

# SWIM Connect 2015

## *NAS Service Registry and Repository (NSRR): Making Services Visible, Discoverable and Understandable*

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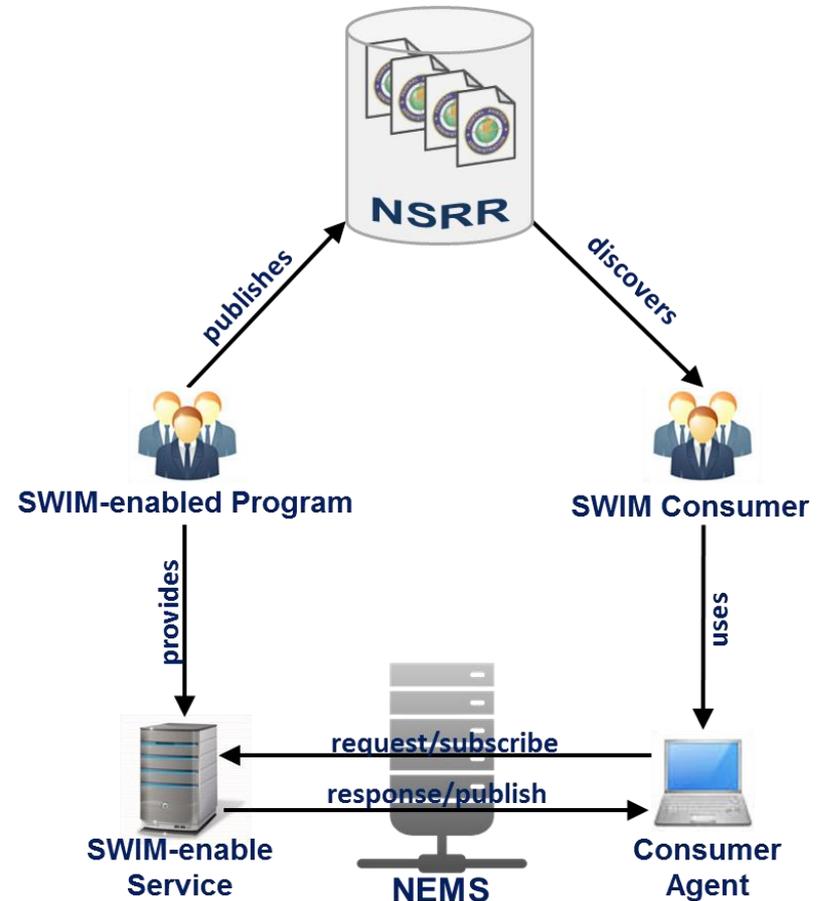


Federal Aviation  
Administration

The SWIM connect 2015 logo is centered within a large white circle on a blue background. The word "SWIM" is in a large, bold, black sans-serif font. To its right are three blue circles of varying sizes. Below "SWIM" is the word "connect" in a smaller, black, lowercase sans-serif font, followed by "2015" in the same font style. The background of the slide features a pattern of overlapping blue circles of various shades and sizes.

# Introducing NSRR

NSRR (NAS Service Registry and Repository) is a component of the SWIM infrastructure. It manages, shares and tracks information about all SWIM-enabled services, both currently available and under development.



# Background

- NSRR was established by SWIM in 2010 and was based on HP SOA Systinet software products.
- To address new and emerging business requirements, in 2014 the SWIM PO decided to rebuild NSRR using an open-source development platform.
- The original version of NSRR is currently operational and will be replaced by NSRR 2.0 in the spring of 2016.

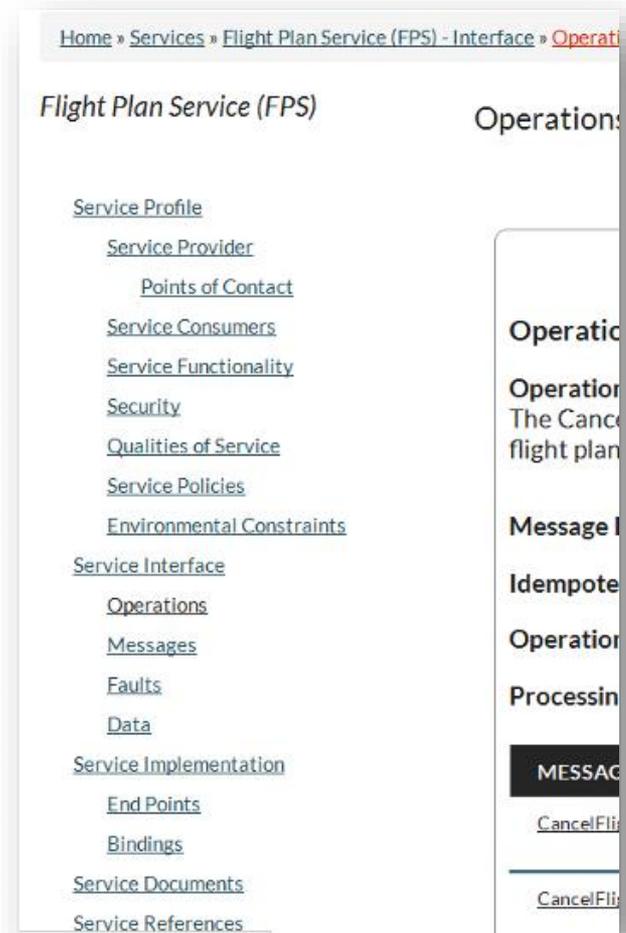
# NSRR 2.0 Objectives

- **Usability.** Simple, intuitive interface for discovering and storing all information about SWIM services.
- **Conformance.** Alignment with SWIM Governance policies and FAA and international standards.
- **Interoperability.** Support consolidation with SESAR's European SWIM Registry in the context of a SWIM Common Registry (SCR) implementation.

# Interface for All Service Information

NSRR 2.0 captures and displays all information that is currently presented in FAA service description documents (WSDDs or JMSDDs).

- 5.8.3 Service Functionality .....
- 5.8.4 Security .....
- 5.8.5 Qualities of Service .....
- 5.8.6 Service Policies .....
- 5.8.7 Environmental Constraints .....
- 5.9 SERVICE INTERFACE .....
- 5.9.1 Interface .....
- 5.9.2 Operations .....
- 5.9.2.1 Processing Considerations .....
- 5.9.3 Messages .....
- 5.9.4 Exceptions Handling .....
- 5.9.5 Data .....
- 5.9.5.1 Referencing External Data Documents .....
- 5.10 SERVICE IMPLEMENTATION .....
- 5.10.1 Bindings .....
- 5.10.2 End Points .....



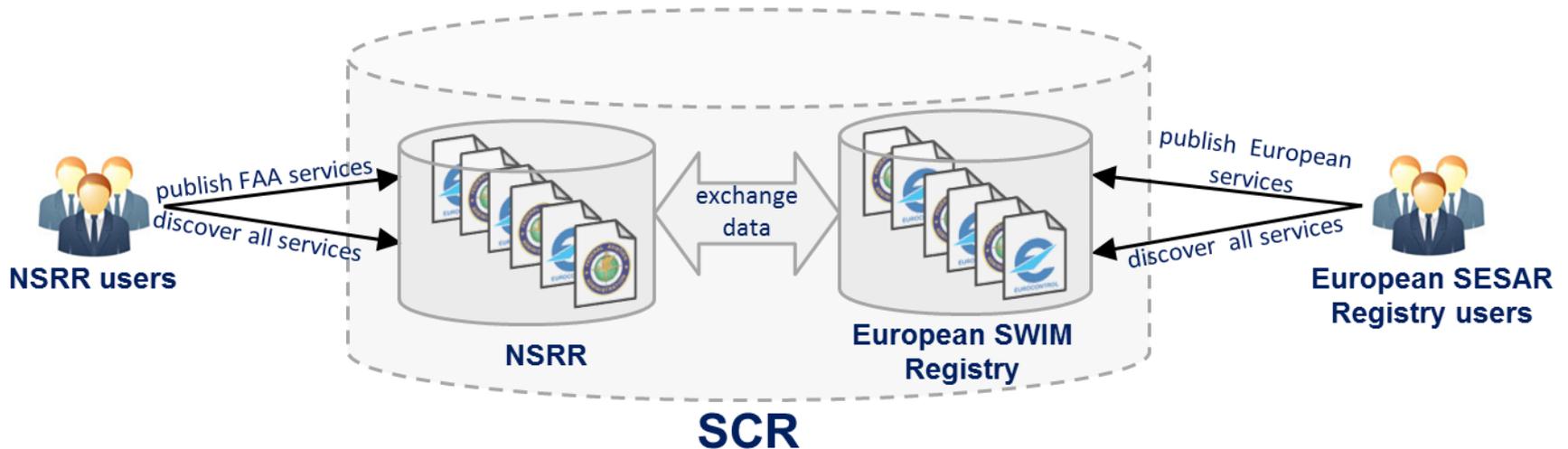
# Support of SWIM Governance

NSRR 2.0 will support service lifecycle management processes to ensure metadata completeness and integrity in compliance with the SWIM Governance Policies document and other Governance regulations.

Stage: Definition	
Service Functionality Exists	Complete
Service Security	Complete
Service QoS	Complete
Service Policies	Complete
Operations	Complete
Messages	Complete
Concept of Operations	Not complete
Web Service Requirements Document (WSRD)	Waived
Stage: Development	
Environmental Constraints	Complete
Message Header	Not complete
Payload	Complete
Fault	Complete
Bindings	Complete
Endpoints	Complete
On-Ramping Form	Not complete
XML Schema Definition for Types	Waived

# Integration with SESAR Registry

NSRR 2.0 will interface with SESAR's European SWIM Registry to allow a shared view into all SWIM services, both FAA and EUROCONTROL.



# Summary

## NSRR is:

- The central point of information about all known SWIM-enabled services, both operational and under development.
- The key enabler for implementing SOA Governance policies and procedures enacted by the SWIM Governance team.
- A key component of the SWIM Common Registry (SCR), a consolidated effort between NEXTGEN and SESAR.