Standards Harmonization

Aircraft Access to SWIM (AAtS) Initiative

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What is the AAtS Initiative?

- Identified in the Next Generation Air Transportation System (NextGen) Implementation Plan (NGIP) of June 2013 (http://www.faa.gov/nextgen/implementation)
  - ✦ Aircraft Access to System Wide Information Management (aka Airborne Access to SWIM)
  - ✦ Two operational gaps (aka Operational Improvements – OIs)
    - OI 103305: On-Demand National Airspace System Information
    - OI 108212: Improved Management of Special Activity Airspace
- AAtS supports these OIs by providing access to a:
  - ✦ series of common services acquired and implemented in a standardized enterprise-compliant fashion
  - ✦ single authoritative sources for NAS information management
  - ✦ common interface among NAS automation systems, service providers, and users

FAA

NextGEN

What is the AAtS?

- Aircraft Access to SWIM (AAtS)
  - Establishes airborne component of ground based SWIM Service Oriented Architecture (SOA)
  - Facilitates exchange of aeronautical information between aircraft and the National Airspace System (NAS)
  - Creates a commonly sourced/shared aviation information environment for collaborative decision making
  - Leverages existing air/ground network services providers' infrastructure and technologies (i.e., NAS/industry infrastructures)
    - System Wide Information Management (SWIM) SOA
    - FAA Telecommunications Infrastructure (FTI)
    - NAS boundary protection services
    - Existing data link services already available and in use by aircraft
    - Implementation intended to be technology agnostic
  - Supports global interoperability/harmonization with similar systems/ capabilities

Aircraft Access to SWIM

AOC/FOC
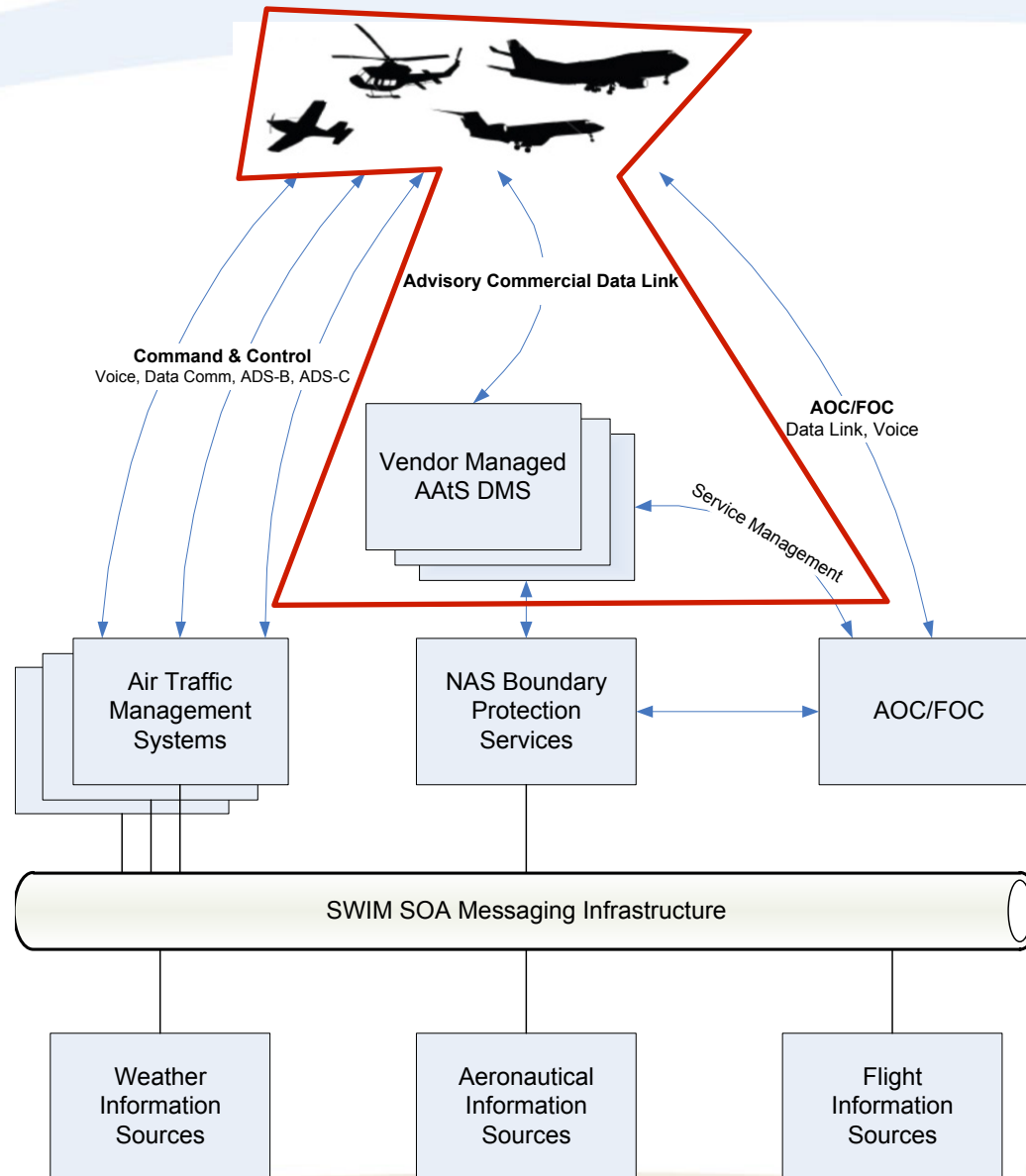
DMS   DMS   DMS

NextGen Cockpit

SWIM

NAS Services

Weather   Traffic Flow Management   Aeronautical Information

DMS = Data Management Service

NextGEN

AAtS Logical Relationships

Advisory Commercial Data Link

Command & Control
Voice, Data Comm, ADS-B, ADS-C

AOC/FOC
Data Link, Voice

Vendor Managed
AAtS DMS

Service Management

Air Traffic
Management
Systems

NAS Boundary
Protection
Services

AOC/FOC

SWIM SOA Messaging Infrastructure

Weather
Information
Sources

Aeronautical
Information
Sources

Flight
Information
Sources

Agenda

- Introduction – Nadine Alameh, OGC

- AAtS Context – Lockett Yee, North Star Group (on behalf of the FAA)

- SC-206 Overview – Matt de Ris, Panasonic/SC-206 representative

- AGIE Overview – Rick Wilber, Boeing/ARINC 830/839 AGIE/MAGIC Co-Chair

- OGC Standards Overview – Johannes Echterhoff, Interactive Instruments/OGC

- Recap – Nadine Alameh, OGC

- Q&A

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