

# *Global Information Management*

Information  
Management  
Panel (IMP)  
Governance  
Working Group  
Status

*Presented By: Allan Hart*

*Date: August 25, 2015*



Federal Aviation  
Administration



## **AIR TRANSPORTATION INFORMATION EXCHANGE CONFERENCE**

**Global Information Management**

**August 25-27, 2015**

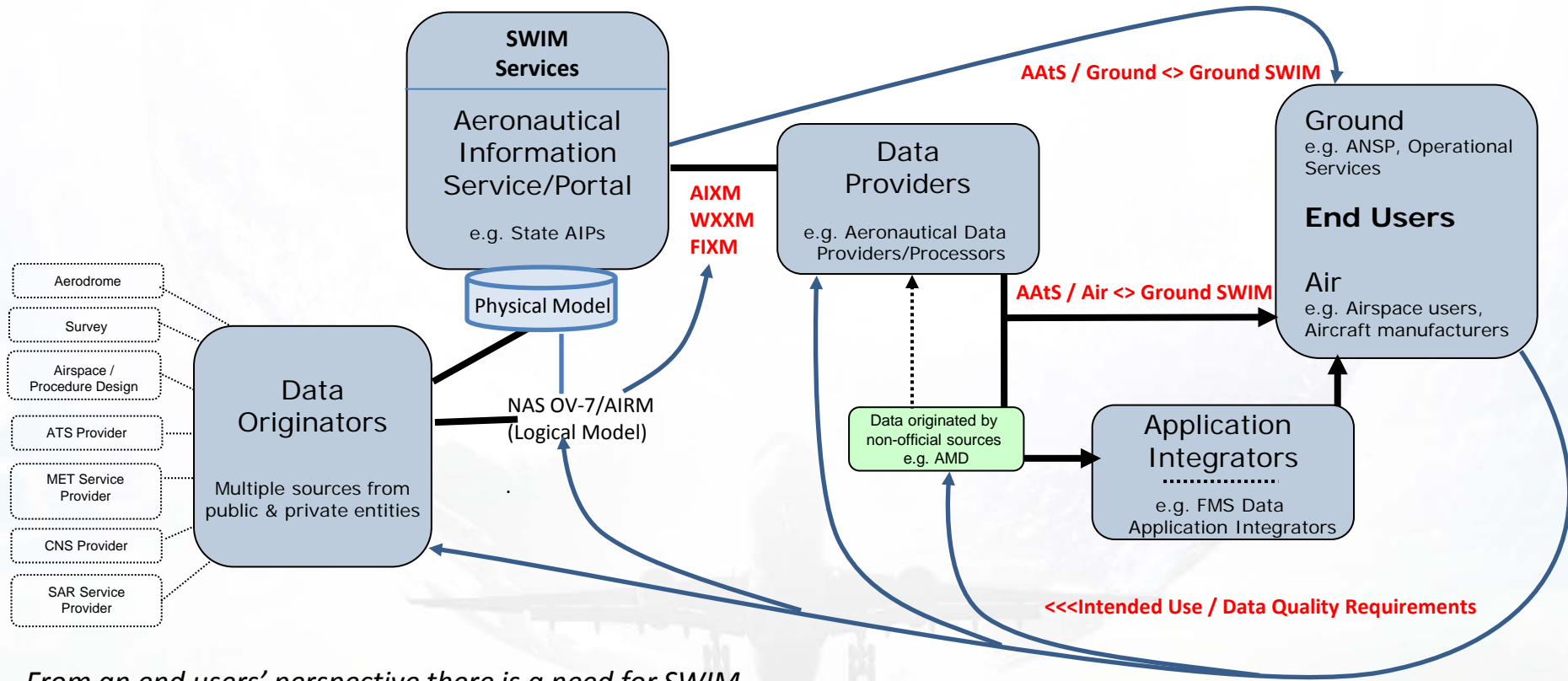
**NOAA Auditorium and Science Center • Silver Spring, MD**

- **Panel** > > > > > > > > Members
    - Mr. Stephan Dubet, France (Leader)
  - **Governance**
    - What is Governance?
    - End User's Perspective
  - **Work Programme**
    - Job Card
    - End User's Need
    - Tasks
  - **Next Steps**
    - Current Actions
    - Work Plan
    - Working arrangements
- Advisors
- Mr. Allan Hart USA
  - Mr. John Moore USA
  - Ms. Susan O'Hara USA

# What is SWIM Governance?

- ICAO Doc 10039, Manual on SWIM Concept
  - Governance defines the chains of responsibility, authority, and communication as well as the measurement and control mechanisms to enable participants to carry out their roles and responsibilities.
  - SWIM governance is characterized by the people, policies, and processes required for leading, communicating, guiding, and enforcing the stakeholder organizational behaviors needed for global interoperability
- FAA SWIM Governance
  - Governance is the ability to ensure that all of the independent stakeholders' efforts (whether in the design, development, deployment, or operations of a service) come together to meet enterprise requirements. SWIM governance supports the following activities:
    - Standards and Policies
    - SOA Suitability Assessment
    - NAS Service Registry/Repository (NSRR)
    - Service Semantics
    - Outreach (Awareness)
- SESAR SWIM Governance
  - Governance is establishing policies and continuous monitoring their proper implementation to ensure a stable operation and controlled evolution of SWIM. SWIM Objects to be governed:
    - Foundation: set of coherent principles, rules and recommendations for establishing SWIM standards
    - Standards: specifications adopted by a recognized standardization body
    - Guidance Material: artefacts developed to provide additional explanation of Foundation & Standards
    - Contracts: needed for service providers of infrastructure, information & network infrastructures

# End Users' Need SWIM Governance



From an end users' perspective there is a need for SWIM governance due to:

- So many standards involved in getting information from its origination to the end user;
- A quality worldwide set of information that will support global operations

Process Standards	Quality Standards	Exchange Standards	Embedded DB Standards
ICAO Annexes	ICAO Annexes	ARINC 424	ARINC 816-3
RTCA DO-200B / EUROCAE ED-76A	DO-201A / ED-77	DO-291C / ED-119C	ARINC 815
	DO-272D / ED-99D	AIXM / WXXM / FIXM	
	DO-276C / ED-98C		

# Work Programme: IMP

## Governance Job Card

- Problem Statement: With SWIM developments ongoing and accelerating in different parts of the world, there is not yet a defined view on which SWIM elements need to be standardized at the Global level and the related necessary collaborative governance.
  - Typical questions to be answered are :
    - What are the roles & responsibilities of the different stakeholders in relation to SWIM governance?
    - What are the standards & requirements that determine SWIM and how to adhere to them (compliance)?
    - Which SWIM elements need to be agreed upon at the Global level?
    - Is there a role for a global registry and if so, what is the associated architecture and relation with regional / local registries?
  - The ICAO SWIM Concept Manual introduces the notion of an ICAO Global Interoperability Framework
    - We now need to further worked out this notion.
    - Need to address any issues as this could impede a speedy implementation of SWIM and delay its corresponding benefits.
  - Data quality appears to be an issue across the different ATM data domains.
    - It would be good to identify approaches and best practices from these different domains in order to develop overall ATM data quality principles and guidance.
    - Data quality management is seen as a fundamental cornerstone of SWIM modernization.
- Expected Benefits:
  - Foundation for collaborative global SWIM implementation
  - Enhanced interoperability
  - Clarity on roles, responsibilities and relationships
  - Transparency
  - Mitigation of risks
  - Improved CDM

# Work Programme: Tasks

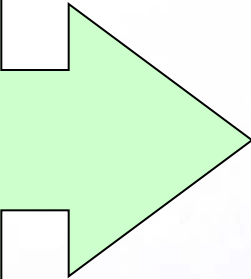
- **ICAO Global Interoperability Framework (GIF)**
  - Further detail the ICAO GIF and agree on the definition and scope of SWIM governance
- **SWIM Governance Scope**
  - Identify what is to be governed at global level and to what extent
- **Governance processes**
  - Determine what governance processes may need to be applied to assure that the application of SWIM can achieve operational goals and realize benefits
- **SWIM compliance**
  - Define what compliance with SWIM means and how it may be assessed
- **Roles and responsibilities**
  - Identify the main stakeholders involved in SWIM and define their roles, responsibilities & relationships
- **Institutional issues**
  - Identify any institutional issue (legal, political, financial, etc.) that could impede the availability of information to operational users
- **Registry**
  - Determine the relevance of a global registry, define options (federated, centralized) for the corresponding architecture and the link with regional / local registries
- **Data Quality**
  - Determine how best to enable data quality requirements across all SWIM data domains

# Current Actions

- Extract SWIM elements from the ICAO Manual, NextGen & SESAR, and other industry SWIM initiatives to determine definition and scope
- Propose ideas on SWIM compliance based on the readiness assessment, including looking into SESAR material and sharing present details on the readiness assessment
- Propose some ideas on registry
- Brainstorming on institutional issues
- Present data quality topics for all SWIM data domains
- Determine where governance can be beneficial for SWIM

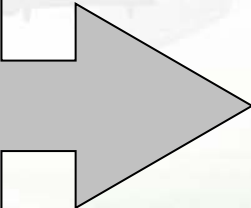
# Work Plan

- SWIM Governance scope
- Roles and responsibilities
- SWIM compliance
- Institutional issues
- Registry



Prepare papers  
for IMP 02  
(November 2015)

- Data Quality
- The ICAO GIF
- Governance processes



On hold  
until after IMP 02



# Working Arrangements

- Webex planned for Sept 1<sup>st</sup> and 4<sup>th</sup>
  - Status on current actions (page 6)
- Face to face meeting
  - Location: Jeppesen Headquarters, Englewood Co
  - Tentative meeting dates: 6-8 October
  - Full days from 8:30AM to 5PM
  - Agenda: Discuss current actions (page 6)
  - Objective: agree on Papers (IP/WP) to be submitted to IMP 02

# Questions?

## Contact Information

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