



**Federal Aviation
Administration**

Proposed Enhancements to NAS Service Registry Repository

Presented to: NAS and SESAR Registries
Technical Interchange Meeting

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Agenda

- **Motivations**
- **Gaps Analysis**
- **Enhancement Requirements**
- **Process Improvement**



Motivations

- Need to improve quality of service metadata stored and presented in the NAS Service Registry/Repository (NSRR)
- Establish consistency of semantic and structure between NSRR and **Web** Service Requirement Document (WSRD) / Web Service Design Document (WSDD) / JMS Design Document (JMSDD)
- Enable a single, shared and consistent view of the SWIM-enabled services



Gaps Analysis

- Existing data model in the NSRR is missing key elements required in the WSDD / JMSDD
- The current UI of the NSRR is organized very differently than structure of the WSDD / JMSDD
- Need to align the Proposal stage metadata in the NSRR with elements of the WSRD
- Unclear procedure for Consumer registration and storage of contract artifacts such as MOA



Gaps Analysis (cont.)

- Need distinction between Service Owner and Service Provider
- Need to offer registration of Services into the R&D domain
- Insufficient reporting capability



Enhancement Requirements

- NSRR shall present and capture service metadata in accordance with the structure and layout for a WSRD
 - Service Requirement document developed during Proposed stage of SLMP
 - Ability to publish Service Requirements will provide potential consumers with future service capabilities and characteristics



Enhancement Requirements (cont.)

- NSRR shall present and capture service metadata in accordance with the structure and layout for a JMSDD
 - Service Provider will elaborate on the metadata available from the WSRD and provide details of service interface design and implementation



Enhancement Requirements (cont.)

- NSRR shall present and capture information relevant to the deployment of the service
 - Operational environment constraints
 - NEMS configuration (such as routing, mediation, security)
- NSRR shall provide canned reports that can satisfy ATO needs
 - Examples: List of operational services, reusability by service, services by consumer...



Enhancement Requirements (cont.)

- NSRR shall offer support of lifecycle management of Consumer
 - Currently only has lifecycle management of Provider
 - Define Consumer lifecycle stages
 - Develop requirements for the lifecycle promotion
 - Implement Consumer lifecycle in the NSRR



Enhancement Requirements (cont.)

- NSRR shall offer support of lifecycle management of services in the R&D domain
 - Update taxonomy to define R&D service
 - Define R&D service lifecycle stages
 - Develop requirements for the lifecycle promotion
 - Implement R&D service lifecycle in the NSRR



Process Improvement

- Enable registration of already implemented services in the NSRR, to allow for temporary waiver/exception of missing artifacts
- Establish accountability to service owners to own data-entry of service metadata in the NSRR (alleviate Governance team from directly doing the data-entry)
- Streamline Organization Unit and User registration into the NSRR



Resources

[1] NAS Service Registry/Repository Requirements Document v.0.8, FAA,9/13/2013

[2] FAA-STD-065 Rev. A, Preparation of Web Service Description Documents, July 1, 2013

http://www.faa.gov/about/office_org/headquarters_offices/ato/service_units/techops/atc_comms_services/swim/governance/standards/media/FAA-STD-065A%2007012013%20FINAL.pdf

