementation data. The *Required Services/Facilities on these tables* are represented as **Element Deliverables**.



# ASBU Implementation – Reporting

- States Focal Points report on their planning and implementation of ASBU Elements through the menu item **Implementation**.
- The list of ASBU Elements displayed is organized by technical areas as follows: AIM, AOP, ATM, CNS, MET and SAR.
- The implementation status is depicted in the following colors: **Red** for “**Not started**”, **Orange** for “**In Progress**”, and **Green** for “**Completed**”.



# ASBU Implementation – Reporting

## ASBU Implementation

Wacaf-test

AIM

AOP

ATM

CNS

MET

SAR







DAIM-B1/1	Provision of quality-assured aeronautical data and information	Standardization	Applicable	▼
DAIM-B1/2	Provision of digital Aeronautical Information Publication (AIP) data sets	Ready for implementation	Applicable	▼
DAIM-B1/3	Provision of digital terrain data sets	Ready for implementation	Applicable	▼
DAIM-B1/4	Provision of digital obstacle data sets	Ready for implementation	Applicable	▼
DAIM-B1/5	Provision of digital aerodrome mapping data sets	Ready for implementation	Applicable	▼





# ASBU Implementation – Reporting

- Planning and implementation details of Deliverables of a given ASBU Element are displayed by expanding the said Element.
- To record data on implementation of a Deliverable, click on the blue “pencil”
- To attach evidence files, click on the green “pencil” icon.

ASBU Implementation									
Wacaf-test									
<div> AIM AOP ATM CNS MET SAR </div>									
ACDM-B0/1		Airport CDM Information Sharing (ACIS)					Ready for implementation		Applicable
Deliverable code	Deliverable name	Implementation status	Date Planned	Due date	Date completed	% Progress level	Evidences	Comments	
ACDM-B0/1-DEL1	ACIS Platform	Not started				0			
ACDM-B0/1-DEL2	A-CDM Procedures	Not started				0			
ACDM-B0/1-DEL3	Apron Management	Not started				0			



# ASBU Dashboard

- The application generates **Dashboard** on ASBU implementation status in the region, accessible through the menu item [Dashboard](#).
- Dashboard is composed of interactive graphs on ASBU planning and implementation per States, threads, elements, or technical areas.
- Dashboard can be:
  - of types: Snapshot or Trend,
  - of scopes: Regional or National,
  - for a given period,.



# ASBU Dashboard - Filters

Dashboard scope		Dashboard type	Period
<input checked="" type="radio"/> Regional	Regions AFI	<input checked="" type="radio"/> Snapshot	Year 2025
<input type="radio"/> National		<input type="radio"/> Trend	

General

AIM

AOP

ATM

CNS

MET

SAR

Data

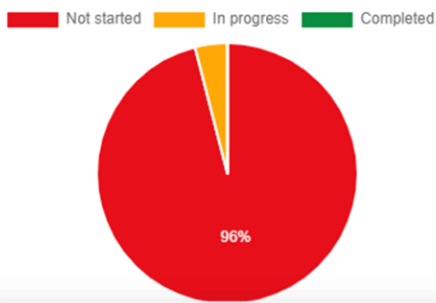


# ASBU Dashboard - Graphs

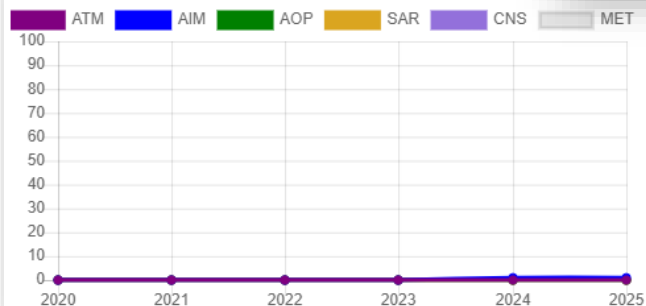
National progress of ASBU implementation in AFI region in 2025



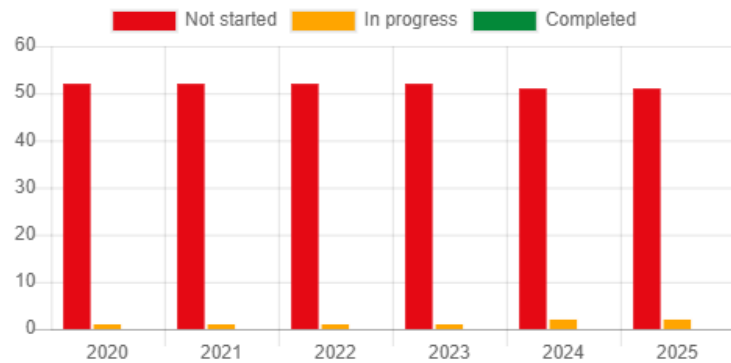
States ASBU implementation status in AFI region in 2025



ASBU implementation (%) per Area in AFI from 2020 to 2025



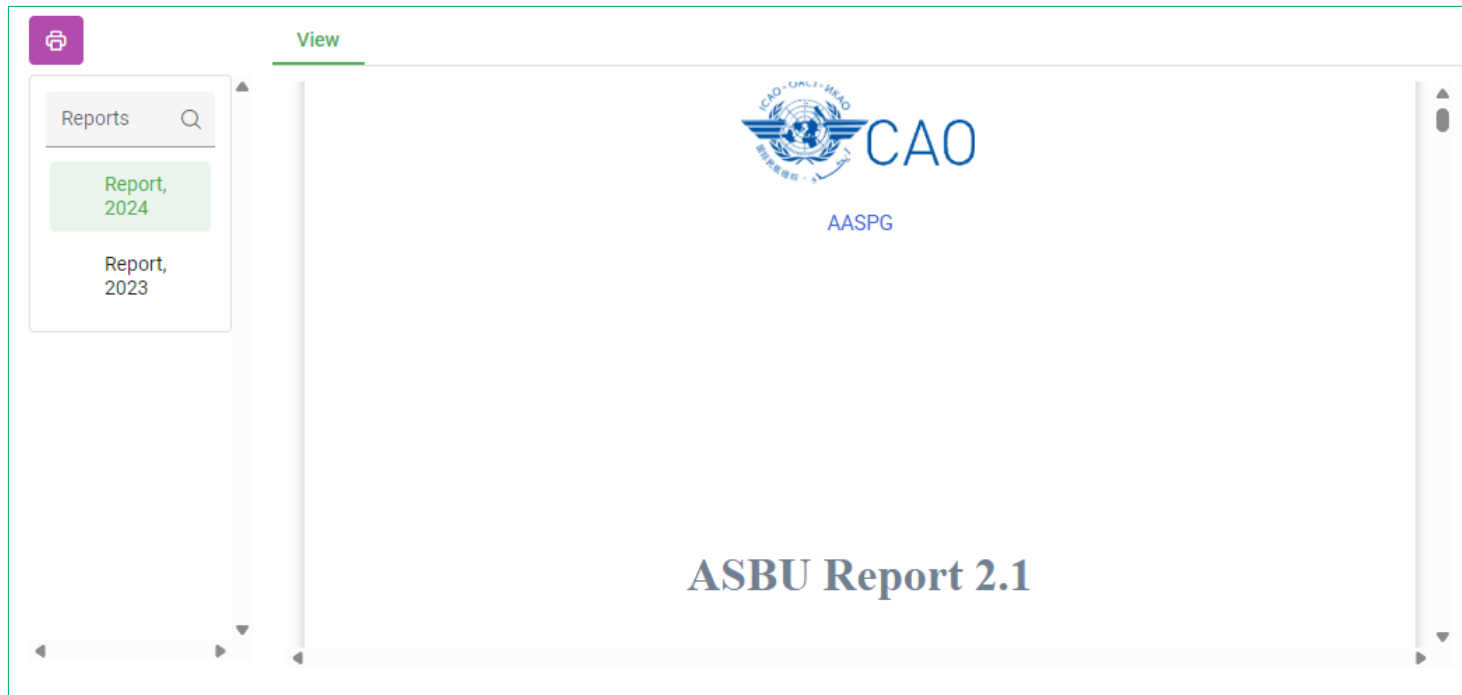
ASBU elements implementation status in AFI from 2020 to 2025





# ASBU Reports

- Accessible through menu item **Reports**.
- Selected in the list “Reports”.
- Printed by click on the “Printer” icon.





ICAO DAKAR UNITING AVIATION

NO COUNTRY  
LEFT BEHIND



ICAO

North American  
Central American  
and Caribbean  
(NACC) Office  
Mexico City

South American  
(SAM) Office  
Lima

ICAO  
Headquarters  
Montréal

Western and  
Central African  
(WACAF) Office  
Dakar

European and  
North Atlantic  
(EUR/NAT) Office  
Paris

Middle East  
(MID) Office  
Cairo

Eastern and  
Southern African  
(ESAF) Office  
Nairobi

Asia and Pacific  
(APAC) Sub-office  
Beijing

Asia and Pacific  
(APAC) Office  
Bangkok



THANK YOU