# SWIM Users Forum

**Federal Aviation Administration**

**Presented to:**

SWIM Users Forum

**By:**

SWIM SCDS Team

**Date:**

September 12, 2023

# Agenda

- **SWIFT Portal Subscription Updates**

- **Policy Language Clarification**

- **Operational Cost Management**

- **TBFM 4.15 Updates**

# SWIFT Portal Subscription Updates

# Purpose

**SWIFT Portal v4 provides a streamlined and modern user experience by providing expedient subscription approvals.**

- **Service Access Agreements (SAAs) have been migrated directly into the SWIFT Portal, and we can now provide automatic subscription approval.**

- 🚫 **Users no longer need to visit a separate SAA portal.**

**SWIFT Portal**
(SWIM Industry-FAA Team)

portal.swim.faa.gov

# Subscription Provisioning

- **Service Access Agreement signing is built into the subscription wizard now to ensure you can find and sign them easily.**

- **Subscriptions are automatically created and approved, providing a true self-service experience.**
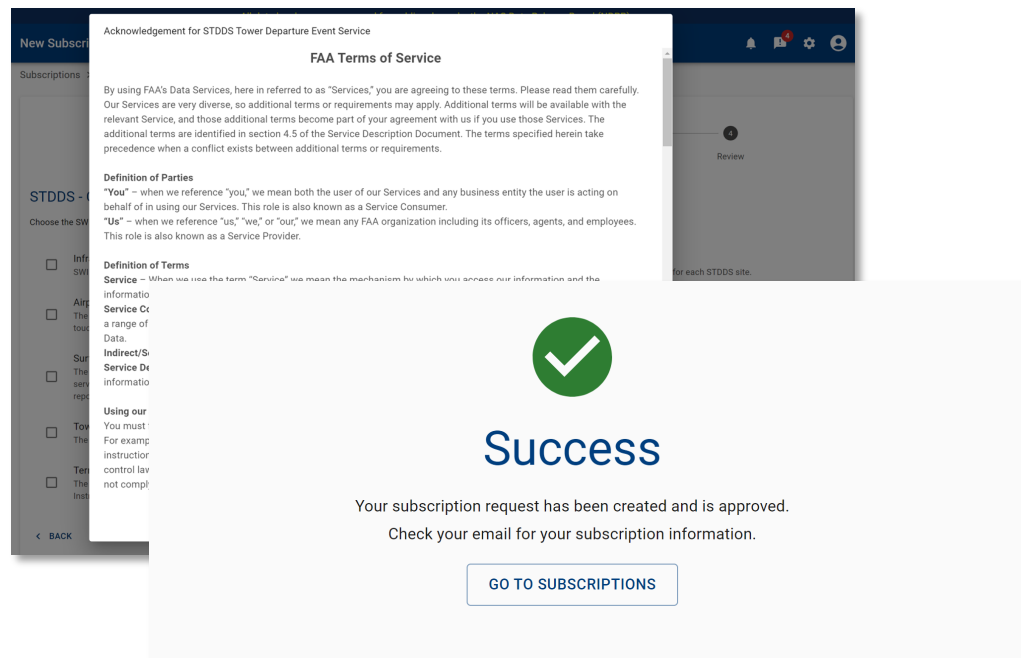
# Signing SAAs After Portal Update

**SAAs are valid for one year with a simple renewal process. Email notifications will remind you to visit the SWIFT Portal and re-sign your SAAs.**

# Policy Language Clarification

# "NAS-Impacting"

- **The term *NAS-Impacting* replaces *Operational* to provide a clearer definition of SCDS data usage practice.**

  - "Data obtained via SWIM Cloud Distribution Service (SCDS) is NOT intended for NAS-Impacting usage."

- **Why?**

  - Commercial consumers' use of "Operational" is different from the FAA's.
  - Business use cases for SCDS data are perfectly acceptable.
    - e.g., selling/providing apps based on SCDS data is a valid usage.
  - SCDS data is not intended to be used as the sole source for any aviation-safety related, law enforcement, or judicial activity that relies on the availability, validity, timeliness, or accuracy of data obtained via SCDS.

# SCDS Data Usage

- **The FAA takes no responsibility for the accuracy, validity or completeness of data obtained from SCDS.**
- **As such, it is your responsibility to notify your consumers of :**
  - Planned and unplanned outages
  - Acceptable use of data obtained by SCDS

# Operational Cost Management

# Keeping SCDS Free

- **SWIM provides robust data for public users that is free to consume, but the FAA pays for data egress/storage/maintenance/portal support/etc.**

- **Costs are increasing, plus the FAA has new budget constraints.**

  - We want to keep providing our users with quality service, but that means reducing costs.

- **A sizeable cost-saving measure is to get users on board with ways of accessing data that help save us money.**

- **To that end, we are introducing three new cost-saving policies.**

# Data Compression

- Data compression helps reduce SCDS operational cost by reducing internet bandwidth needs, which reduces costs to the FAA.

- Compressed data connections are now mandatory for SCDS operation, and consuming compressed data is the only authorized method for obtaining SCDS data products.

- It is users' responsibility to keep data compression enabled. Users who are not currently using compressed SCDS connections will be contacted for necessary transition procedures.

# Java Messaging Service (JMS)

- **SCDS uses Solace JMS technology to provide messaging to consumer queues.**

- **The JMS library provides native compression support in the consumer application, but AMQP does not.**

- **As such, users are required to access SCDS data products using JMS based consumer applications.**

- **JMS is the only authorized connection method.***

**\* Unless special permission is granted**

# Internal Redistribution

- **Each subscription your organization uses costs the FAA money.**
  - Different subscriptions for different products, filters, etc. are reasonable.
  - Duplicate feeds with identical product filters are redundant data egress. Example: 3 identical STDDS subscriptions used for development, testing and operations.

- **Users are required per SCDS policy to internally distribute SCDS data products within their organization vs. requesting/maintaining duplicate subscriptions.**

- **Duplicate subscriptions within the same org will not be permitted and we will be reviewing these connections.**
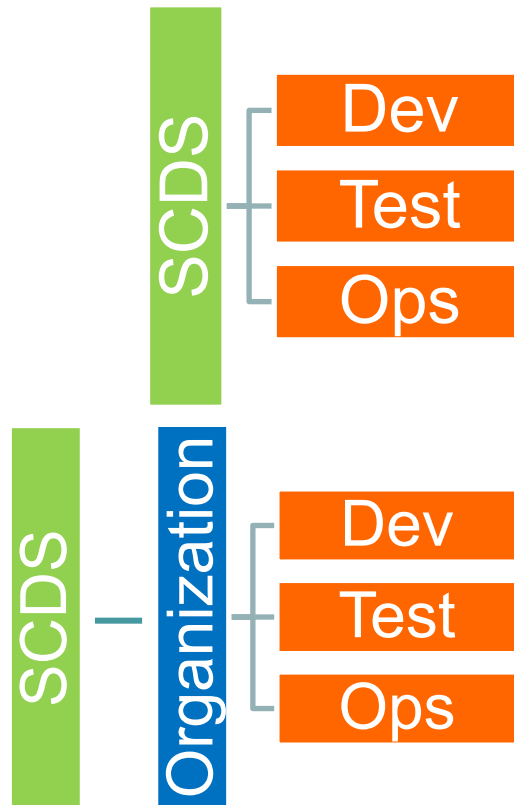
# TBFM 4.15 Updates for TBFM Subscribers

# Time-Based Flow Management 4.15 Updates

- **Updates allow for additional filtering possibilities**
  - New data populated in JMS Header fields
  - 4 additional new fields
- **Release currently planned for early November**
- **https://nsrr.faa.gov/**

| Update | Message Group | Nature of the Update | Message Type | Data Format/Range |
|---|---|---|---|---|
| Versioning | | MIS JMS Header Update | All Message Types | N.N.N, where each N can range from 0-99 |
| Departure Airport Information | <dap> | MIS JMS Header Update | Air Information (all); Configuration Information (subset of messages) | 3-4 characters |
| Destination Airport Information | <apt> | MIS JMS Header Update | Air Information (all); Configuration Information (subset of messages) | 3-4 characters |
| Computer ID (CID) | <cid> | New Aircraft Information Data | Aircraft Information Data | 3 alphanumeric ASCII Character |
| GUFI (Global Unique Flight Indicator) | <gufi> | New Aircraft Information Data | Aircraft Information Data | 10 character ASCII string with 10 characters: A-Z or 0-9 |
| Heartbeat Message | <hb> | New Message for MIS Info | Heartbeat Data | Not Applicable |
| DEX_SOURCE_TYPE | | Identifier used to group messages for a SWIM service utilizing the value of 'TBFM' | | |

New Data — (Versioning, Departure Airport Information, Destination Airport Information)

New Fields — (Computer ID (CID), GUFI, Heartbeat Message, DEX_SOURCE_TYPE)

# Re-cap

- **SWIFT Portal Subscription Updates**

- **Policy Language Clarification**

- **Operational Cost Management**

- **TBFM 4.15 Updates**

# Questions

✉ **Waldo E. Ford**
SWIFT Portal Lead
Waldo.E.Ford@faa.gov

✉ **SCDS Helpdesk**
9-ATO-SECC-OPS@faa.gov