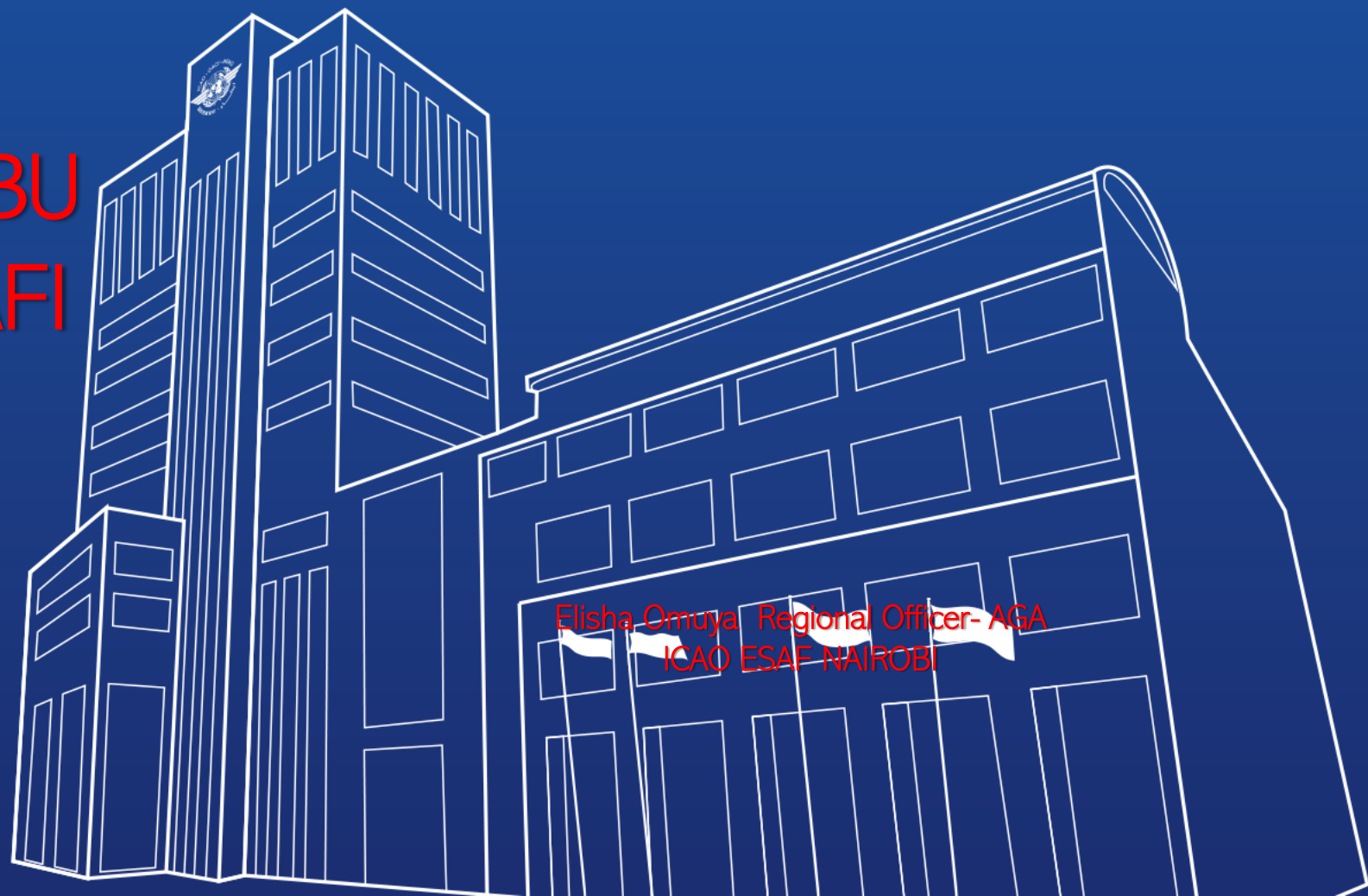




APPLICABLE ASBU ELEMENTS IN AFI

**INTERNATIONAL
CIVIL AVIATION
ORGANIZATION**



Elisha Omuya Regional Officer- AGA
ICAO ESAF NAIROBI

APIRG/25 (*Now AASPG*) Decisions Driving ASBU Implementation

ASBU Framework Endorsement

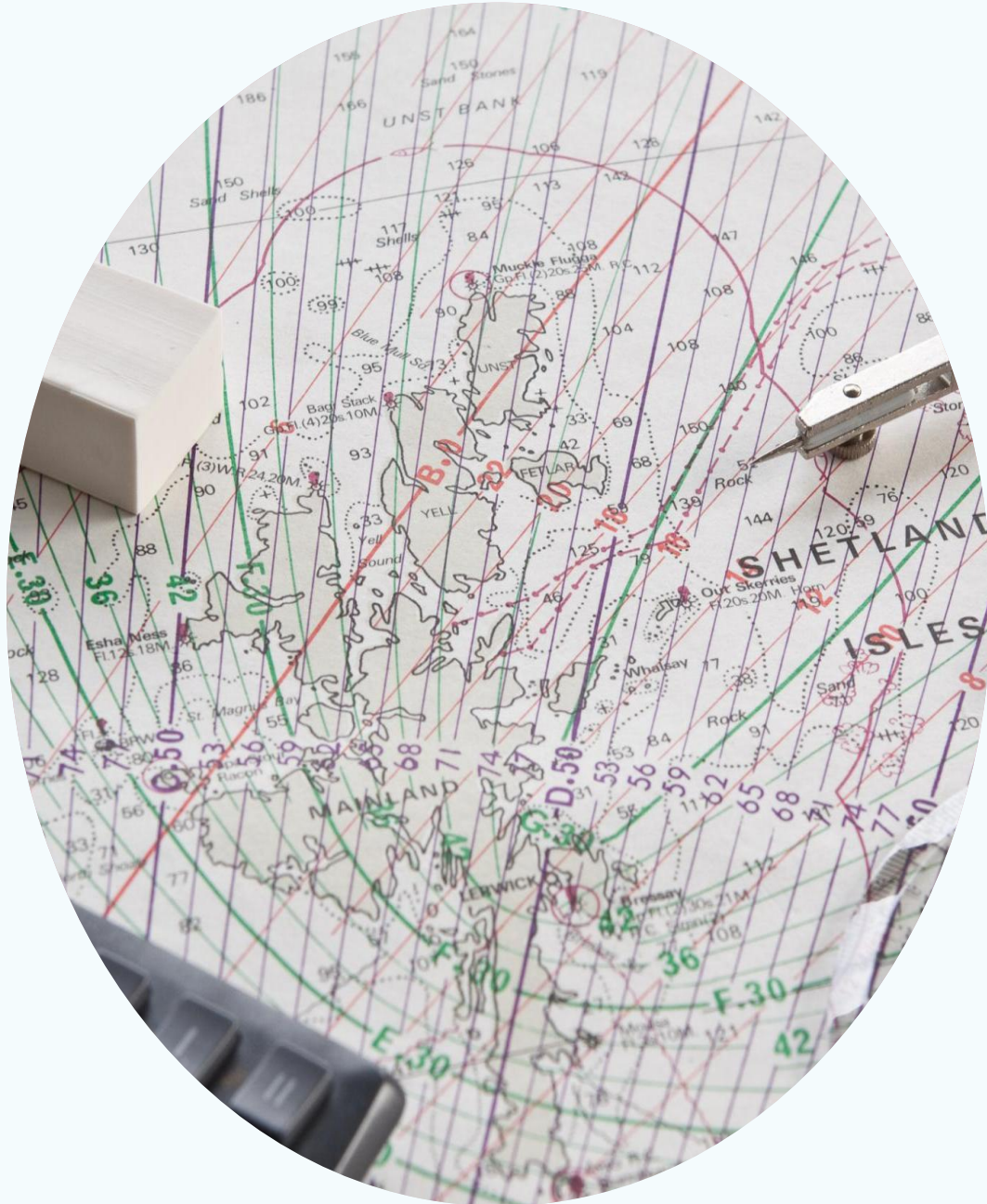
APIRG/25 Decision 25/10 endorses ASBU to align the Regional Air Navigation Plan with ICAO global standards.

Data-driven Monitoring Mandate

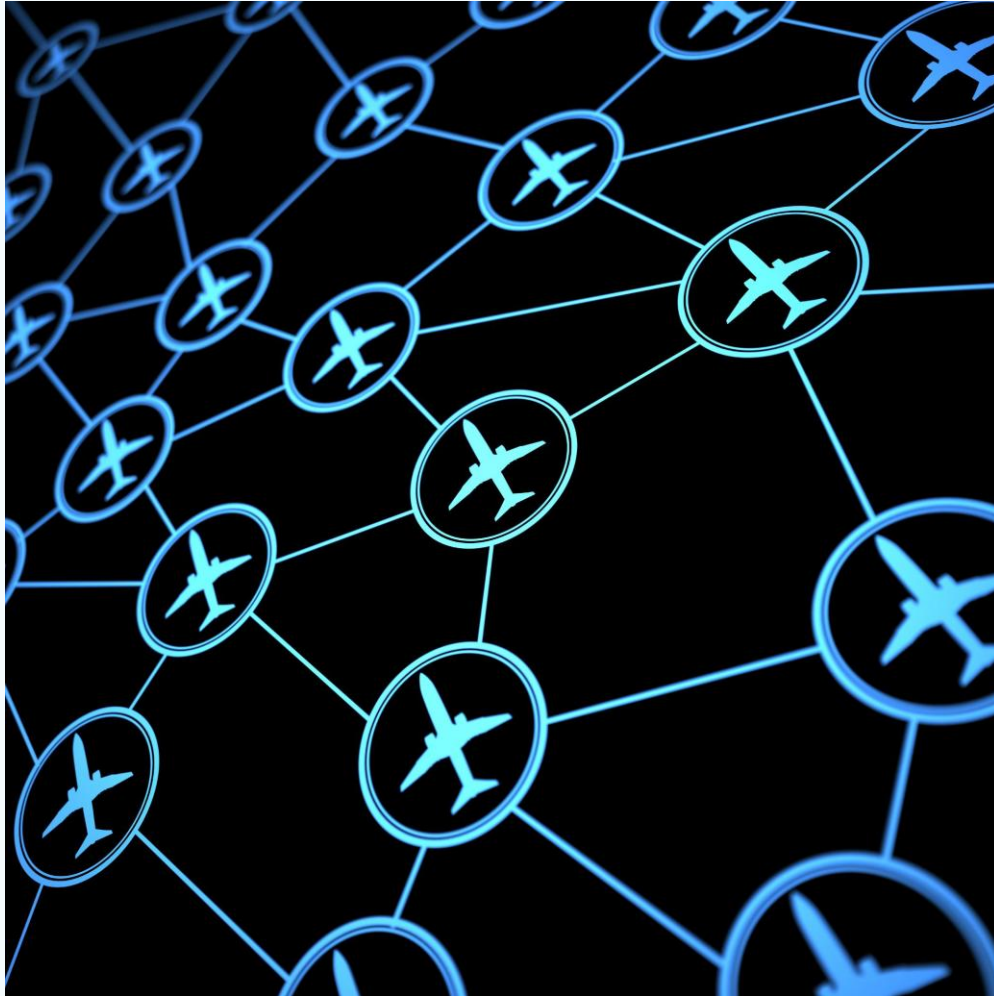
APIRG/25 Conclusion 25/11 mandates quarterly ASBU reporting using standardized templates and online platforms.

Governance and Regional Coordination

These decisions emphasize governance, compliance, and coordination to ensure harmonized ASBU implementation across diverse states.



Understanding the ICAO ASBU Framework



Structured Modernization Approach

ASBU provides a global, performance-based framework to modernize air navigation in a predictable, phased manner.

Performance Improvement Areas

ASBU modules focus on airport operations, capacity, flight efficiency, information management, and meteorology.

Flexible Global Interoperability

The framework ensures global interoperability while supporting regional priorities and gradual technology adoption.



Institutional Context

AASPG's Role

AASPG coordinates air navigation planning and performance monitoring across the Africa-Indian Ocean region to harmonize aviation systems.

Strategic Alignment and Safety

ASBU implementation aligns regional systems with the ICAO Global Plan, emphasizing safety, standardization, and global interoperability.

A-CDM Determination in AFI

Medium traffic density. Where the number of movements in the mean busy hour is of the order of 16 to 25 per runway or typically between 20 to 35 total aerodrome movements.



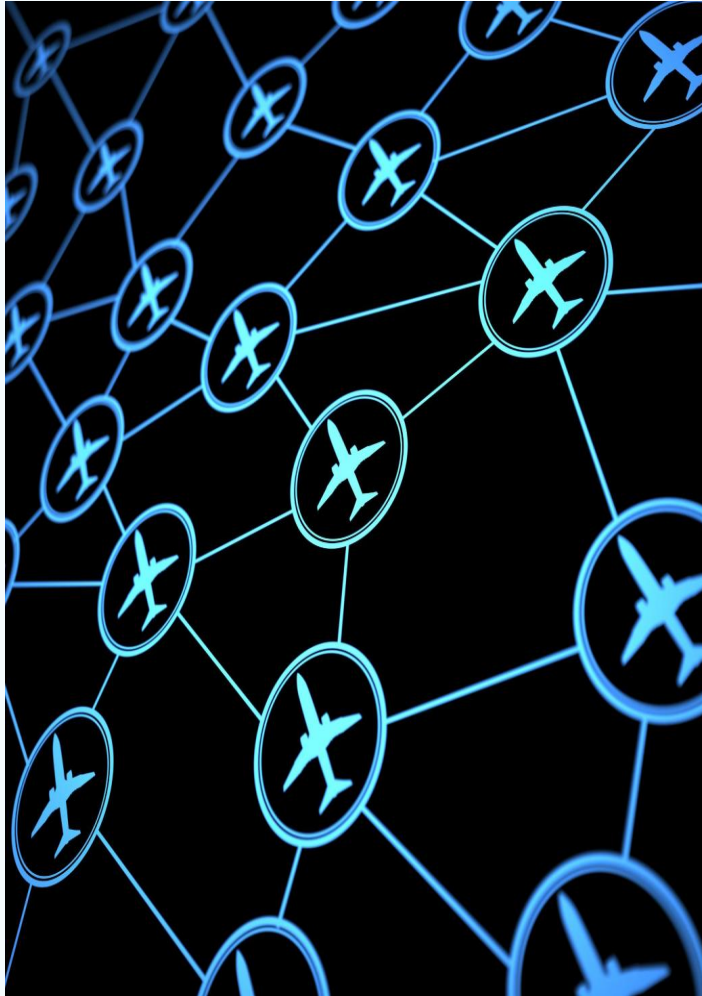
Understanding the ICAO ASBU Concept



airspace, or terminal manoeuvring area (TMA): flexible airspace which aircraft fly along dedicated trajectories, that may or may not be based on standard procedures. The main actors in this module are pilots and approach air traffic controllers;

runway(s) system: composed of paved infrastructures including runways, runway entries and runway exits with strong geometrical constraints. They are equipped with specific radio navigation, markings and lighting equipment. They are used by pilots, local and ground air traffic controllers or ground services;

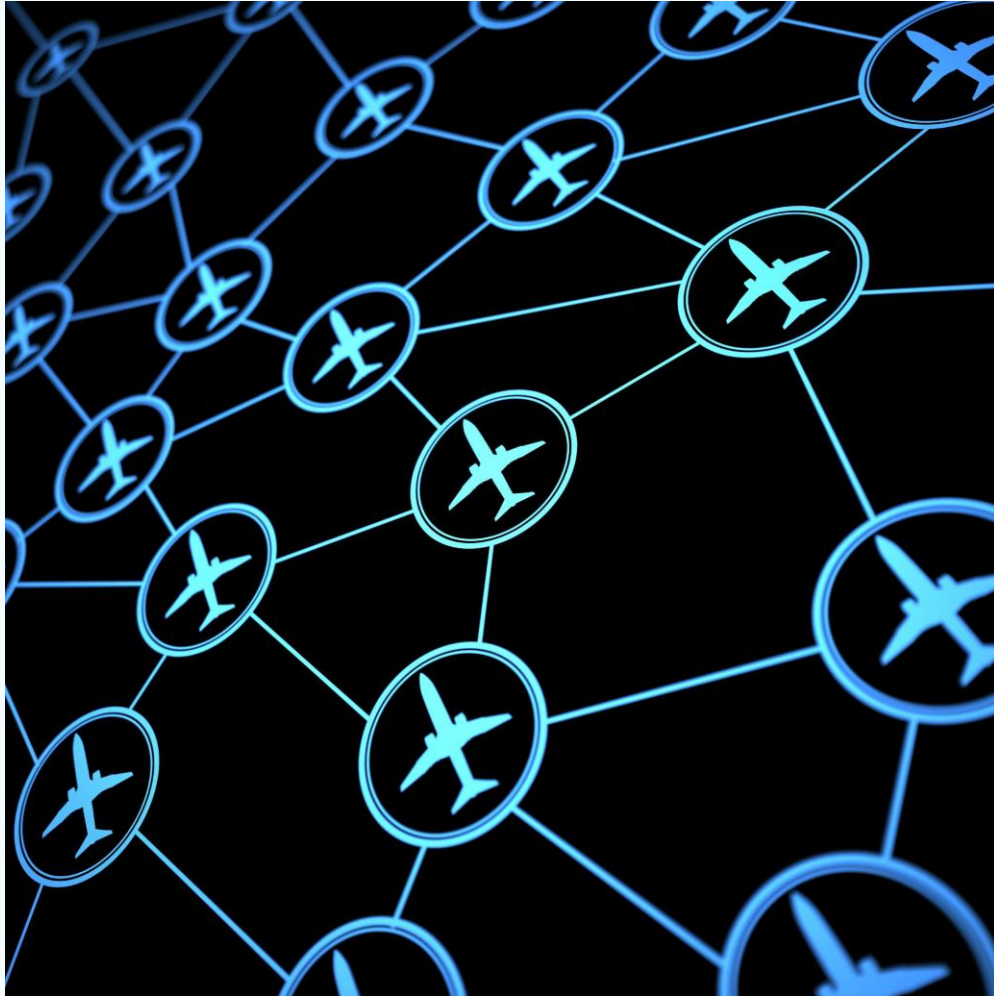
Understanding the ICAO ASBU Concept



- **taxiways system from the runway(s) to the apron:** taxiways form a static yet well-organized network, with a lot of intersections. They are also equipped with markings and lighting equipment and used by pilots, ground air traffic controllers or ground services;
- **apron:** a wide and complex dynamic network with specific markings and lightning equipment. Various vehicles must drive on the apron (aircraft, tugs, ground handling vehicles, buses, etc.), and they operate in a crowded and less predictable environment; and
- **aircraft gates:** these are static but must deal with a dynamic usage. Various vehicles circulate around gates (aircraft, tugs, buses, fuel trucks, catering trucks, luggage dollies, jet ways, etc.) with a variety of drivers.

ASBU ELEMENTS APPLICABLE IN AFI

[Air Navigation plan Volume III](#)



AOP Elements

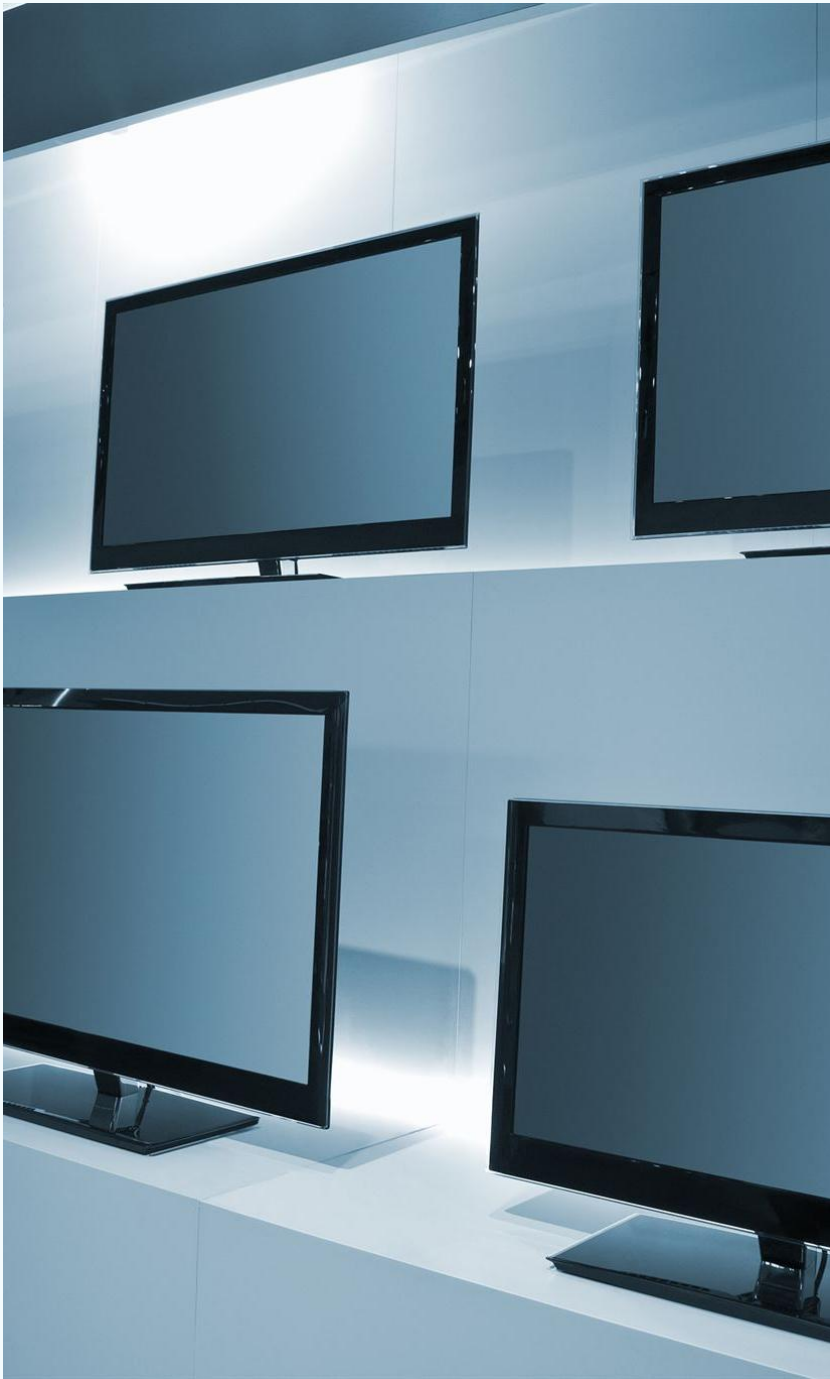
-ACDM-BO/1 Airport CDM Information Sharing



	Maturity level	Required Facilities /Products /Services	Requirements /Guidance for Implementation
Ready for implementation		ACIS Platform	Information Sharing
		A-CDM Procedures	Provision and availability of Procedures from Stakeholders at the airport
		Apron Management	Provision and availability of Aerodrome Operations Manuals

AOP Elements-
ACDM-B0/2 integration with ATM Network
function

B0	ACDM-B0/2 Integration with ATM Network function	Ready for implementation	ATM- Aerodrome Coordination	Milestone Approach, Variable Taxi time, Pre- departure Sequencing and Adverse weather conditions
			Aerodrome Capacity Information	Apron area, Stand and gate allocation, Strength of pavements , Air Bridge information,ect
			FUM- Flight Status Update Messages	Dtaa from Flight Plans, Flight monitoring information,Flight Chandes information etc



Core Differences Between ASBU Block 0 and Block 1

Aspect	Block 0	Block 1
Timeline	2013-2019	2019-2025
Objective	Foundational capabilities	Enhanced and integrated capabilities
Complexity	Low to moderate	Moderate to high
Dependency	Minimal	Builds on Block 0 systems
Integration	Limited	High, network-wide

Airport Operations: From A-CDM to AOP



Basic Aerodrome Collaborative Decision-Making

Block 0 A-CDM focuses on information sharing among key airport stakeholders to improve situational awareness and predictability.

Integrated Airport Operations Plan

Block 1 evolves airport operations into an integrated plan aligned with network-wide Air Traffic Flow Management for better coordination.

AFI Region Transition Challenges

Transition to integrated AOP in AFI requires better data quality, interoperability, and institutional coordination to enhance operations.

Operational Benefits

Integrated AOP improves demand-capacity balance, reduces congestion, and enhances resilience during disruptions.



Enhanced and Integrated Meteorology in Block 1

Feature	Block 0	Block 1
Data Use	Situational awareness	Decision support
Integration	Limited	Full ATM integration
Automation	Low	High
Operational Impact	Safety-focused	Safety, capacity, efficiency

ASBU Implementation Priorities in the AFI Region



Phased ASBU Implementation

ASBU implementation in AFI is pragmatic and phased to align with regional realities and resource availability.

Focus on Block 0 Priorities

Block 0 is prioritized as it addresses critical safety and efficiency gaps with manageable resources.

Progressive Block 1 Implementation

Block 1 is implemented progressively in states with sufficient readiness and infrastructure.

Regional Coordination Importance

Coordination by ICAO and AASPG ensures interoperability and prevents fragmented ASBU implementation.



Thank You

