SIP/2012/ASBU/Dakar-WP/17

AIM - implementation

Saulo Da Silva

Workshop on preparations for ANConf/12 − ASBU methodology
(Dakar, 16-20 July 2012)

Overview

- What we have been doing

- What we are doing

- What will we be doing next

What we have been doing.....

2008

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

2009

 – **Gap Analysis of NextGen/SESAR/ICAO**
 – **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**

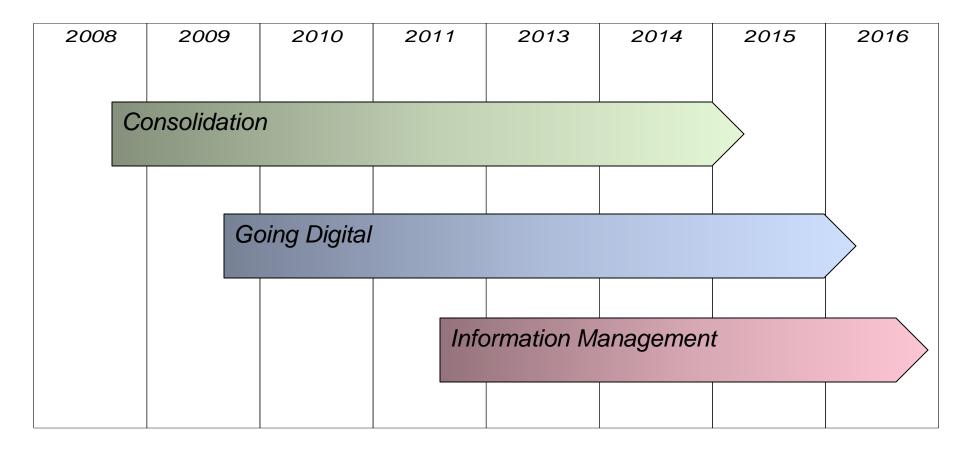# What we have been doing…..

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
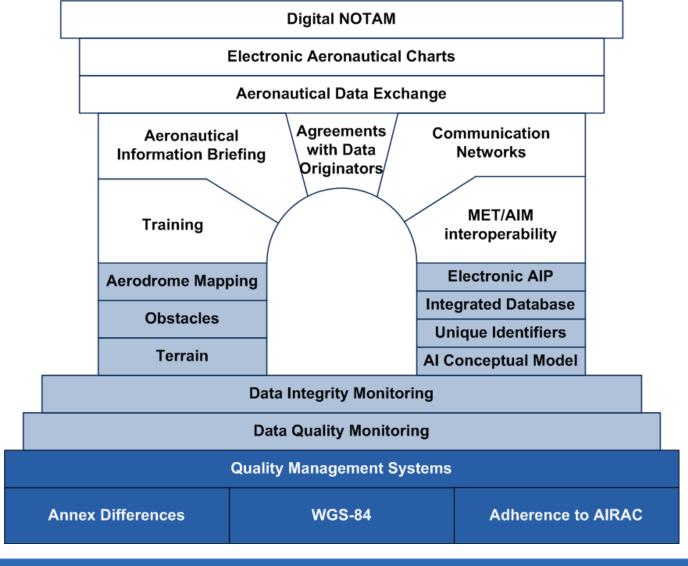
AIS to AIM Roadmap - 3 Phases

2008	2009	2010	2011	2013	2014	2015	2016

Consolidation

Going Digital

Information Management

Current ICAO Provisions

SARPS

Guidance Material

Annex 15

Requirements	Detailed specifications
General Requirements	AIP Format
AIP	SNOWTAM Format
NOTAM	ASHTAM Format
AIRAC	AIRAC Contents
AIC	NOTAM Distribution System
Pre and post flight information	NOTAM Format
Telecommunication Requirements	Data Quality
eTOD	Terrain and Obstacle data

PANS-AIM
Contents might include

Provisions, procedures, practices and formats applicable to:

- **AIP**
- **NOTAM, SNOWTAM, ASHTAM**
- **AIRAC**
- **Data acquisition**
- **Data quality**
- **Integrated briefing**
- **Inter-service communication**

Developing the AIM Framework

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

AIM Provisions Framework

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

Structural Implementations – The bigger picture
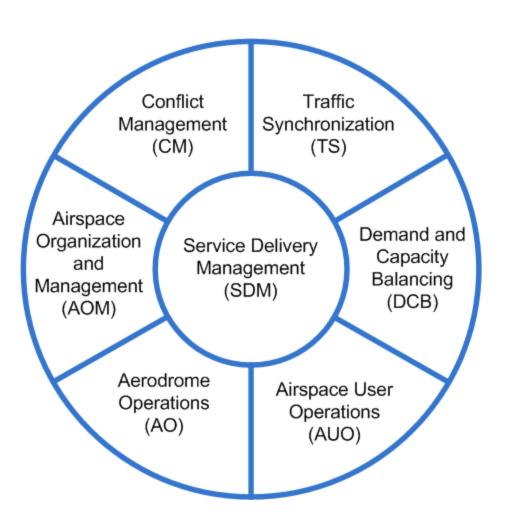
- **Global ATM Operational Concept has a target implementation horizon of 2020-2025**

- **ATM requirements expand the OC and provide the basis for ATM development**

2011	2012	2013	2014	2015	2016	2017	2018

ATM Operational Concept

- **7 inter-related concept components**

- **Describes a "vision of achievable benefits"**

- **Information is a overarching dimension linking all components**

- **CDM is a key process**

Information is the key enabler

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

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

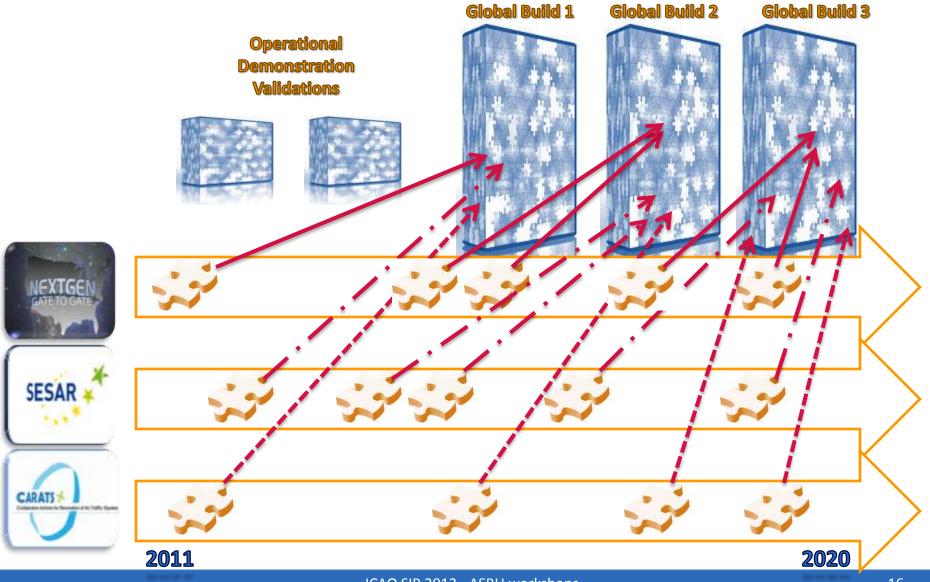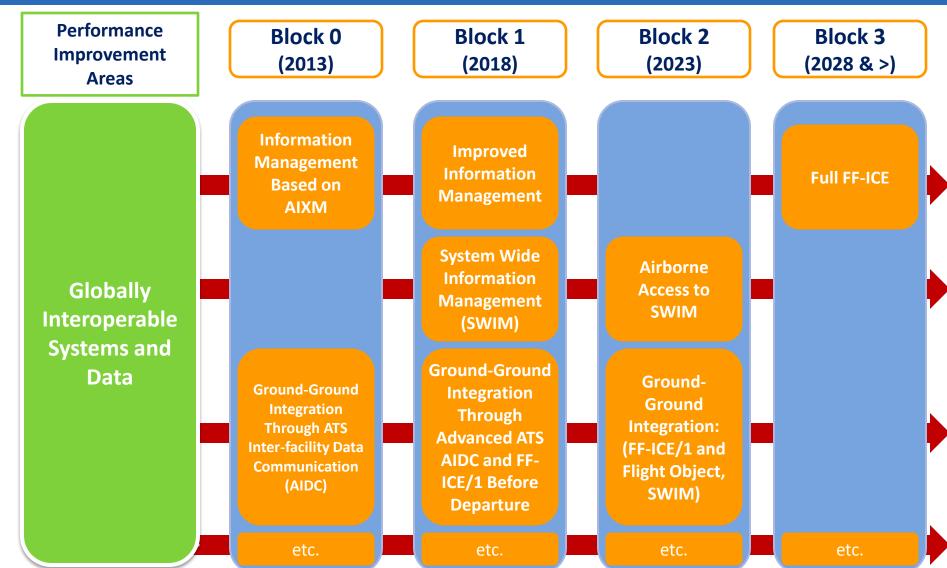# Planning and development is underway

A number of planned implementations……

Aviation System Block Upgrades

Possible AIM integration....

Performance Improvement Areas	Block 0 (2013)	Block 1 (2018)	Block 2 (2023)	Block 3 (2028 & >)
Globally Interoperable Systems and Data	Information Management Based on AIXM	Improved Information Management		Full FF-ICE
		System Wide Information Management (SWIM)	Airborne Access to SWIM	
	Ground-Ground Integration Through ATS Inter-facility Data Communication (AIDC)	Ground-Ground Integration Through Advanced ATS AIDC and FF-ICE/1 Before Departure	Ground-Ground Integration: (FF-ICE/1 and Flight Object, SWIM)	
	etc.	etc.	etc.	etc.

Possible AIM integration....FPL

- **Amendment 1 to PANS-ATM 15th Edition - FPL**

- **The changes were announced by ICAO in 25 June 2008 and will become applicable on 15 November 2012**

- **Necessary to allow ATM systems to make optimum use of advanced aircraft capabilities already onboard the aircraft**

- **Is one step towards a completely integration of the aircraft to the ATM system as envisaged in the Global ATM Operational Concept**

Possible AIM integration....FPL

- **Flight planning environment**

- **Transition Strategy**

- **Checklist Tasks**

- **Implementation guidelines**

- **Conversion of new items to present items**

- **Flight Plan Implementation Tracking System (FITS)**

In Summary.....

- **Current 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**

- **New FPL as one step**

In summary - Milestones

Date	Event	Milestone
20-23 Sept 2011	GANIS	Industry feedback on : • ASBUs • AIM concept with Roadmap and PANS-AIM
15 Nov 2012	FPL	States/ANSPs/Airlines using ne FPL functions
19-30 Nov 2012	ANC 12	• 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 1st edition

ICAO SIP 2012 - ASBU workshops