SWIFT:

SWIM Industry Collaboration Workshop #10.5

SWIM, Services & SWIFT (SWIM Industry-FAA Team)

FAA SWIM Program

Communications, Information and Network Programs

July 8th, 2020

"Airwave Procedures"

- **Please note during the session all attendees will be muted, and will need to use the zoom controls to the right to interact with presenters**

- **If you would like to ask questions, or engage during a topic of interest please use the "Ground Rules & House Keeping guidance"**

Attending via Computer, Tablet or Smartphone
When using the Zoom video application, you should see a toolbar at the bottom of your screen with the icons pictured below.

Here is how and when to use each option. **Raise Hand:** Click the "**Raise Hand**" icon in your menu bar (see image below) to ask a question **verbally**. The moderator will be alerted and will unmute you so you may ask your question.

Q&A: Click the "**Q&A**" icon in your menu bar (see image below) to submit a question via **text**. The moderator will be alerted and will read your question aloud on your behalf or respond to you via text.

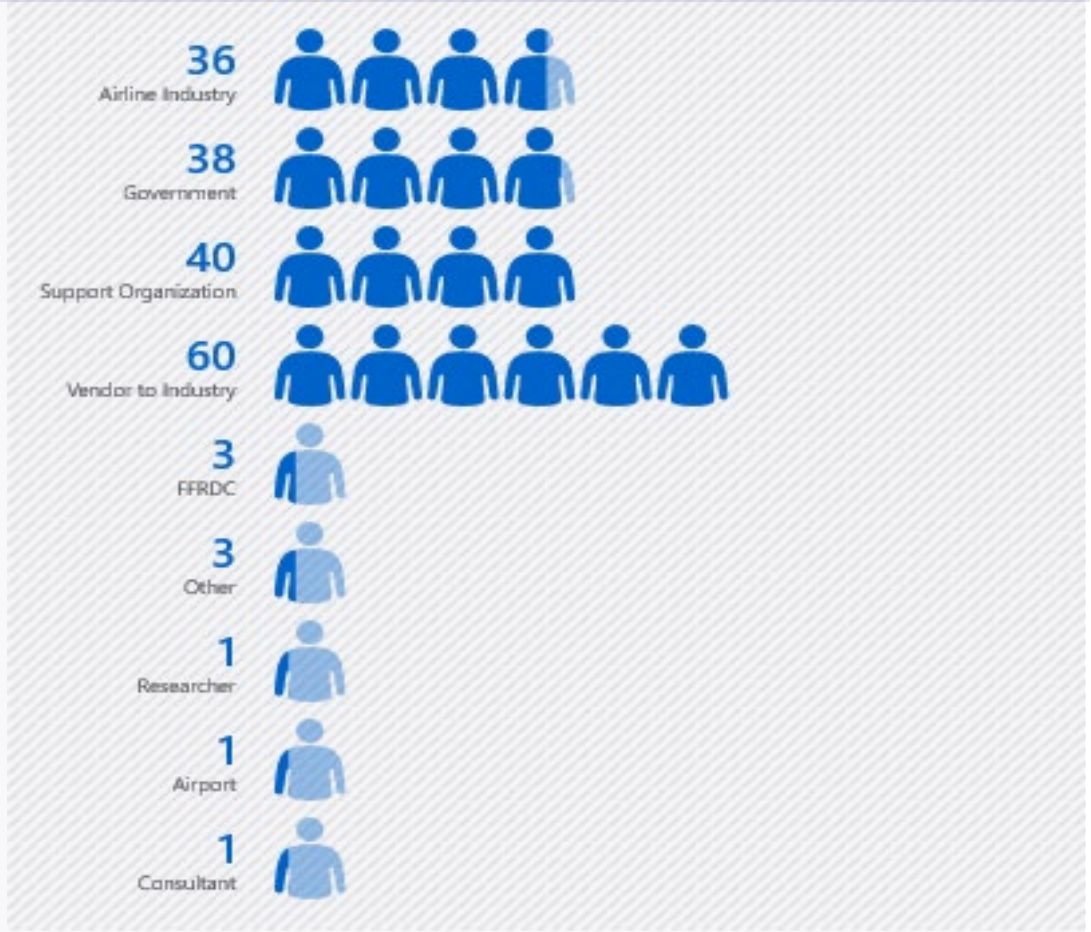
Chat: Click the "**Chat**" icon to send a chat message to the host.

SWIFT Collaborative Workshop #10.5
July 8, 2020 – Virtual Conference

- **On-line Virtual Conference Starts Promptly 2pm**
- **Welcome and Introductions** David Almeida
  - Agenda overview, SWIFT Focus Group Updates
- **Producer Program: AIMM – ACS (Aeronautical Common Services) Use Cases**
  - Suzanne Koppanen, Kevin Lew
- **Information Services Roadmap Update** David Almeida
  - SWIM On-Ramping Roadmap
- **TFDM Services**
  - Program overview by Doug Swol
  - Use Case & Ops Context Document Introduction
- **SWIM Capability: SWIFT Portal Update & Demonstration** Kristin Cropf & L3Harris

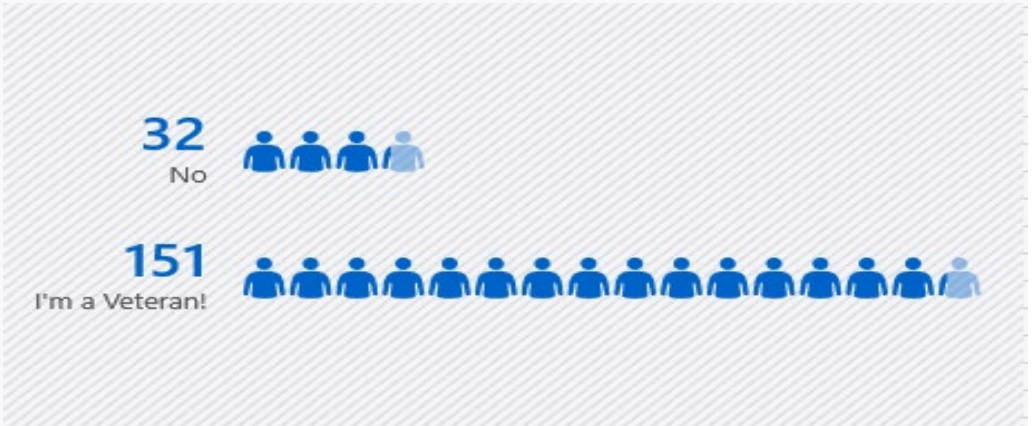
Who is in the "Zoom Room" at SWIFT #10.5?

Attendee Organizations



Other defined as: R&,D, Researcher, Airport, Consultant, GA, and ATL IAP

Attended a SWIFT Meeting Before?

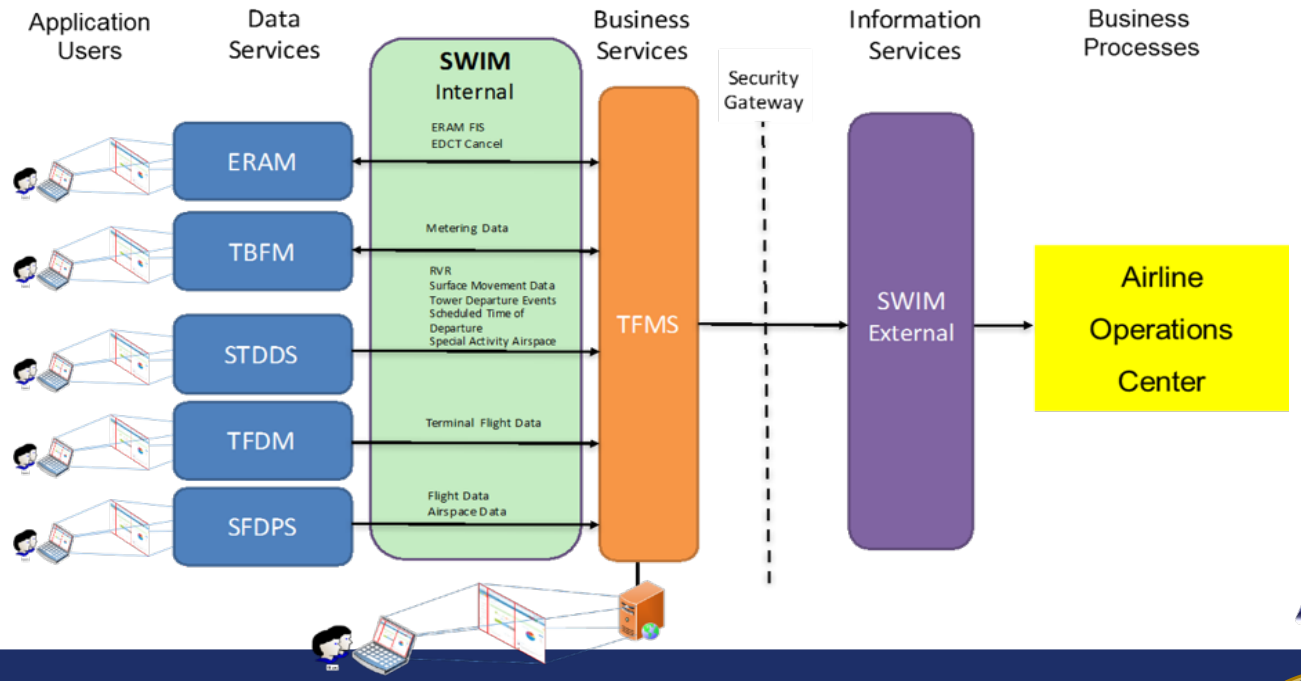


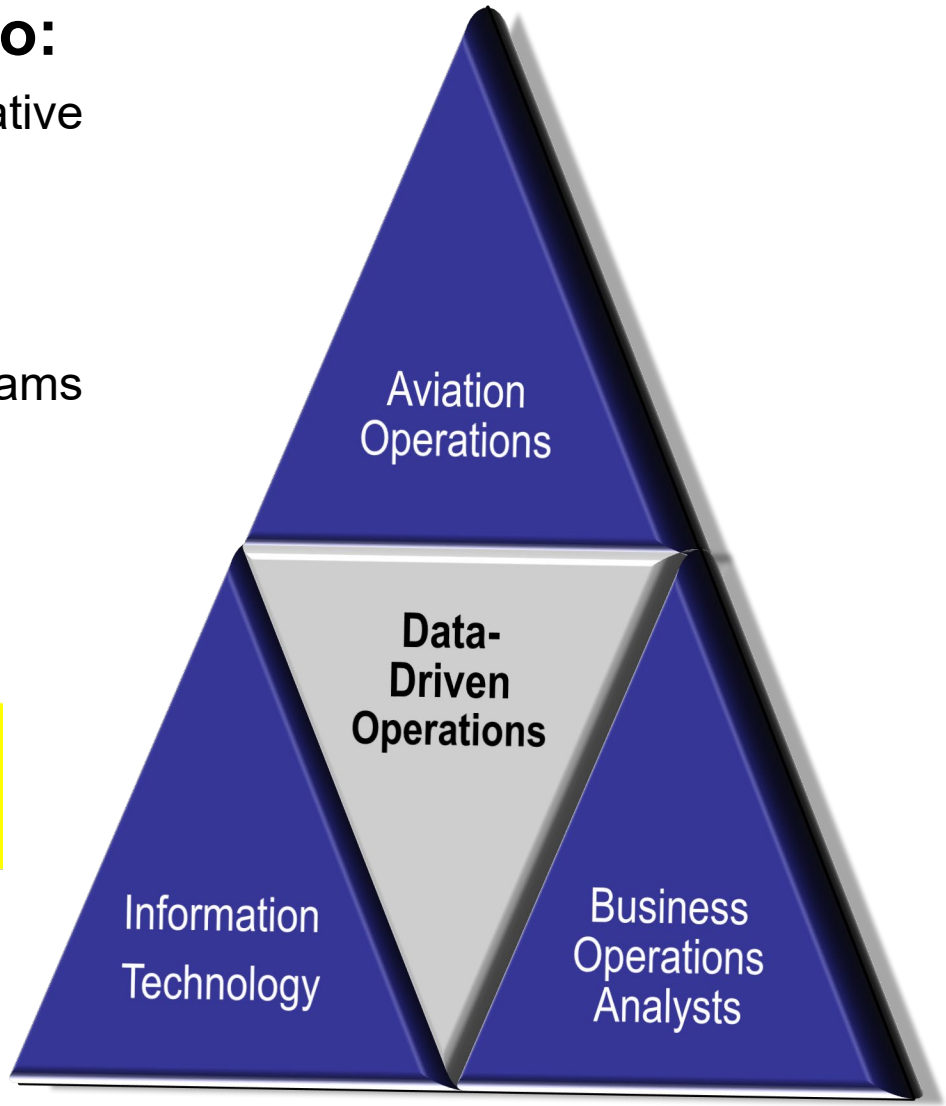
183 attendees

SWIFT

SWIFT: At the Intersection of Operations, Technology & Data

- **SWIFT addresses industry recommendation to:**
  - A community forum that acts as a clearinghouse for collaborative engagement around NAS information and data sharing
  - **Educate**: Synchronize community on information services
  - **Collaborate**: Discuss issues most relevant to community
  - **Communicate**: Inform community about SWIM & NAS programs





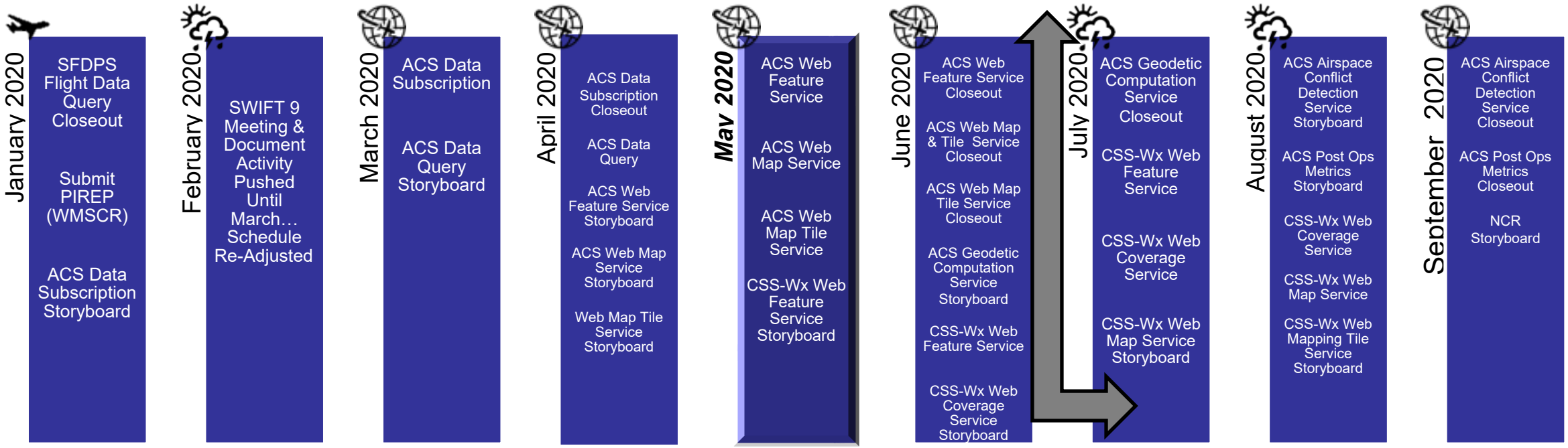
Focus Groups

SWIFT 10.5 Update

David Almeida, LS Technologies

July 08, 2020

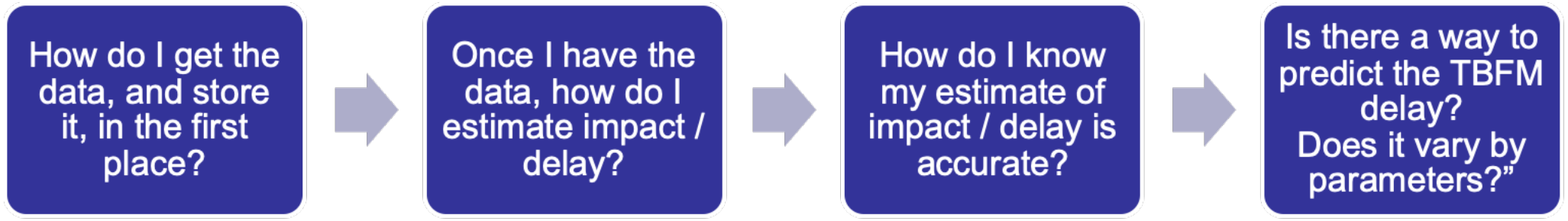
Operational Context Focus Group: Document Updates



- **Schedule subject to change if service updates are released and existing Operational Context documents need to be updated**
- **In process of developing first Use Case document since June 19, Focused on TFDM**
- **Focus Group requested an escalation of TFDM TTP & TFCS services, teams integrate without impact to current schedule**

Development & Analytics Focus Group

- **Lead: Erin Cobbett, Delta Airlines**
- **Goals:**
  - Address common challenges in ingesting, storing, and utilizing SWIM data
  - Work collaboratively to advance functionality and value of SWIM to community
  - Leverage team experts to use SWIM data to address operational issues
- **Current Priority: TBFM Delay**
  - TBFM is a bit of a “black box”, and SWIM data is not the whole picture
  - Analytical problems have layers: working with program to answer key questions

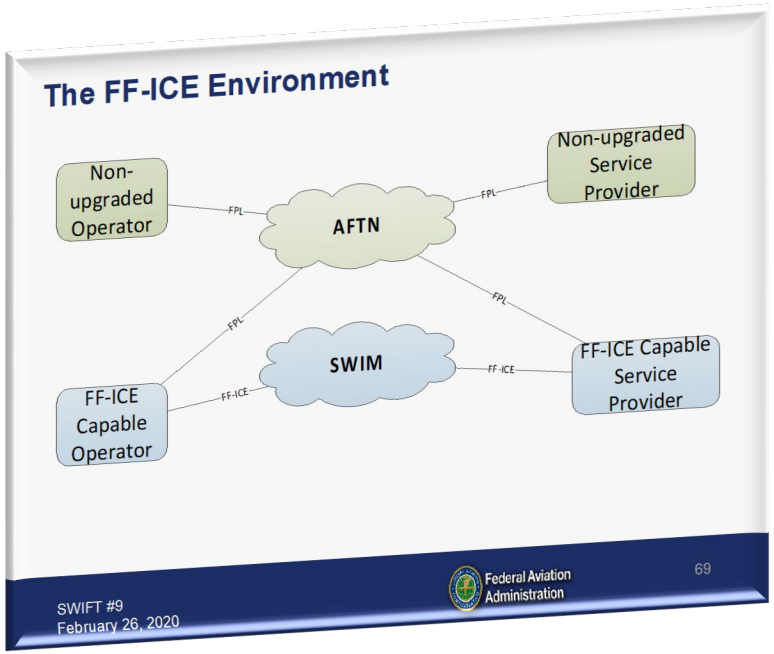


Operational Issues Focus Group

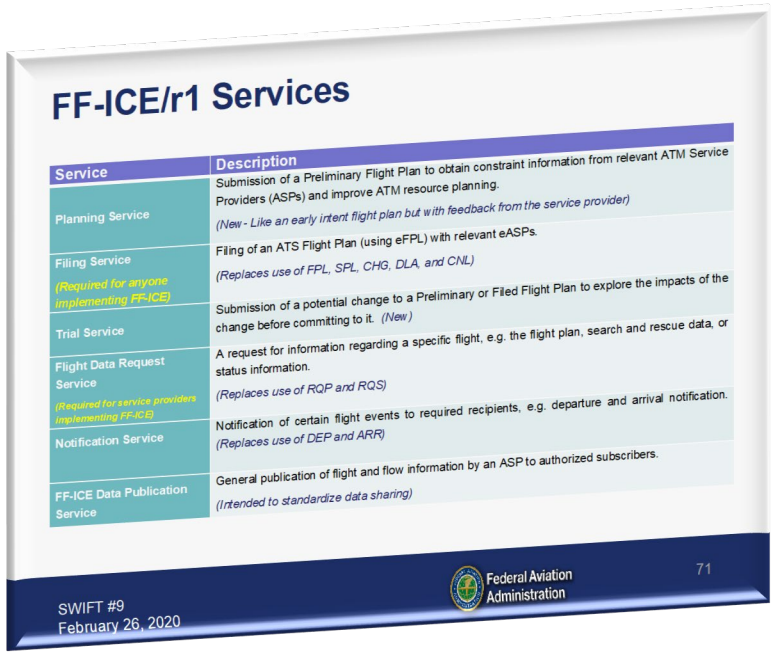
- **Lead: Chris Gottlieb, JetBlue**
- **Goals: Address NAS-wide operational issues that might benefit from information sharing between organizations**
- **Current Prioritized Issues:**
  1. **TBFM delays (United) who, what, why it matters**
  2. **Flight Planning over IP (SWA)**
  3. Taxi Out Return to Gate (Delta)
  4. TBFM/TFMS double delays
  5. JFK has long taxi issues (JBU)
  6. Early Detection Deviation over Fix (JBU)

Flight Planning Modernization

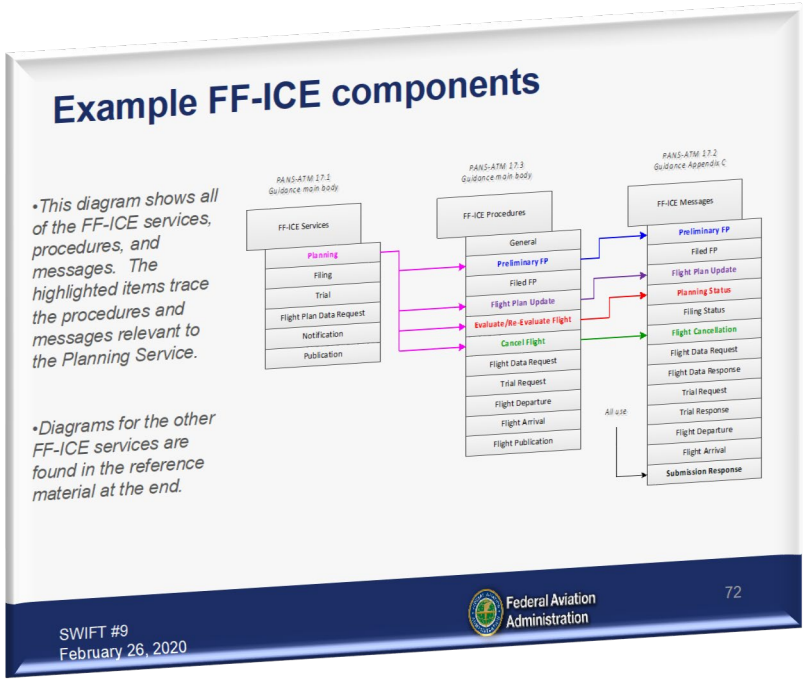
Flight Planning modernization will likely include hybrid implementation



There will be multiple information service interactions introduced



There are multiple scenarios driving business processes



Looking to understand how infrastructure, standards and security will support this modernization effort

Flight Planning Areas of Interest and Focus

- **FF-ICE Processes**
- **Iterative flight plan filing**

- **Benefits of 4D trajectories**
- **ID Delay before pushback**
- **Eval Trajectory options sets**

- **Assessing taxi experience**
- **Acceptance rates on routes**
- **Delay on different routes**
- **Expected Delay vs Actual**

- **FIXM-based exchange**
- **Flight Object standards**

SWIFT 10.5

Aeronautical Common Service (ACS)

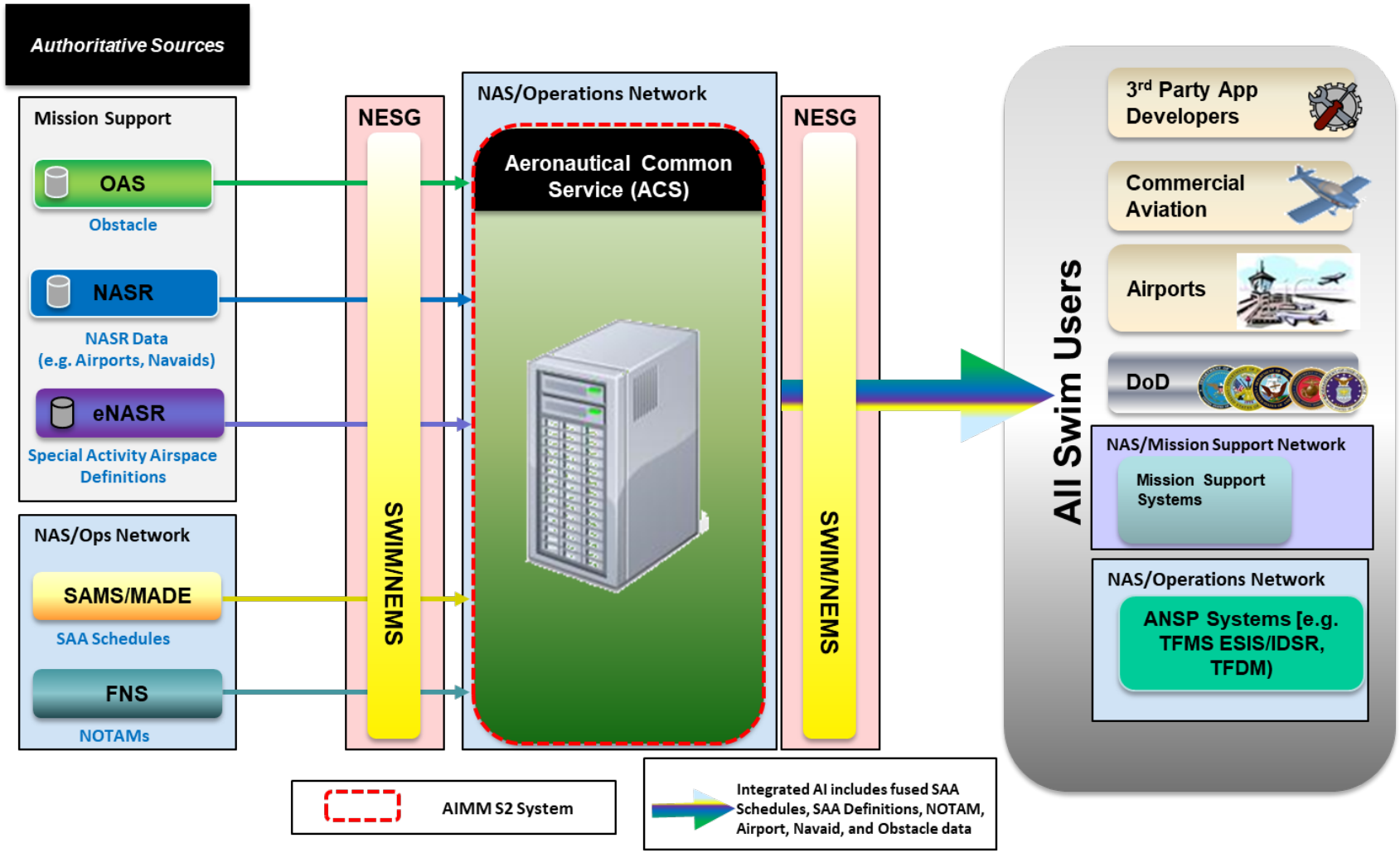
Suzanne Koppanen
FAA AIMM S2, Program Manager

Kevin Lew
CNA, Systems Engineer

July 8, 2020

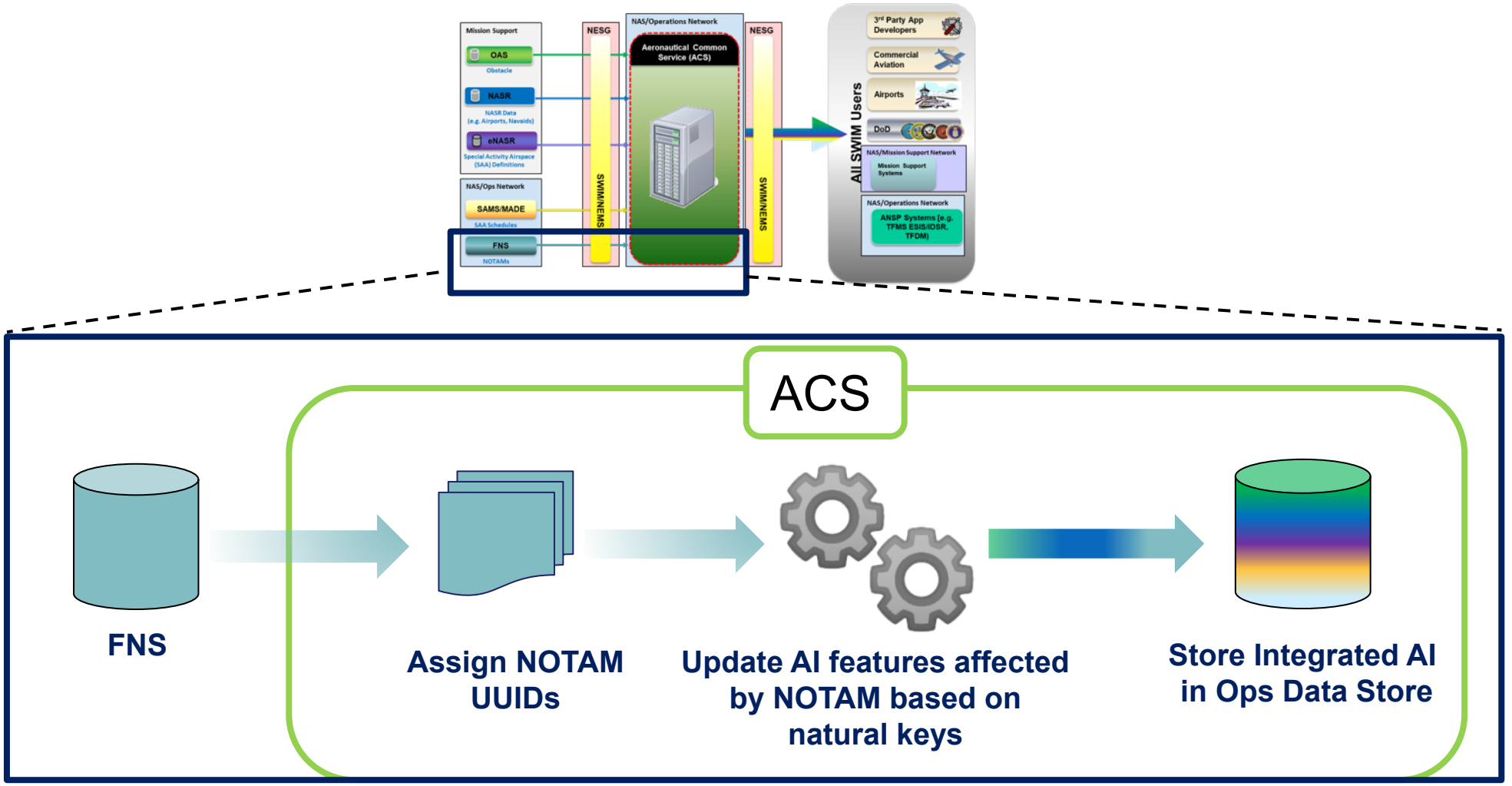
SWIFT 10 ACS Recap

ACS Overview



AI Integration

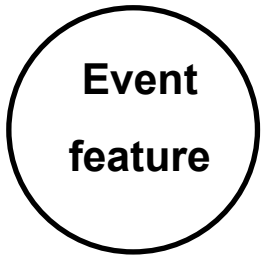
NOTAM Ingestion and Integration



ACS NOTAM Integration

LAX 03/005 LAX RWY 6L CLSD 2019030412 00-2019030512 00

Non-digital

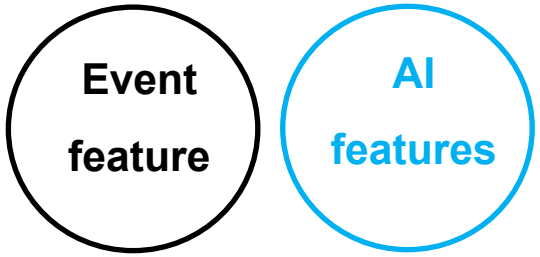


Does not receive associated features

- **Still provides the event containing NOTAM text and location**

Also applies for non-integrated events

Partially digital

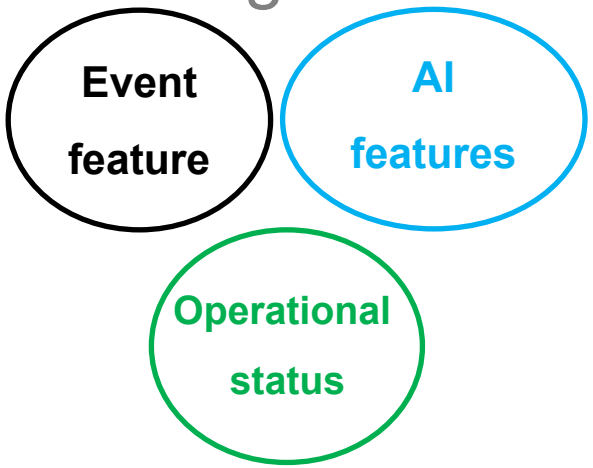


Features associated with the event

- **E.g., event relates to LAX and RWY 6L**

Status on features will not be updated

Digital

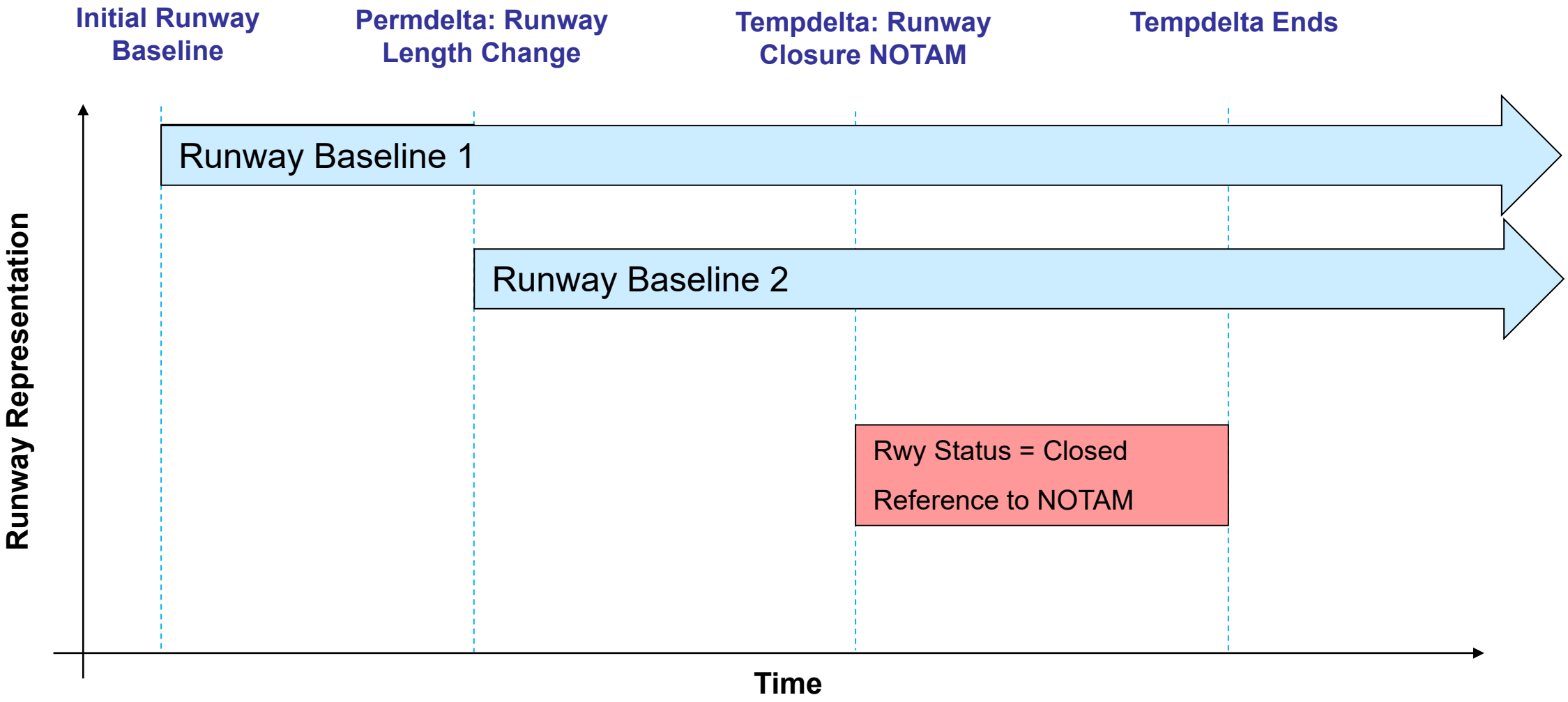


Features associated with the event

Affected feature status is updated

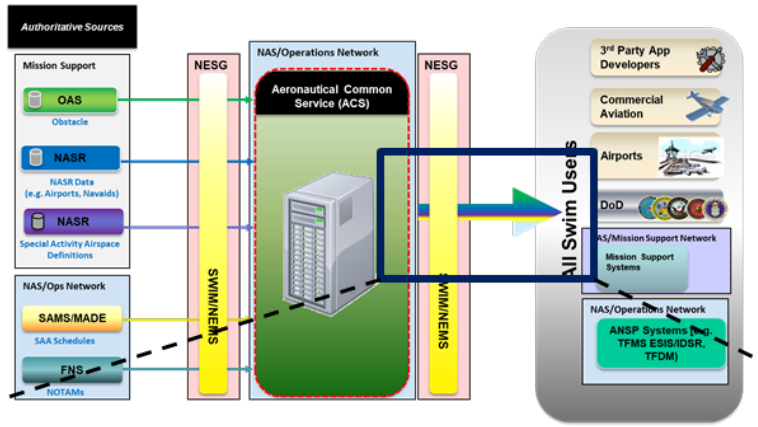
- **E.g., RWY 6L is closed at LAX**

Timeline: Integrated Runway Closure NOTAM



ACS Web Services

ACS Web Services

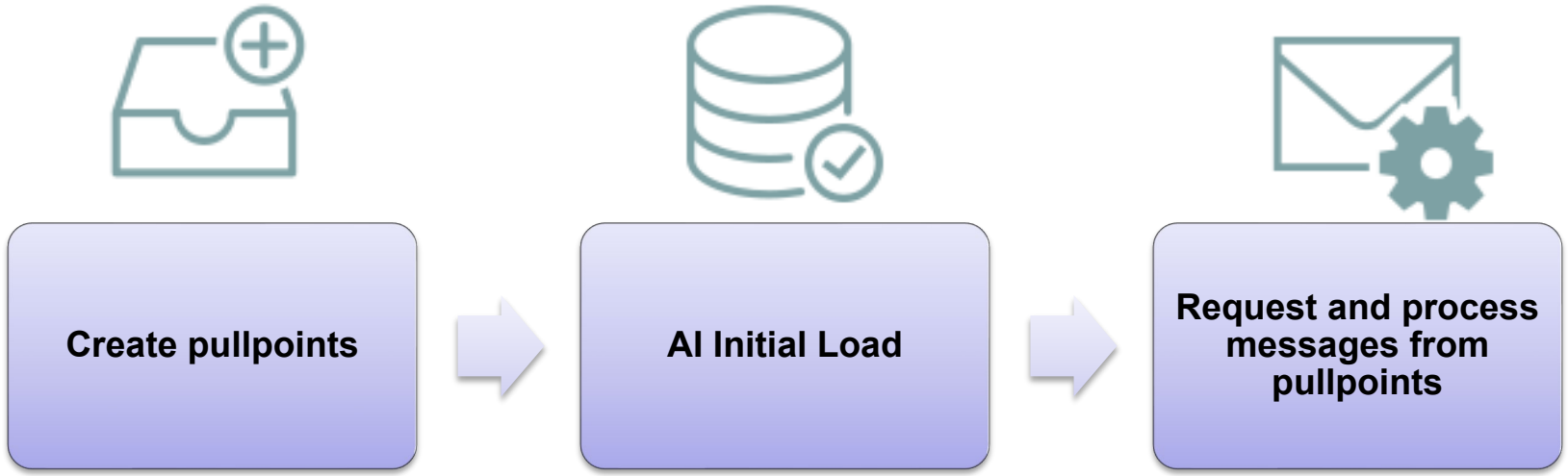


- Web Feature Service
- Data Query Service
- Data Subscription Service
- Web Map Service
- Web Map Tile Service
- Airspace Conflict Detection
- Geodetic Computation
- Post Operational Metrics

Use Cases

Use Case: AI Subscriber

User wants to subscribe to NOTAM and airport updates



Subscription: Create Pullpoints

- **User creates pullpoint subscriptions**
  - Response contains address of the pullpoint created
- **Feature groups of interest:**
  - IntegratedNotam
  - AirportGroup

Create pullpoint request

```
<soapenv:Body>
CreatePullPoint = IntegratedNotam
</soapenv:Body>
```

Create pullpoint response

```
<ns4:CreatePullPointResponse>
  <ns4:PullPoint>
    <ns3:Address>http://0.0.0.0:0000/*pullpoint address and identifier*</ns3:Address>
    <ns3:Metadata wsdli:wsdlLocation="http://cxf.apache.org/wsn/jaxws
bundle://208.0:1/org/apache/cxf/wsn/wsdl/wsn.wsdl" xmlns:wsdli="http://www.w3.org/ns/wsdl-
Address = http://0.0.0.0:0000/*pullpoint address and identifier*
        <wsdl:import location="bundle://0.0:0/org/apache/cxf/wsn/wsdl/wsn.wsdl"
namespace="http://cxf.apache.org/wsn/jaxws"/>
      </wsdl:definitions>
    </ns3:Metadata>
  </ns4:PullPoint>
  <ns4:any>Success</ns4:any>
</ns4:CreatePullPointResponse>
```

Subscription: Initial Data Load

ACS updates contain the changes to AI features, for full context users should have a baseline set of AI features

Identify Feature Types Desired	Download Initial Load	Process Initial Load
• Initial baseline data set for the NOTAMs and airport-related features (e.g., runway, runway directions)	• Contains the state of AI features at a given point in time in the future	• Process the features contained in the initial load files

Subscription: Pull and Process Messages

- **User requests messages from their pullpoints**
  - 200 message limit per request
    - If 200 messages are received, there may be more messages waiting on their pullpoint
  - High volume feature groups will require frequent calls to retrieve messages
- **User processes AI updates to their system**

A single NOTAM with Event and associated AI features

Request for pullpoint messages

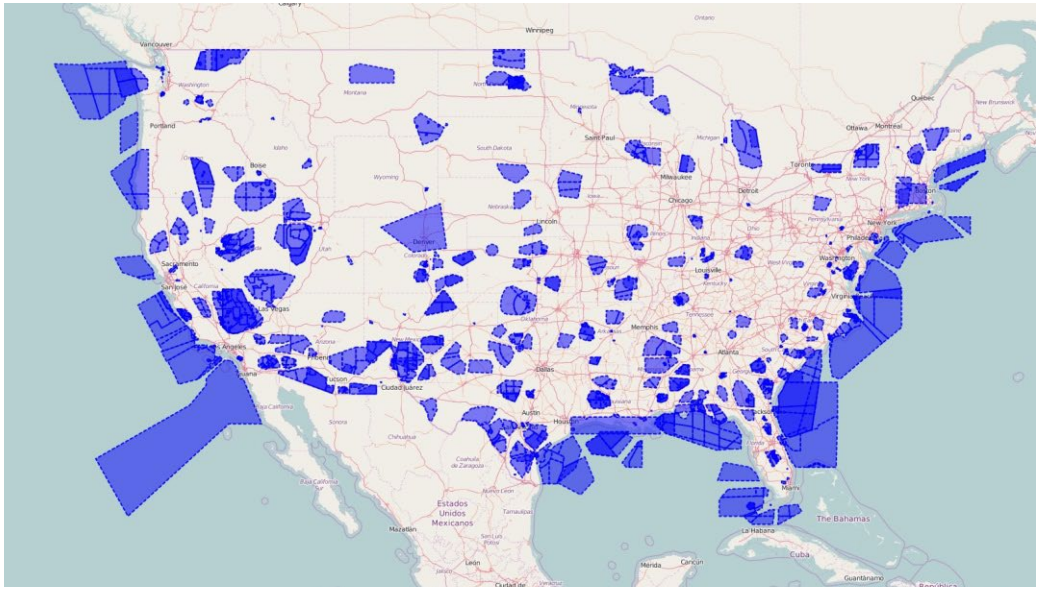
```
<urn:GetMessages>
      <b:GetMessages>
        <b:MaximumNumber>200</b:MaximumNumber>
      </b:GetMessages>
      <urn:PullPointReference>
        <add:Address>http://0.0.0.0:0000/*pullpoint address and identifier*</add:Address>
      </urn:PullPointReference>
    </urn:GetMessages>
```

Use Case: Querying SAA Status

Pre-Planning: User wants to see what SAAs along flight path are scheduled for the day

Using the ACS WFS getFeature operation, users can query for SAA based on UUID or airspace designator

- Create WFS GetFeature request
- Submit WFS GetFeature request
- Receive SAA definitions from the ACS WFS
- Process timeslices returned to identify when the SAAs are active



Querying SAA: UUID vs Designator

Querying on UUID

```
<ns2:GetFeature outputFormat="application/gml+xml; version=3.2" resolve="none"
resolveTimeout="300" resolveDepth="*" resultType="results" service="WFS" version="2.0.0"
xsi:schemaLocation="http://www.opengis.net/wfs/2.0 http://schemas.opengis.net/wfs/2.0/wfs.xsd"
xmlns:aixm="http://www.aixm.aero/schema/5.1" xmlns:fes="http://www.opengis.net/fes/2.0"
```

typeNames="aixm:Airspace"

gml:identifier = 62154725-2770-49A2-9D50-6164CCA0289C

Or

gml:identifier = 4C9CBE0B-43E1-82D3-3B9C-48BAC9494682

```
            </ns1:Or>
        </ns1:Filter>
    </ns2:Query>
</ns2:GetFeature>
```

Querying on Designator

```
<ns2:GetFeature outputFormat="application/gml+xml; version=3.2" resolve="none" resolveTimeout="300" resolveDepth="*"
resultType="results" service="WFS" version="2.0.0" xsi:schemaLocation="http://www.opengis.net/wfs/2.0
http://schemas.opengis.net/wfs/2.0/wfs.xsd" xmlns:aixm="http://www.aixm.aero/schema/5.1"
```

typeNames="aixm:Airspace"

aixm:timeSlice/aixm:AirspaceTimeSlice/aixm:type = OTHER:MOA
And
aixm:timeSlice/aixm:AirspaceTimeSlice/aixm:designator = MLINCOLN

Or

aixm:timeSlice/aixm:AirspaceTimeSlice/aixm:type = R
And
aixm:timeSlice/aixm:AirspaceTimeSlice/aixm:designator = R4001C

```
                </ns1:PropertyIsEqualTo>
            </ns1:And>
        </ns1:Or>
    </ns1:Filter>
</ns2:Query>
</ns2:GetFeature>
```

Querying SAA: Returned SAA Timeslices

SAA Baseline (Static SAA)

Airspace

gml:identifier = 62154725-2770-49A2-9D50-6164CCA0289C

<gml:endPosition indeterminatePosition="unknown"/>
</gml:TimePeriod>

AirspaceTimeSlice

beginPosition = 2013-01-10T09:01:00
endPosition indeterminatePosition=“unknown”

interpretation = BASELINE

type = OTHER:MOA
designator = MLINCOLN

<aixm:timeReference>UTC-5</aixm:timeReference>
<aixm:startDate>01-01</aixm:startDate>

AirspaceActivation

day = ANY
startTime = 00:00
endTime = 23:59
status = AVBL_FOR_ACTIVATION

SAA Tempdelta (SAMS)

Airspace

gml:identifier = 62154725-2770-49A2-9D50-6164CCA0289C

<aixm:interpretation>TEMPDELTA</aixm:interpretation>
+ <aixm:timeSliceMetadata>
<aixm:activation>

AirspaceTimeSlice

beginPosition = 2020-01-30T16:00:00
endPosition = 2020-01-30T18:00:00
interpretation = TEMPDELTA

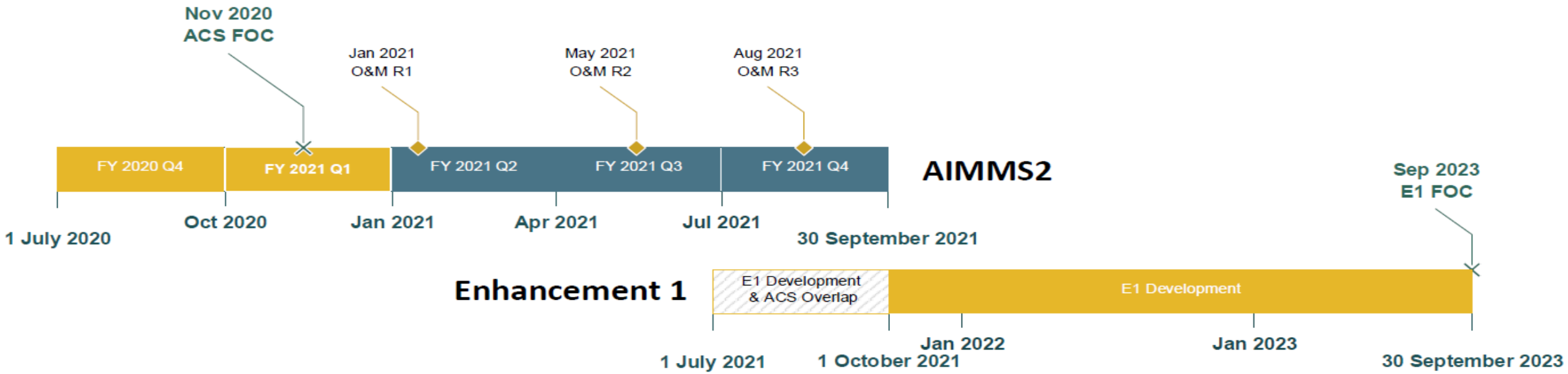
</aixm:timeInterval>
<aixm:activity>MILOPS</aixm:activity>
<aixm:status>OTHER:ALLOCATED</aixm:status>

AirspaceActivation

status = OTHER:ALLOCATED
upperLimit = 180 FL
lowerLimit = 80 FL

ACS Roadmap

AIMM S2 & Enhancement 1 Roadmap



AIMM S2 O&M

- **Performance Optimization**
- **User feedback**

ACS FOC: No earlier than 10/20 Due to COVID Delays

Enhancement 1

- **ACS Enhancements**
  - **JMS Subscription capability**
  - **Expanded AI scope**
- **Enterprise Airspace Tool (EAST)**
- **NOTAM System Migration**

Questions

For technical and programmatic questions

Email: ACSConsumer@faa.gov

SWIFT

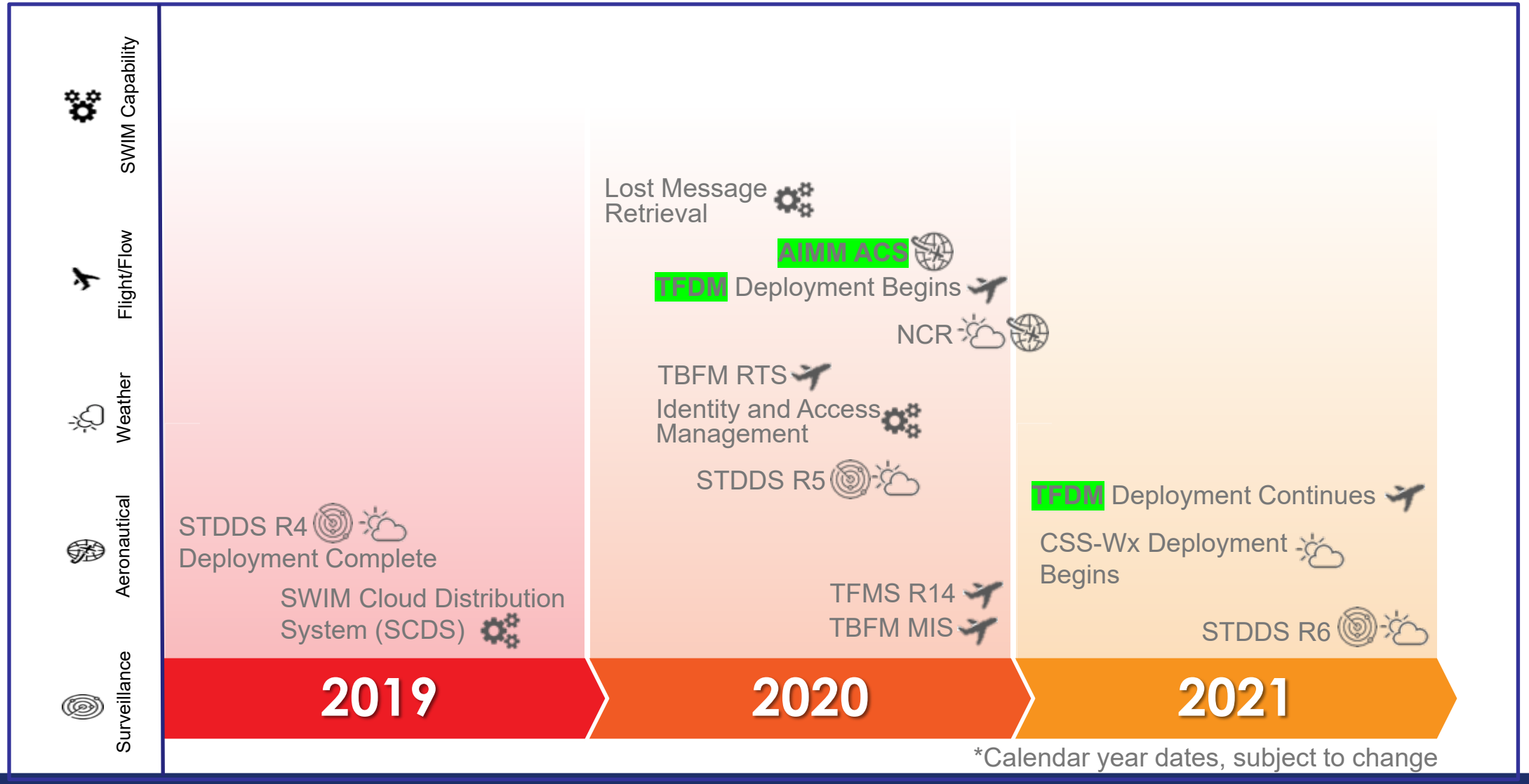
Information Services Roadmap

SWIFT 10.5

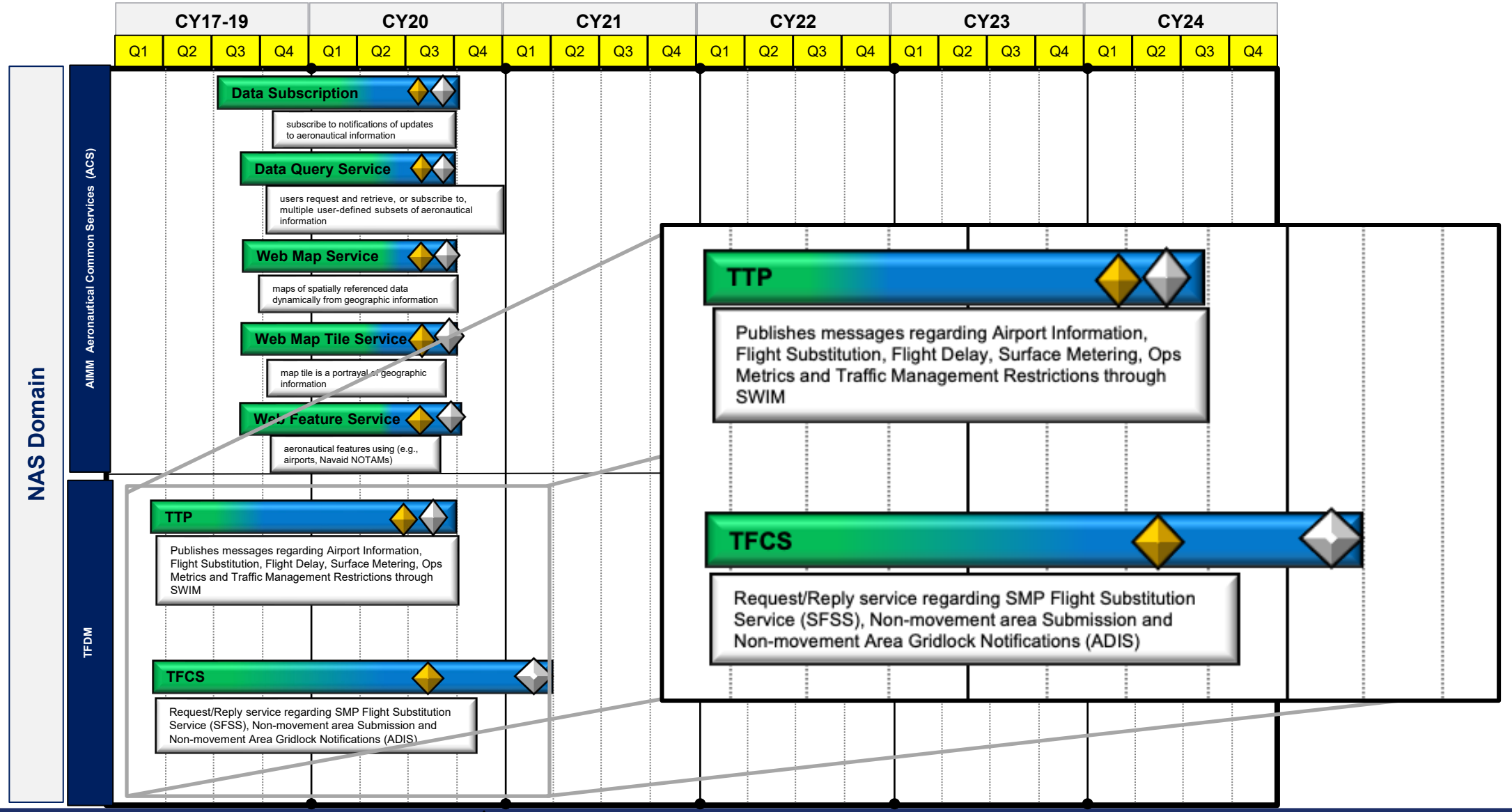
David Almeida, LS Technologies

July 08, 2020

SWIM Planned Deployment Roadmap



Information Service Road Map – ACS & TFDM



Legend:

- Analysis/Design Phase
- Implementation/Development Phase
- Service Description
- Service Available Milestone
- Ops Context Document Available Milestone

Information Service Road Map – TFDM

System Wide Information Management (SWIM)

TFDM

Use Case Document

Version .1

May 19, 2020

Appendix A –TFDM Metering Program Parameters

Data Field Name / Configuration Parameter	Description	Importance to Stakeholders
Average Metering Hold Threshold parameter	Configurable percentage of change in metering hold time associated with a rejected SMP required to	ATCT TM sets this parameter so future
Airport Metering Model parameter		
Compression Automatic Affirmation parameter (See Section 7.4 for more on Compression)		
Compression Minimum TMAT Adjustment Time parameter (See Section 7.4 for more on Compression)		
Controlled Time of Departure (CTD) Buffer		
Departure Target Queue Length		

Appendix B –TFDM TTP Flight Data Elements Examples

Data Element	Description	Importance to Stakeholders
Target Off Block Time (TOBT)	The departure stand time agreed upon between the flight operator and other interested parties (such as between the flight operator and air/ground services providers, airport authority) that is generated by TFDM due to a SMP. It is equal to the TMAT minus the Ramp Transit Time (RTT).	Indicates to the PIC when the surface scheduler recommends the aircraft should push back from the departure
TMAT	The movement area entry time agreed upon between the flight operator and Air Traffic Control (ATC) as a result of a SMP.	
Target Take Off Time (TTOT)	The runway departure time agreed upon between the flight operator and other interested parties, or directly derived from such a time. This is generated by TFMD due to a SMP.	
Total Estimated Taxi-Out Time (EXOT)	The total estimated taxi out time from the stand to take-off.	
Predicted Departure Queue Waiting Time	The predicted length of time for the flight in a departure queue.	

For a complete listing of all the data elements contained in t refer to the TTP Operational Metrics JMSDD [6].

Appendix C –TFDM Flight Delay

Data Element	Description
Aircraft Departure Delay Start Time	The delay start time.
Aircraft Departure Delay End Time	The delay end time.
Impacting	The reason for the delay.

Appendix G –TFDM TTP Operational Metrics Data Elements Examples

Data Element	Description	Importance to Stakeholders
Airport Arrival Demand KPI	The arrival demand count for the specified time interval.	KPI for all stakeholders to monitor to maintain awareness of the airport arrival demand and make informed planning decisions.
Airport Departure Demand KPI	The departure demand count for the specified time interval.	KPI for all stakeholders to monitor to maintain awareness of the airport departure demand and make informed planning decisions.
Metering Time Compliance KPI	The percentage of departures where the absolute value of the flight's start of taxi for departure time minus its TMAT is less than or equal to the metering time compliance window parameter.	KPI for all stakeholders to monitor to maintain awareness of metering time compliance. When metering time compliance is below the optimal level, stakeholders should work together to improve it.
Calculated Fuel Burn KPI	The amount of fuel burn provided in gallons calculated for the time interval requested.	KPI for flight operators, GA, and FBOs to monitor to be aware of aircraft fuel burn.
Queue Length Accuracy KPI	Comparison of the actual departure queue length to the target queue length.	KPI ATCT TM will monitor to determine if the queue length parameters are being adhered to.

For a complete listing of all the data elements contained in the TTP Operational Metrics service, please refer to the TTP Operational Metrics JMSDD [6].

TFDM-SWIM Introduction

SWIFT 10.5

Douglas Swol
TFDM Acting Deputy Program Manager
and Lead Engineer

July 08, 2020

Federal Aviation Administration

TFDM Program Overview

TFDM is the surface management solution for NextGen and iTBO.

https://www.faa.gov/air_traffic/technology/tfdm/

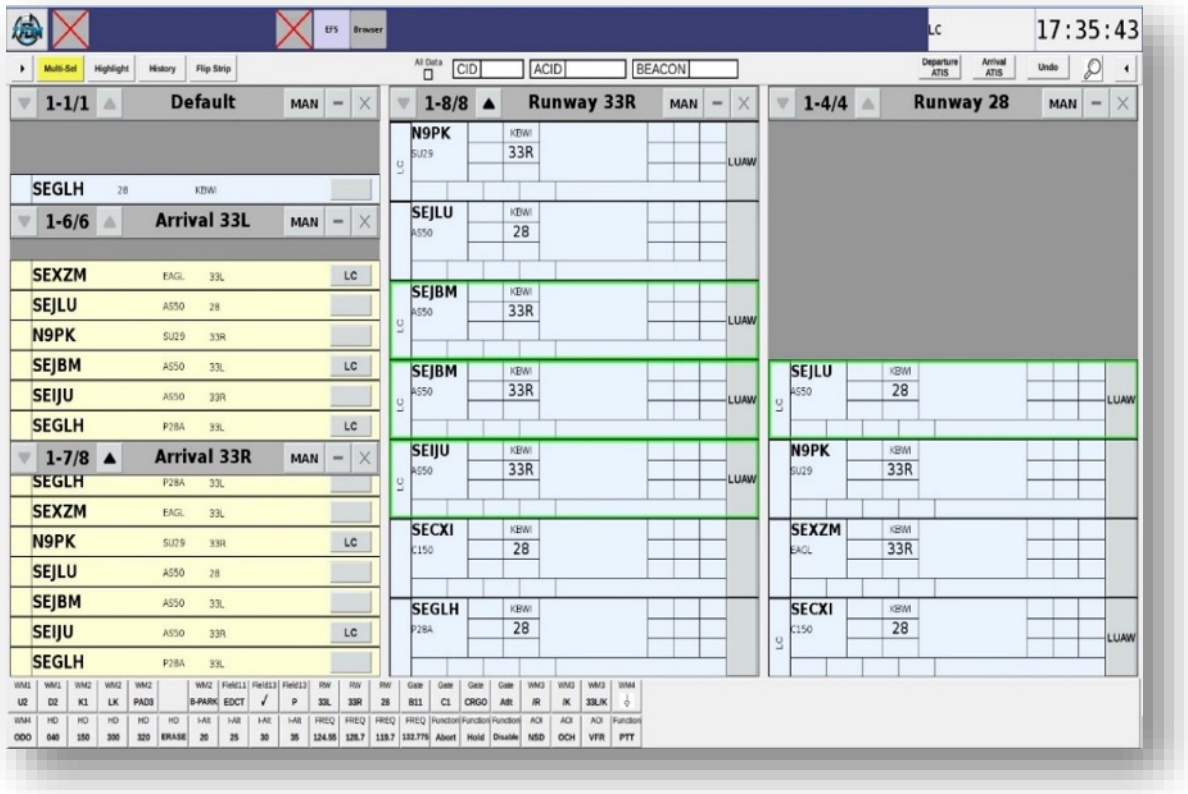
- **TFDM** will provide an integrated tower flight data automation system, which **will improve controllers' common situational awareness.**
- **TFDM will improve efficiencies** on the airport surface and terminal airspace by providing:

- Electronic Flight Strips in the Tower
- Traffic Flow Management Integration
- Collaborative Decision Making for the Surface
- Systems Consolidation

Key Benefits:

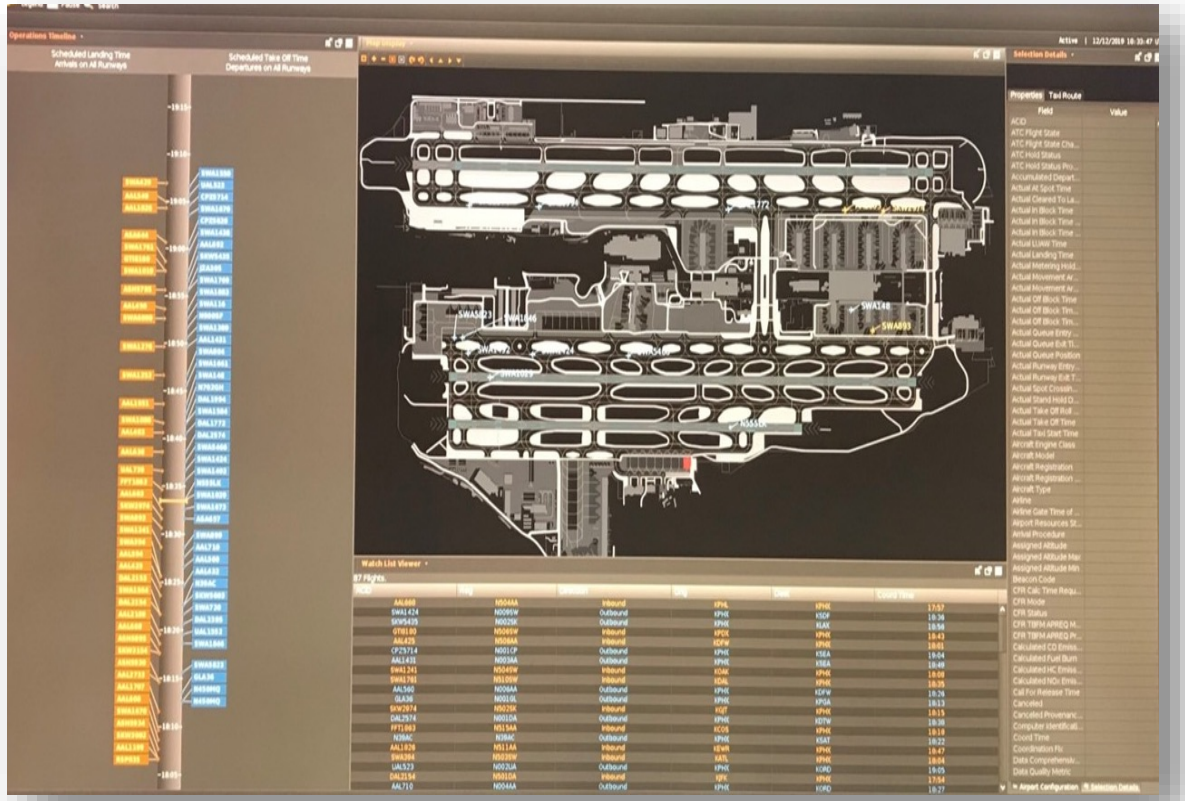
- Fuel Savings
- Carbon Emission Savings
- Improved Situational Awareness
- Expanded Data Access

TFDM System Displays



Electronic Flight Strip Display

Surface Management Display



TFDM Interfaces

Internal Interfaces

Two-Way Interfaces
- TFMS (via SWIM)
- TBFM (via SWIM)
- FDIO
- RMLS (via SWIM)
- STDDS (via SWIM)

One-Way Interfaces
- ASDE-X/ASSC
- STARS/TAMR
- TDLS

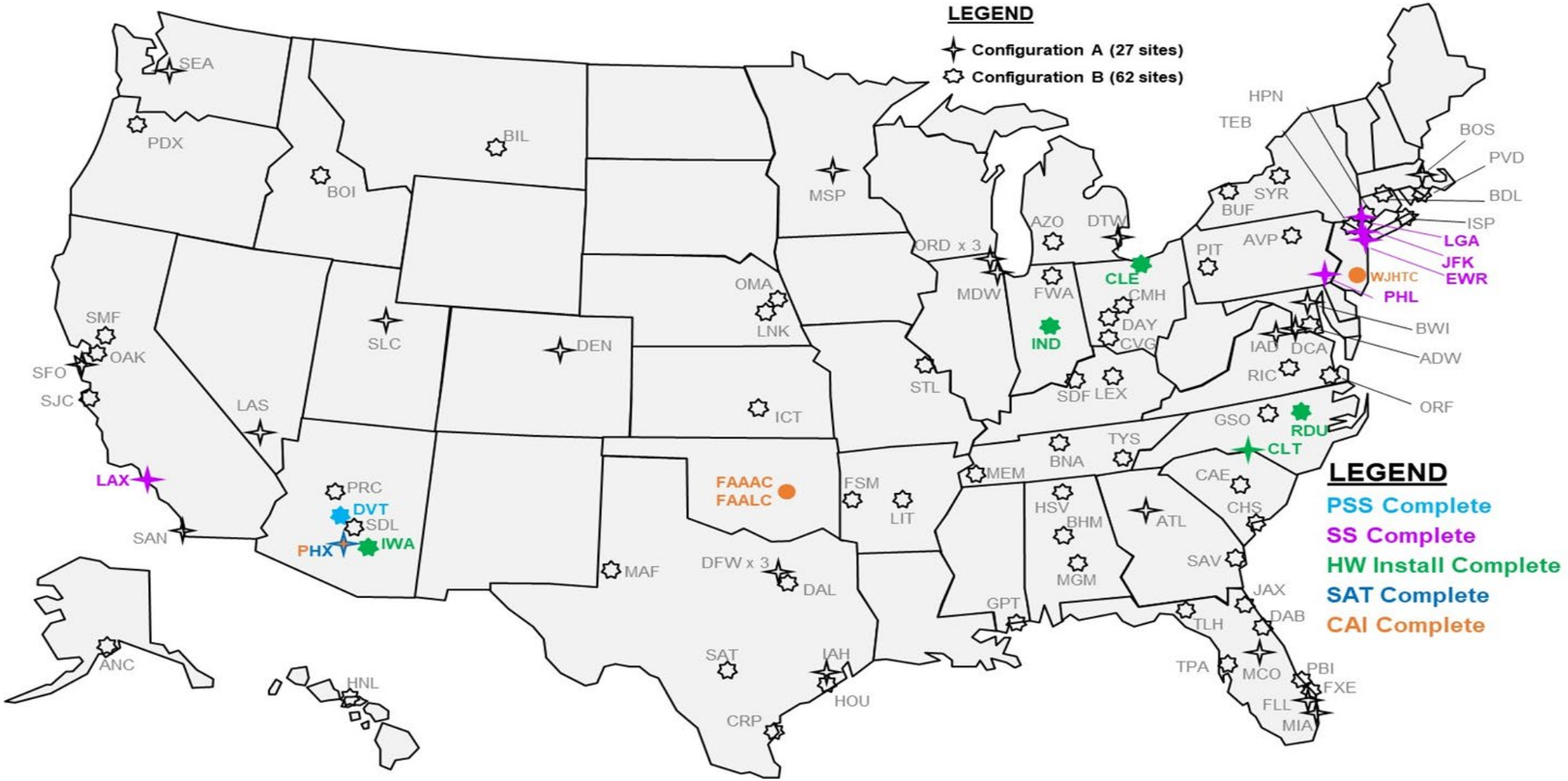
Facilities Affected

- Towers (93 at 89 airports)
- TRACONs (58 via TFMS)
- ARTCCs (18 via TFMS)
- ATCSCC (via TFMS)
- WJHTC (Test and 2nd Level Engineering)
- MMAC (Academy and Depot)

External Interfaces (via SWIM)

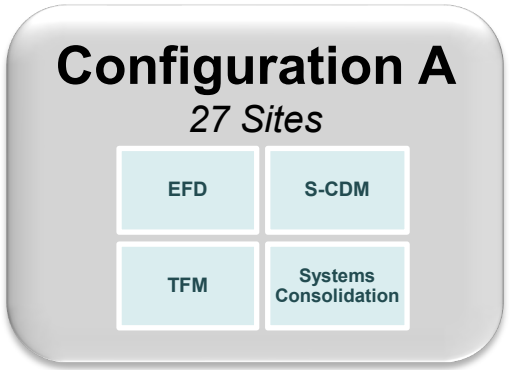
- Flight Operators (TTP and TFCS)
- Airport Authorities (TTP and TFCS)

Implementation Sites by Configuration



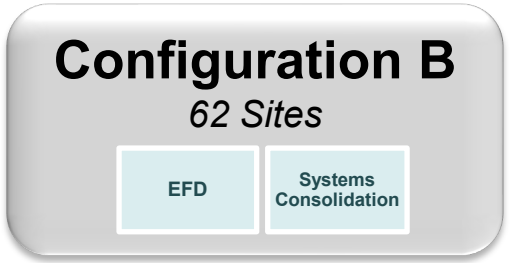
TFDM Configurations

The 89 Airports chosen for TFDM will receive one of two configurations based on functional need:



Full Functionality TFDM

- EFD, including electronic flight strips in towers
- Surface surveillance data integration
- Full DSTs (including surface metering)
- TFM data exchange and integration
- SSA on TFMS TMU displays in the TRACON, ARTCC, and ATCSCC



Improved EFD exchange only TFDM

- EFD, including electronic flight strips in towers
- SSA capability on TFMS TMU displays at selected sites

TFDM Program Roll-Out Overview

TFDM will be implemented via a multi-build strategy deploying the TFDM capabilities:

Build 1

Key Site - PHX

- Full hardware development to support the deployment of Build 1 & 2
- Improved Electronic Flight Data Exchange and Electronic Flight Strips
- Runway Assignment Predictions
- Basic Load Balancing
- SSA viewer (via TFMS)
- Maintenance tools for life cycle support

- **Initial Operating Capability: TBD**
- **In-Service Decision: TBD**

Build 2

Key Site - CLT

In addition to the Build 1 capabilities

- Surface Scheduling
- Surface Metering
- Advanced Runway Load Balancing
- Metric Reporting & Analysis (MRA)
- DSP Replacement via TFDM, TBFM, and TFMS

- **Initial Operating Capability: TBD**
- **In-Service Decision: TBD**

TDFM Terminal Publication (TTP) Overview

- **Service Description**
  - A SWIM Pub/Sub service that gives a consumer the capability to subscribe to TFDM data
- **Service Consumers**
  - FAA Consumers
  - Non-FAA Consumers (military or other agency)
  - Collaborative Decision Making (CDM) Participants
- **Service Interface**
  - Publishes airport information to SWIM for authorized consumers utilizing JMS 1.1 to send JMS messages
  - Makes use of a Pub/Sub Message Exchange Pattern (MEP)
- **Service Business Functions**

Flight Data

Airport Information

Flight Delay

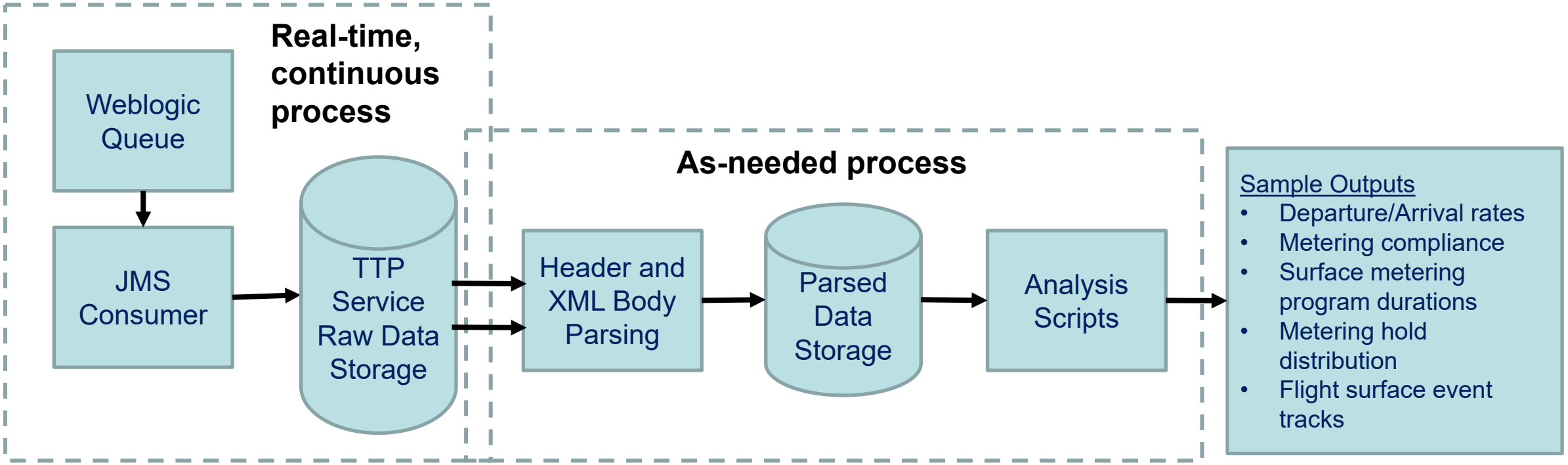
Operational Metrics

Traffic Management Restrictions

Surface Management Programs

Use Case: TTP Subscription

User subscribes to receive specified filtered information about surface events.



TFDM Flight-Operator System Collaboration Service (TFCS) Overview

- **Service Description**
  - Data exchange between TFDM and NAS users using a Request-Reply message exchange pattern.

- **Service Consumers**
  - Non-FAA Consumers (military or other agencies)
  - Collaborative Decision Making (CDM) Participants
  - Non-CDM Participants

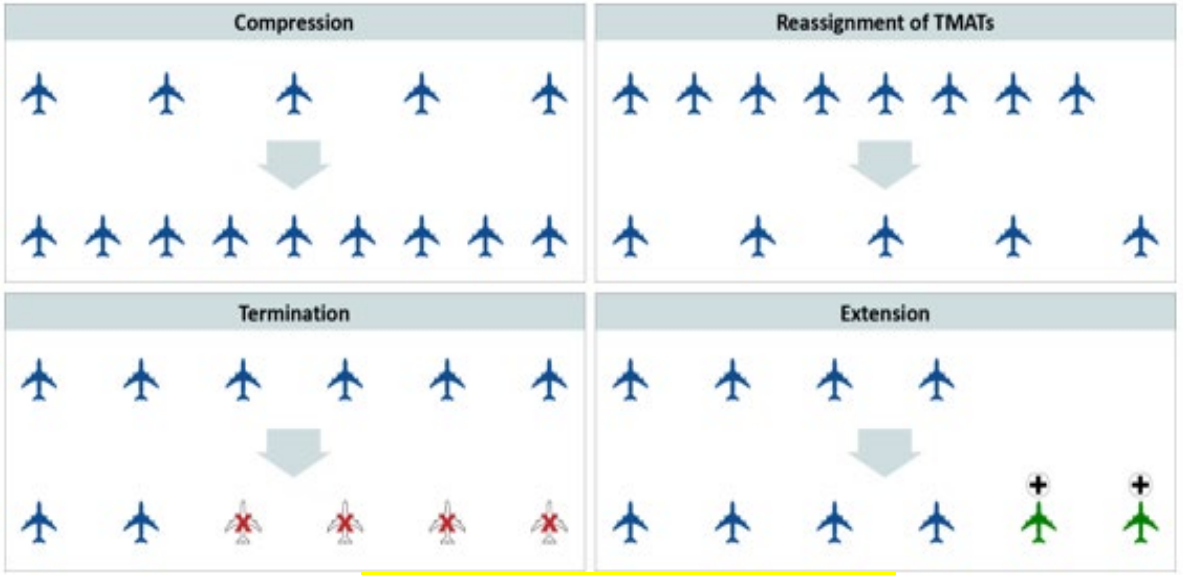
- **Service Interface**
  - Follows a request/reply messaging model and makes use of a Request-Reply MEP
  - The interface to each service operation is defined by the messages exchanged in the MEP
  - Service users exchange messages with TFCS via NEMS

- **Service Business Functions**
  - The TFCS service allows authorized subscribers to submit/receive the following types of information
    - SMP Flight Substitution Service (SFSS)
    - Airport Data Information Service (ADIS) - *non-movement area closure data*
    - Airport Data Information Service (ADIS) - *non-movement area gridlock notifications*

Use Case: TFCS SMP Flight Substitution

Tactical Planning: User requests flight data for substitutions during Surface Metering Program (SMP).

- Flight operator identifies flights that they want to substitute during SMP.
- The flight operator submits a substitution request message via the TFCS interface.
- TFDM automation receives the substitution request message conducts checks to ensure the request is permissible.
- TFDM automation sends a reply to the flight operator via the TFCS interface. This reply will notify the flight operator if their request has been approved or rejected.
- TFDM publishes the new metering TOBT, TMAT, TTOT times associated with all flights that were affected by the substitution request (updates received from TTP Flight Data Service)



Permissible SMP Adjustments

TFCS Request/Reply: Flight Substitution Samples

Flight Substitutions Request – Flight Substitution

```
<?xml version="1.0" encoding="UTF-8"?>
            <aircraftId>DAL2345</aircraftId>
            <tfdmFlightUniqueId>BBBBBBBB-BBBB-4BBB-9BBB-
BBBBBBBBBBBB</tfdmFlightUniqueId>
            <targetMovementAreaEntryTime>2001-12-
31T12:00:00</targetMovementAreaEntryTime>
            <aircraftId>DAL1234</aircraftId>
```

Flight Substitutions Request – Flight Relinquish

```
<?xml version="1.0" encoding="UTF-8"?>
          <aircraftId>DAL1234</aircraftId>
          <tfdmFlightUniqueId>AAAAAAAA-AAAA-4AAA-9AAA-
AAAAAAAAAAAA</tfdmFlightUniqueId>

<targetMovementAreaEntryTimeRelinquished>TRUE</targetMovementAreaEntryTimeRelinquished
>
  </request>
</tfcs>
```

Flight Substitutions Request – Marked for Substitution

```
<?xml version="1.0" encoding="UTF-8"?>
          <tfdmFlightUniqueId>AAAAAAAA-AAAA-4AAA-9AAA-
AAAAAAAAAAAA</tfdmFlightUniqueId>

<targetMovementAreaEntryTimeMarkedForSubstitution>TRUE</targetMovementAreaEntryTimeMar
kedForSubstitution>
  </request>
</tfcs>
```

Flight Substitutions Response

```
<?xml version="1.0" encoding="UTF-8"?>
      <errorData>
        <errorCode>FLIGHT_PASSED_METERING_CONTROL_POINT</errorCode>
        <errorString>DAL1234 past metering control point. </errorString>
      </errorData>
      <flightsSubstitutionErrors>
        <flight>
          <aircraftId>DAL1234</aircraftId>
    </flightSubstitutionResponse>
  </response>
</tfcs>
```

What's Next?

- **Service Documentation**
  - Available
    - Draft TTP Pub/Sub Service JMSDD
    - Draft TFCS Request/Reply JMSDD
  - In Development
    - TTP and TFCS Use Cases
    - TTP and TFCS Ops Context Documents

- **TTP Service Availability**
  - **TFDM Build 1 IOC at PHX expected ~2021**
    - Flight Data, Airport Information, Flight Delay, Operational Metrics New
  - **TFDM Build 2 IOC at CLT expected ~2022**
    - Flight Data, Airport Information, Flight Delay, Operational Metrics Enhanced
    - Traffic Management Restrictions, Surface Metering Programs New

- **TFCS Service Availability**
  - **TFDM Build 2 IOC at CLT expected 2022**

How to collaborate with TFDM

- **SWIFT (of course!)**
- **Collaborative Site Implementation Team (CSIT)**
  - csit@faa.gov
- **TFDM Program Testing**
  - TTP/TFCS Pre-SWIM Testbed
- **Contact: Douglas Swol (Christopher.D.Swol@faa.gov)**

System Wide Information Management

Program Update

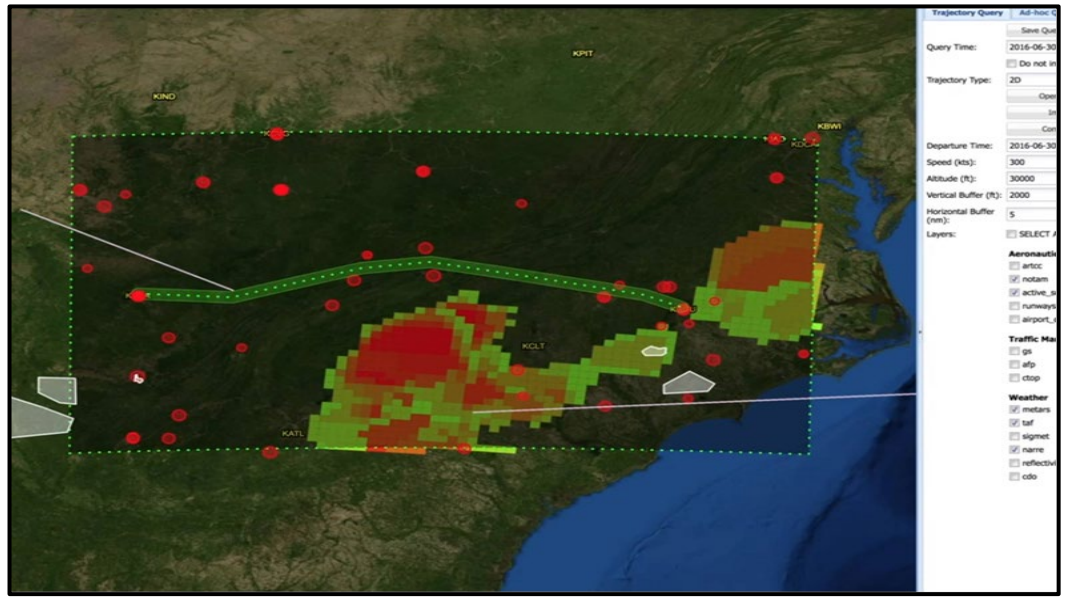
Presented to:
SWIFT 10.5

By:
SWIM Program Manager,
Kristin Cropf
Communications, Information and Network Programs, AJM-31

Date:
July 8, 2020

SWIM Capabilities

NAS Common Reference (NCR)



Will enable NAS systems & authorized users to customize requests for real-time SWIM data using standards-based geospatial, temporal, and attribute filters.

Common Support Services – Flight Data (CSS-FD)

Partnering with NextGen to provide users a flight planning and filing capability.

SWIFT Portal

SWIM Service Discovery

Learn about SWIM data products before subscribing. Visit the NAS Service Registry Repository (NSRR) for service documentation, including service operational context and use case documents.

SWIM Service Status

Check the current status of SWIM services and client connections to assist with troubleshooting. These insights provide users with information that was previously unavailable.

SWIFT Community Forum

Connect with the SWIM community, share knowledge and ideas with the aviation community, and learn what is new with SWIM in the News section of the forum.

SWIM Cloud Distribution

Utilize our cloud platform to connect, consume, and manage your SWIM data subscriptions. This new service offers self-service provisioning, data filtering capabilities, and subscription metrics.

Enhanced SWIM Cloud Service (ESCS)

Features

- Extends the SCDS concept to aviation mission partners - airlines, Air Navigation Service Providers (ANSPs), and others
- Allows for bi-directional data exchange with airlines and other airspace users
- Provides increased security controls to protect future sensitive data exchange
- Supports web services




L3HARRIS™

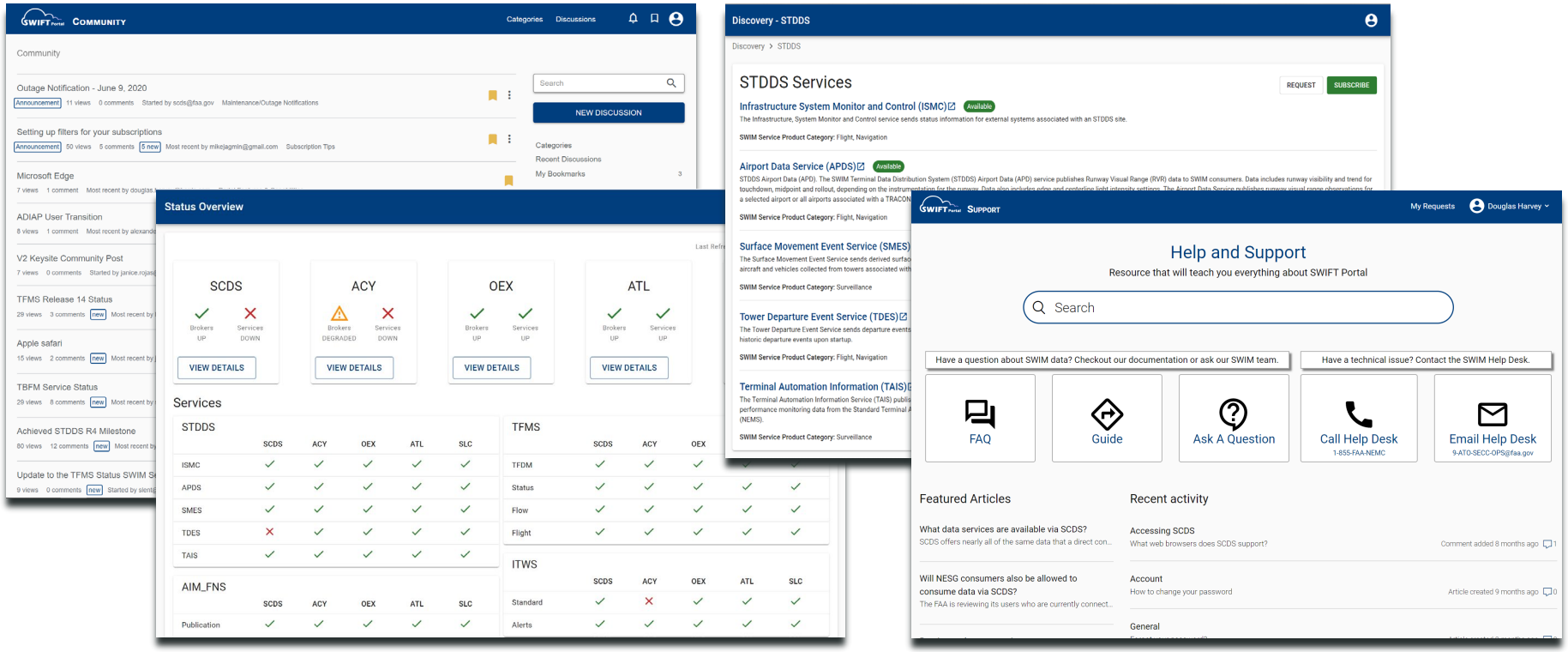
SWIFT PORTAL DEMO

Doug Harvey

SWIFT Portal

SWIFT Portal is a publicly accessible cloud-based infrastructure that brings new capabilities to built upon the SWIM Cloud Distribution Service (SCDS)

This service will include new Service Discovery, Service Status, Community Forum, Cloud Distribution Service, Self-service Help Desk



SWIFT Portal Experience

Self-service Support: Online FAQs, guides, ticketing, Q&A, and chat support

Self-service Provisioning: Ability to register, create, & edit your own subscriptions

Managed Failover: Cloud technology with redundant connections to create a reliable environment

Live Service Status: Ability to view & filter which SWIM Services to status

Community Forum: Discuss ideas, share SWIM knowledge, learn about latest news and events

Subscription Metrics: View data bandwidth, connections, queue lengths & expired message counts

SWIFT Portal Demo

LIVE DEMO

Please join us at the next

SWIM Users Forum

August 13, 2020

2:00-3:00 EST

We will be holding a SWIFT Portal Demonstration and would love your feedback!

Scan the QR Code below to register!

Use your phone to scan the QR code

Questions?

Please send them to
SWIM@faa.gov

Final Announcements

SWIFT Workshop #11

- **Date**
  - **August 2020**
- **Location**
  - **Online Session**

SWIFT Site Information

- **SWIFT@faa.gov**
  - Any SWIFT-related questions
  - Sign up for SWIFT mailing list
- **https://www.faa.gov/air_traffic/technology/swim/swift**
  - Register for future SWIFT meetings
  - Stay up to date with SWIFT
  - Past meeting slides

SWIFT Contact Information

SCAN ME

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- David Almeida, SWIFT Community Moderator
- Phone: (321) 735-2774
- Email: David.Almeida@LSTechLLC.com