Global Information Management

NOTAM Services Over SWIM

Presented to: ATIEC

By: Trish Gay
   FAA Program Management Organization
   Enterprise Services/AJM-336

Date: 9/22/16
NOTAM Modernization

Web services for collecting and disseminating digital NOTAM data
Benefits of NOTAM Services over SWIM

- System-to-system interface
- Efficient transmission of data
- Data validation & business rules
- Standardized templates & formats
- Integration of NOTAM and baseline aeronautical data
NOTAM Modernization

NOTAM Origination Service
Federal NOTAM System
Implementing the Pilot’s Bill of Rights

Digitally at the Source:
• More Timely
• More Accurate

Originate Digital NOTAMs

Digitally

• Archived
• Available to the Public

NOTAM Distribution Service/SWIM
• Standards Based (AIXM)
  NOTAM Information

FNS NOTAM Search

• User-Friendly Format
• Filterable
• Timely Delivery
• Searchable
• Relevant (Route Specific)
NOS Today

Tower Remote Monitoring System
- Tower light NOTAMs are the **second largest** category of NOTAMs in the NAS
- ~85% of these NOTAMs are originated via the NOS

NOTAM Origination Service
- NOS enables integration of third-party software to directly submit NOTAMs to FNS
NOS SWIM Integration

Why SWIM integration?
• Better support integration with internal and external users
• Simplify user interactions with NOS
• Reduce resources required to onboard and submit digital NOTAMs
• Leverage FAA SWIM architecture

Potential New Users:
• Equipment NOTAMs (FAA Technical Operations systems)
• Airspace NOTAMs (SAA, CARF, TFR management systems)

Available Dec 2016!
NOTAM Distribution Service Concept

EXTERNAL STAKEHOLDERS
- Gov’t Agencies
- Airlines/EFB
- Application Developers

FAA SWIM

ALL NOTAM DATA
DIGITAL + LEGACY
Federal NOTAM System
Implementing the Pilot’s Bill of Rights

- Digitally at the Source:
  - More Timely
  - More Accurate

- Originate Digital NOTAMs
- Centrally Located
  - Archived
  - Available to the Public

- NOTAM Distribution Service/SWIM
  - Standards Based (AIXM)
  - NOTAM Information
  - User-Friendly Format
  - Filterable
  - Timely Delivery
  - Searchable
  - Relevant (Route Specific)
Request/Response Service

- **Bulk**: all active NOTAMs of specific types (e.g., Domestic, Int'l)
- **Delta**: changes to NOTAMs in last X minutes
- **Geographic**: active NOTAMs with X radius of location or coordinates
- **Location**: active NOTAMs with NOTAM location id
- **Free Text Search**: active NOTAMs that match text string
Publish/Subscribe Service

Advantages to Pub/Sub:

- Loose coupling between provider and consumer
- Scalability
- User specific subscription criteria
- Live on 9/17/16
Operational Users

Distribution Services over SWIM

New consumers
- FAA OEAAA System, Various Third-Party Vendors
How to Connect

1. Test Agreements with FNS Program Office
2. System Development and Testing
3. Coordinate with and connect to SWIM
4. Operational
Access to all FNS-NDS technical documents:

- Web Service Requirements Document
- Web Service Design Document
- Web Service Definition Language
- NOTAM Event Scenarios
- ... and more!
SWIM Coordination

Consumer-driven process
2-6 months

http://www.faa.gov/nextgen/programs/swim/
Operational Access

Access to FNS-NDS:
- Complete all system testing with SWIM and FNS
- Coordinate with stakeholders
- Begin receiving digital NOTAMs from FNS!

FAA SWIM

EXTERNAL STAKEHOLDERS
- Gov’t Agencies
- Airlines/EFB
- Application Developers

ALL NOTAM DATA
DIGITAL + LEGACY
Questions

Contact FNS:

Trish Gay
trish.gay@faa.gov
FNS Program Manager