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
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

DMS = Data Management Service

SWIM

NAS Services

- Weather
- Traffic Flow Management
- Aeronautical Information

DMS = Data Management Service

NextGen Cockpit
AAtS Logical Relationships

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

Vendor Managed AAtS DMS

Air Traffic Management Systems

NAS Boundary Protection Services

AOC/FOC

Advisory Commercial Data Link

Service Management

AOC/FOC
Data Link, Voice

Weather Information Sources

Aeronautical Information Sources

Flight Information Sources

SWIM SOA Messaging Infrastructure

NextGEN
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