

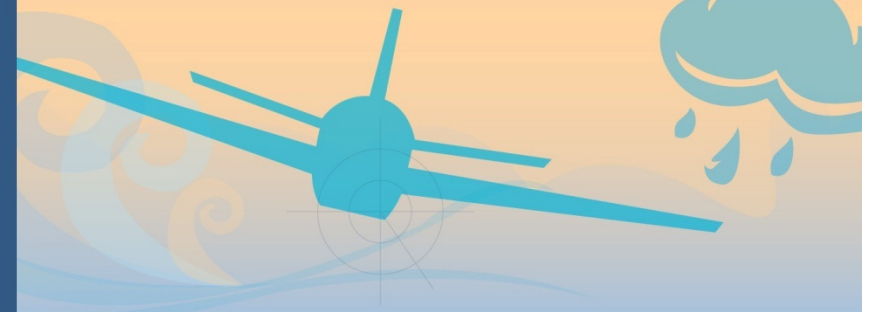
Enabling Information Sharing thru Common Services

AIM Development in a Global Context

Presented By: Michael W. Hohm
Technical Officer – AIM
ICAO
Date: August 30th, 2011



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**August 30, 2011 - September 1, 2011
NOAA Science Center & Auditorium
Silver Spring, Maryland**

Introduction

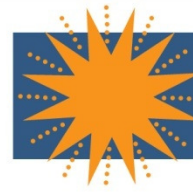


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- AIM development and evolution
- What is next
- Challenges
- Addressing coordinated development and implementation
- AIM in Global ATM



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What we have been doing

2008

- NextGen / SESAR Conference in Montreal
- AIS-AIMSG/1

2009

- Gap Analysis of NextGen/SESAR/ICAO
- Established Standards Roundtable
- AIS-AIMSG/2
- AIS to AIM transition roadmap

2010

- Harmonisation of NextGen and SESAR
- Introduction of CARATS
- AIS-AIMSG/3
- Amendment 36 to Annex 15

Currently.....



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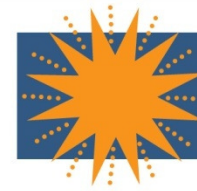
2011

- AIS-AIMSG/4
- Development of Amendment 37 to Annex 15
- GANIS
- Initiate work to integrate AIM into Global ATM
 - AIM Operational Concept
 - Swim integration
- Global AIM roadmap for GANP
- AIM elements in ASBUs

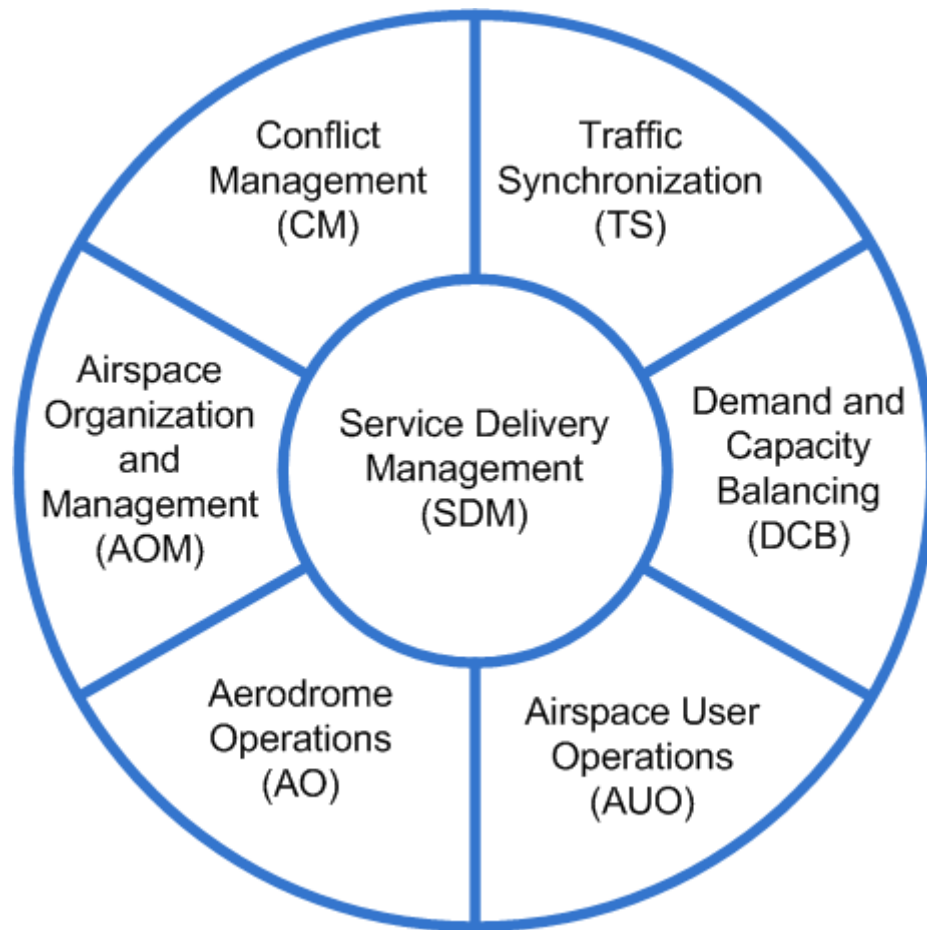


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Global ATM Operational Concept



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- 7 inter-related concept components
- Describes a “vision of achievable benefits”
- Information is a overarching dimension linking all components
- CDM is a key process



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Information is the key enabler



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The delivery of timely, quality assured information as needed across:

- Multiple Domains
- Multiple Providers
- Multiple users
- Multiple applications
- Multiple communication modes
- Multiple Modernization Programs

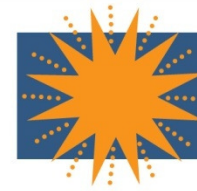


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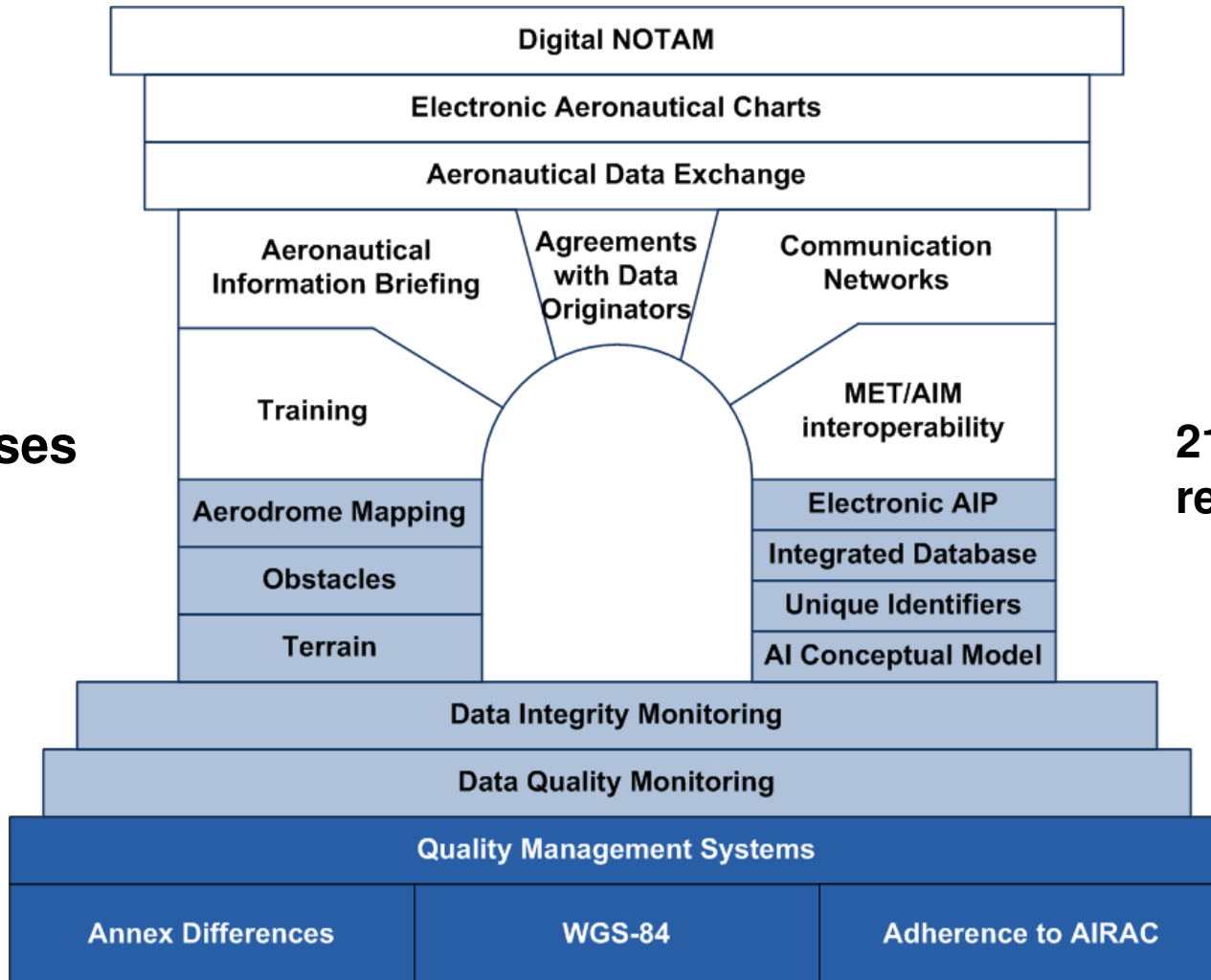
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AIS to AIM Roadmap



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3 phases



21 inter-related steps



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Current evolution of AIM



Paper Products

AIP



eAIP

NOTAM



dNOTAM

Charts



Electronic Charts

Traditional AIS products to Digital AIS Products



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Further Evolution



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- Specification of Data Sets
 - eTOD
 - AMDB
- Scope of AIM Domain
- Definition of Services
- How will AIM fit in SOA
- What is the contribution to SWIM
- AIM Roadmap

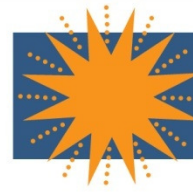


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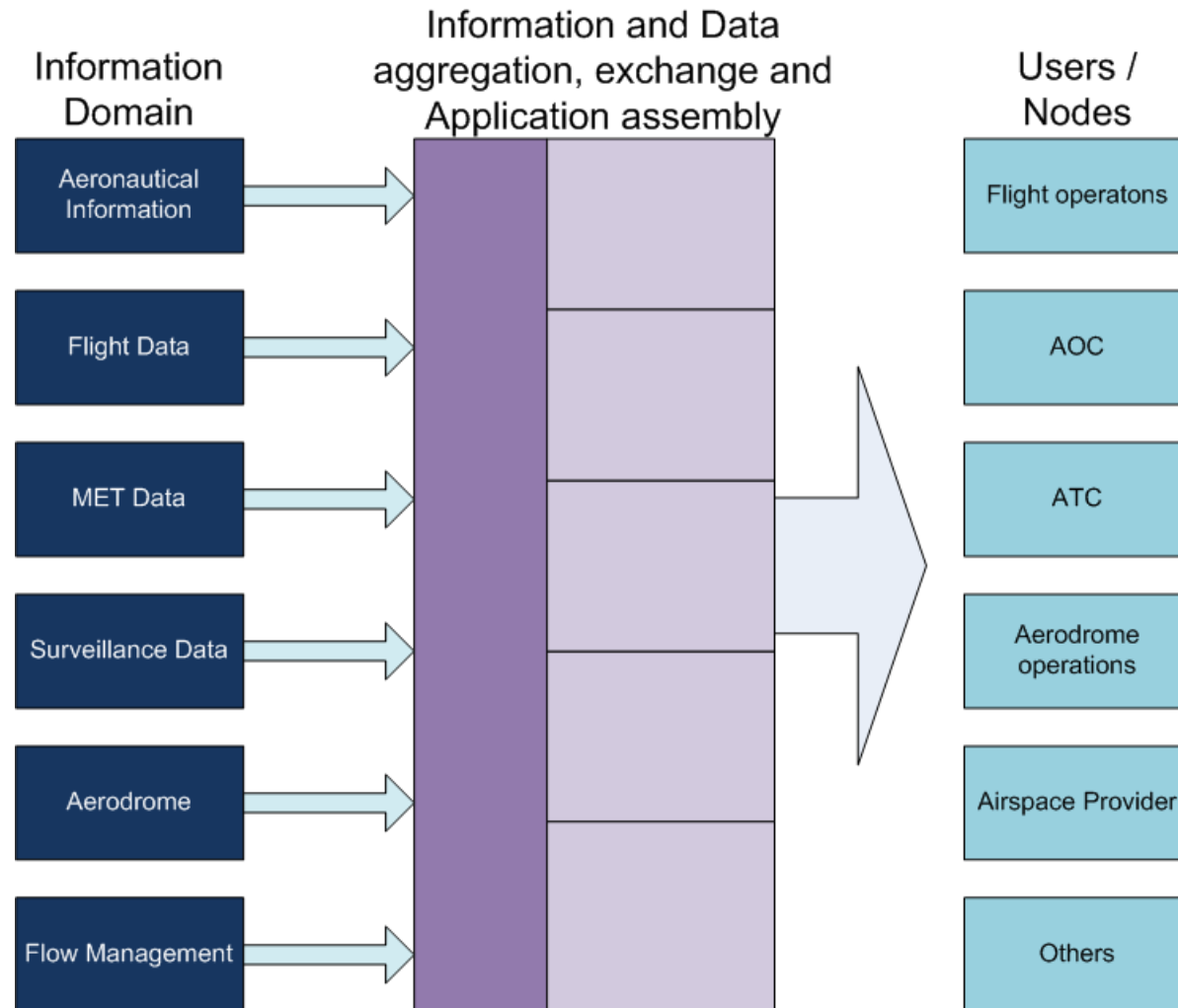


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AIM is one Information Domain



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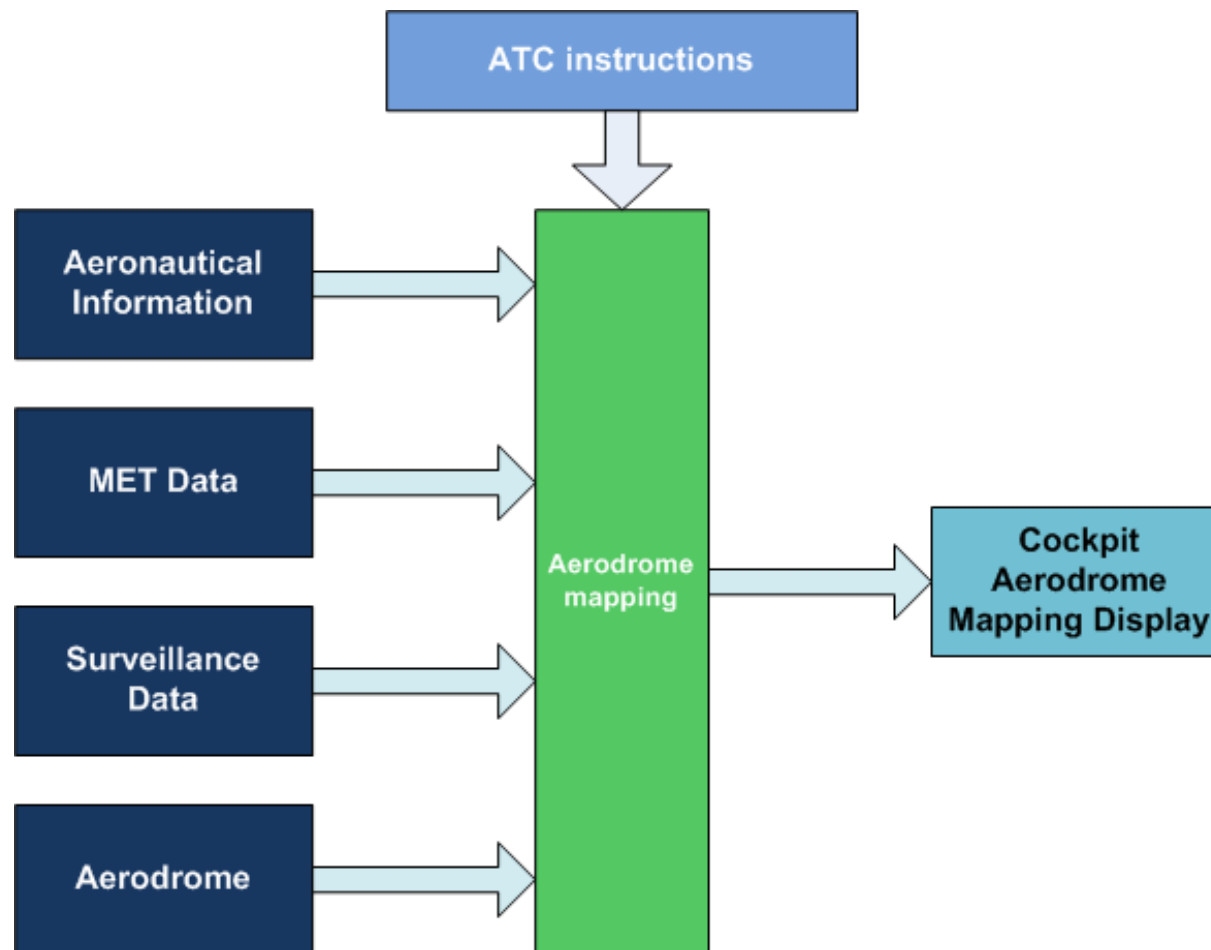


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An emerging example – Cockpit Aerodrome Mapping Display



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Challenges



- Relationship of AIM to other domains not clearly articulated
- AIM beyond Digital AIS services
- No current consensus on SWIM
- SWIM Global concept
- How will AIM be designed to serve Global ATM
- Interoperability vs. Harmonization
- Information access / authentication / need



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Coordination is Critical



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A number of planned implementations.....

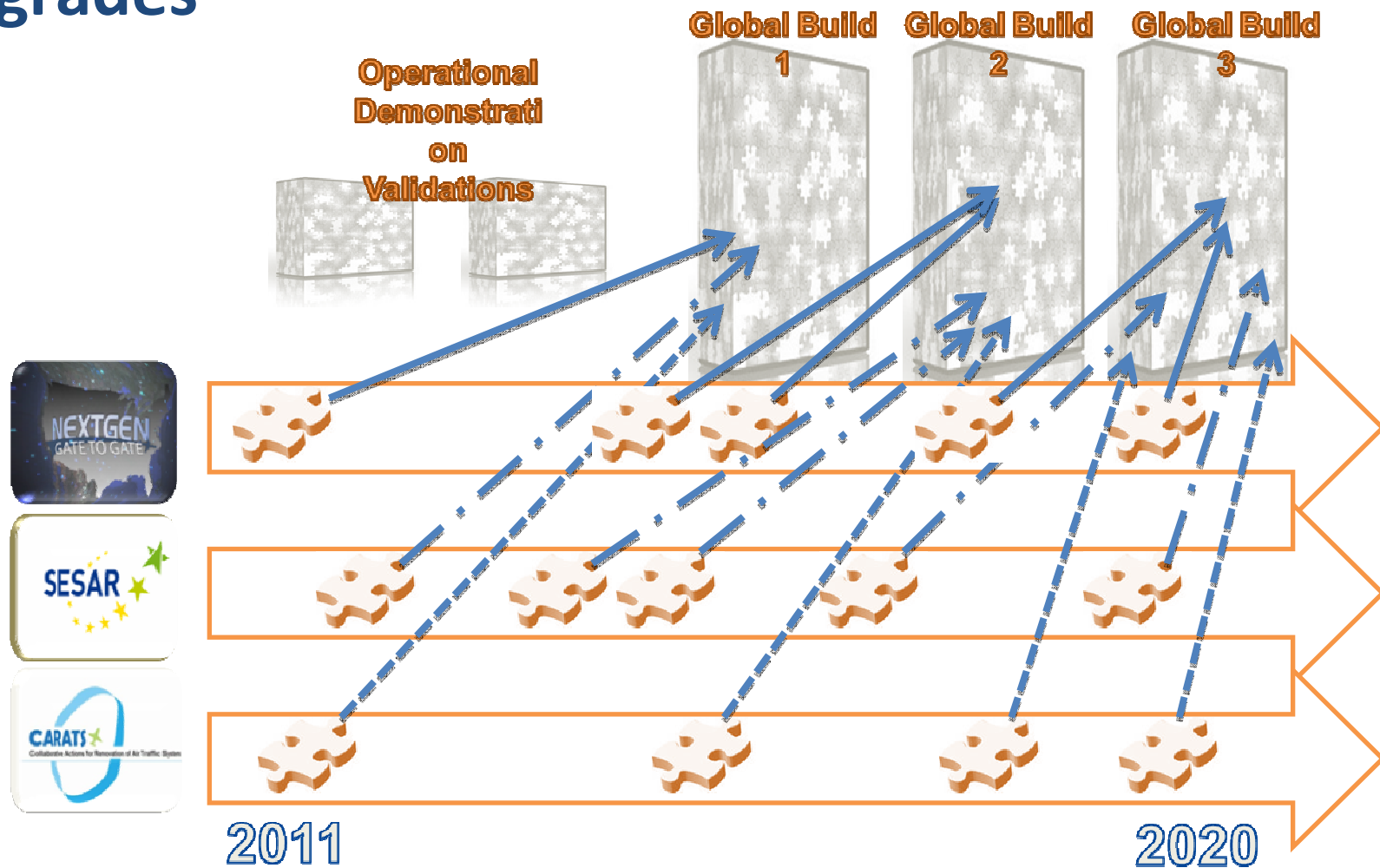


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Aviation System Block Upgrades



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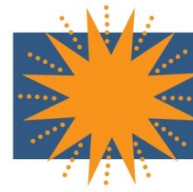
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What is a Block Upgrade?

A **block upgrade** is a package of capabilities which:

1. Nominate intended **performance improvement**
2. Determine necessary **procedures**, air and ground
3. Identify **technology**, air and ground
4. Outline the **business case**
5. Propose a **regulatory approval plan**
6. Define any necessary **transition strategies**
7. Nominate any global **demonstration trials** that relate to the intended operational improvement package



A Building Block Approach

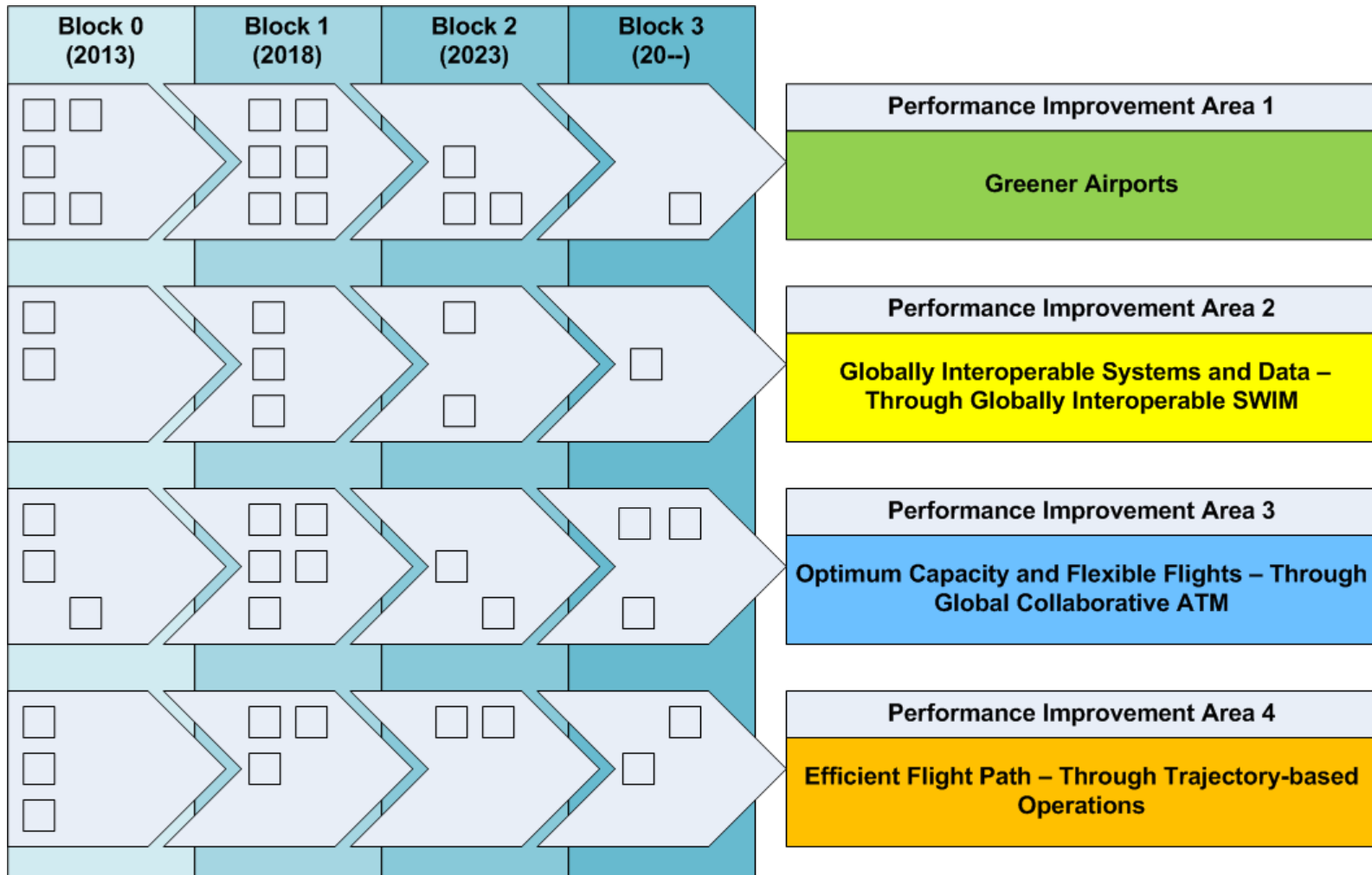
- Block Upgrades provide a series of measurable, operational performance improvements
- Organized into flexible & scalable building blocks
- Could be introduced and implemented as each individual State requires the capability
- Intended to provide investment certainty



Modules / Blocks / Improvements



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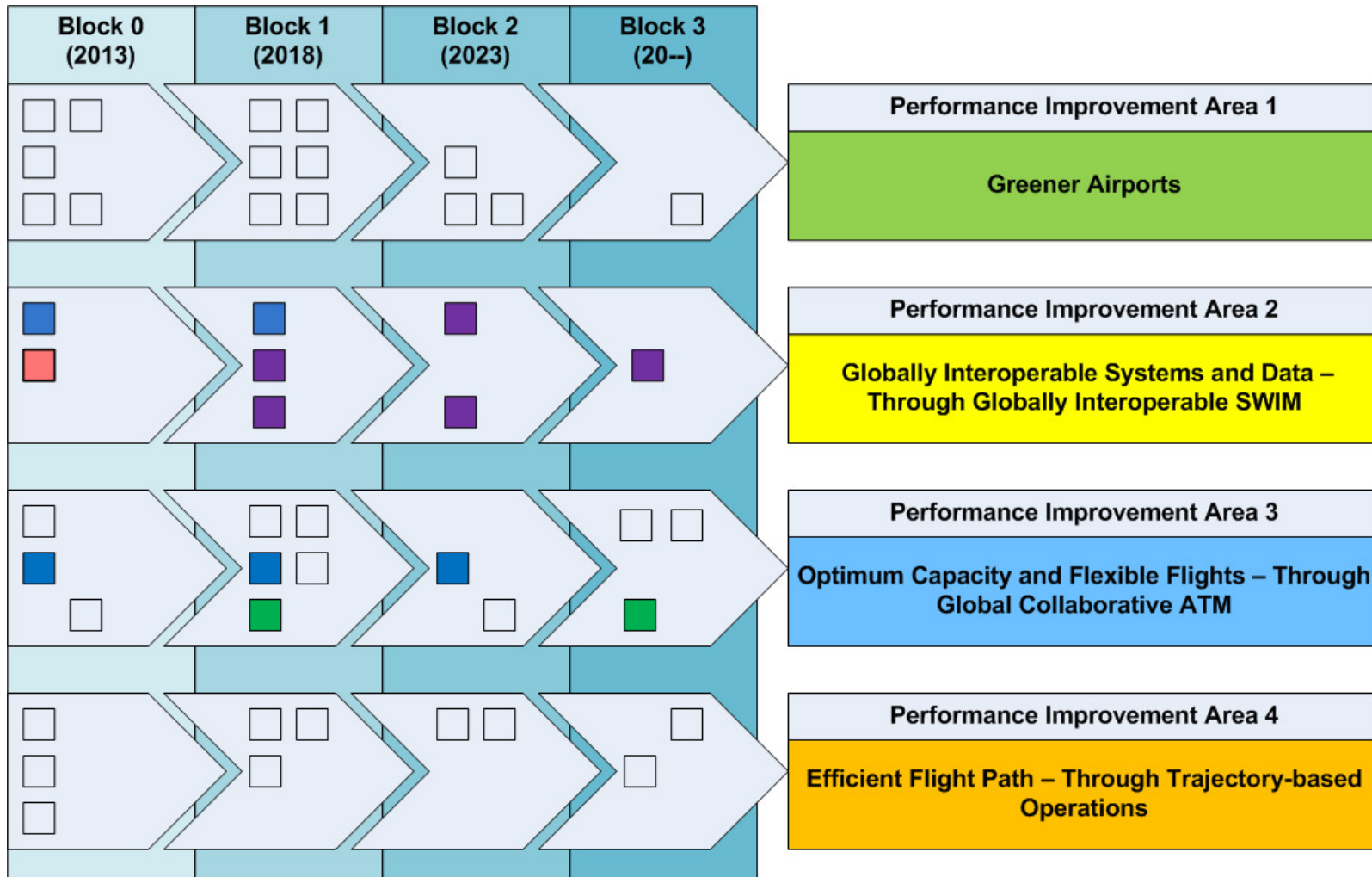


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AIM and SWIM effected Modules



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Performance Area 2



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Block 0	Block 1	Block 2	Block 3
Increased Interoperability, Efficiency and Capacity through Ground-Ground Integration	Increased Interoperability, Efficiency and Capacity through FF-ICE/1 application before Departure	Improved Coordination through multi-centre Ground-Ground Integration: (FF-ICE/1 and Flight Object, SWIM)	
Service Improvement through Digital Aeronautical Information Management	Service Improvement through Integration of all Digital ATM Information		Improved Operational Performance through the introduction of Full FF-ICE
	Performance Improvement through the application of System Wide Information Management (SWIM)	Enabling Airborne Participation in collaborative ATM through	



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Developing the AIM Framework



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- Annex 15:
 - Amendment 37 (2013)
 - Introduce AIM elements
 - Amendment 38 (2016)
 - Fully restructured
- Global AIM Operational Concept
- AIM Roadmap → GANP
- PANS-AIM (2016)



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Global AIM Provisions Plan



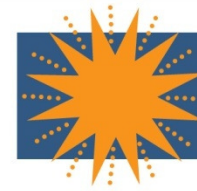
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Document	Function and Content	Primary Audience
Annex 15	Requirements and performance specifications	States
PANS-AIM	Procedures, processes, formats, technical specifications	States and service delivery organizations
AIS (AIM) Manual	Best practices; guidance on application and implementation	Service delivery organizations



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Milestones



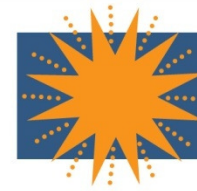
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Date	Event	Milestone
20-23 Sept 2011	GANIS	Industry feedback on : <ul style="list-style-type: none"> • ASBUs • AIM concept with Roadmap and PANS-AIM
19-30 Nov 2012	ANC 12	<ul style="list-style-type: none"> • Present Global AIM and SWIM concept and outline of ICAO provisions (SARPS and PANS) • Agreement of the first series of block upgrades • GANP
Nov 2013		Annex 15 Amendment 37
Sept 2014	MET – AIM Divisional meeting	Present draft PANS-AIM and Annex 15 provisions
Nov 2016		Annex 15 Amendment 38 PANS-AIM 1 st edition



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In Summary



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- Current AIS to AIM roadmap leads to digital AIS services
- New functions, products, and services are in the process of identification
- New roadmap will extend from the current one and be incorporated into the GANP
- Delivery of full IM should allow for flexible applications
- Products will evolve to information service applications



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Questions & Answers / Feedback



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More Information / Contacts



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AIS to AIM SG Website:

<http://www2.icao.int/en/ais-aimsg/Pages/default.aspx>

Contact:

Michael Hohm

Technical Officer – AIM

ICAO

mhohm@icao.int

514-954-8219 ext 8119



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