

Enforcing Governance Policies in NSRR

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Technical Interchange Meeting

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Agenda

- Basic Concepts
- Introducing SWIM Governance
- Role of NSRR in Governance Processes
- Service Lifecycle Management Process in the NSRR
- Promoting Services through the Lifecycle Stages



Basic Concepts

- **SWIM Governance** is the realization of *SOA Governance* by the SWIM program, with the major goal of enabling a set of enforceable policies, procedures, processes, tools, and organizational activities that together ensure a consistent alignment between FAA/NAS business objectives and SOA best practices, methodologies, and technological solutions.[1]
- **NSRR** is the SWIM-supported capability for making services visible, accessible, and understandable across the NAS. NSRR supports a flexible mechanism for service discovery, an automated policies-based way to manage services throughout the services lifecycle, and a catalog for relevant artifacts. [2]

NAS SOA Governance activities

- Developing governance standards, policies, and procedural guidelines to support the functional requirements for implementing all aspects of service-oriented development.
- Making all services discoverable, searchable, and retrievable, through a formal cataloging process of service metadata, by establishing and operating the NAS Service Registry and Repository (NSRR).
- Promoting interoperability among FAA systems by developing a common set of semantic and structural artifacts and promulgating them through communities of stakeholders.[3]



Role of NSRR in Governance Processes

- NSRR supports all activities in *pre-operational stages of service lifecycle*:
 - ensures that development is performed in alignment with business and IT policies
 - enforces conformance to automated design-time policies
 - tracks progressions of services transformations
 - notifies on selected changes in service metadata and lifecycle status

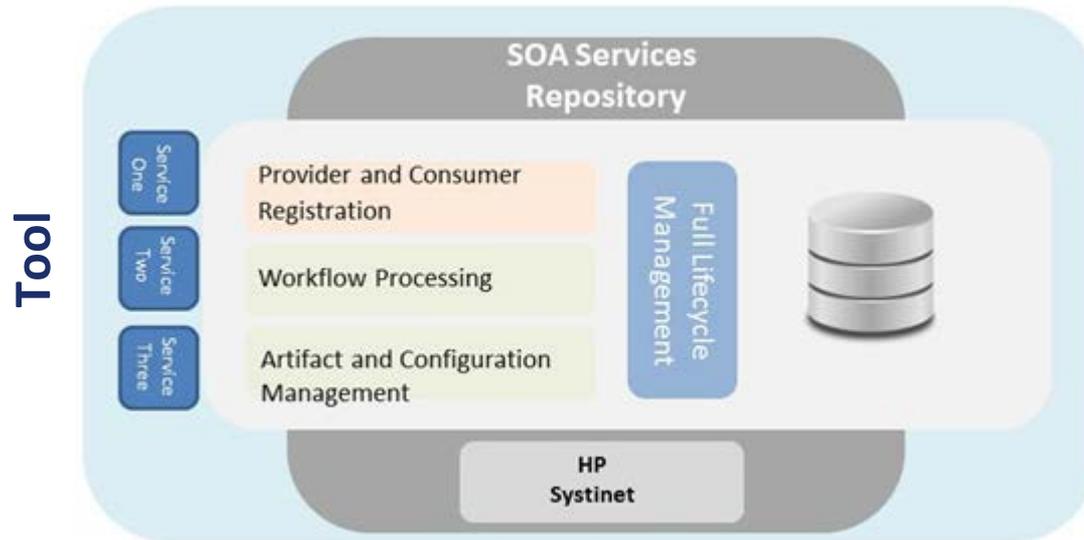


NSRR Functional Overview

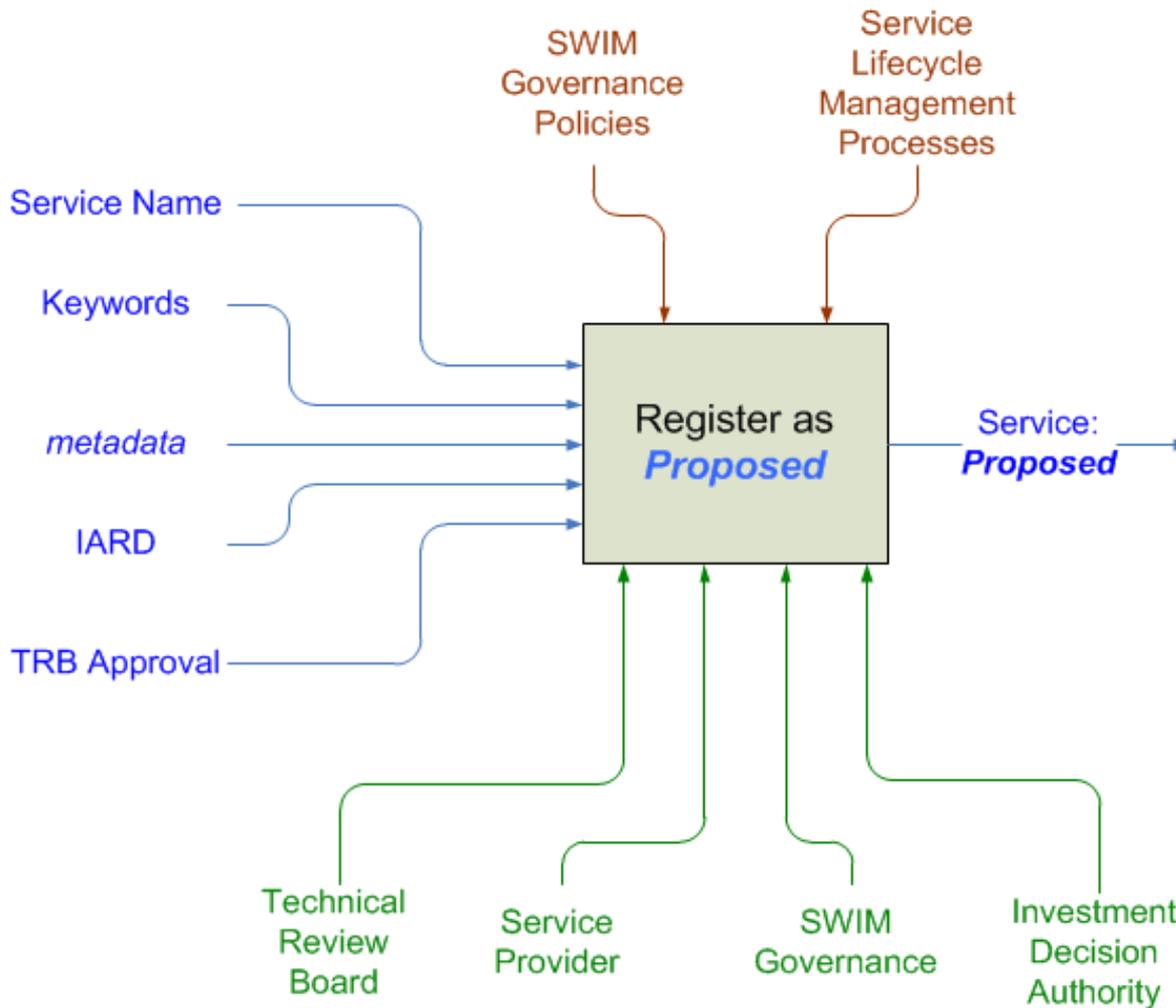
NSRR provides the several major functions that support SOA-based implementation goals. The major functions of NSRR include ***discovery, governance, and lifecycle management***



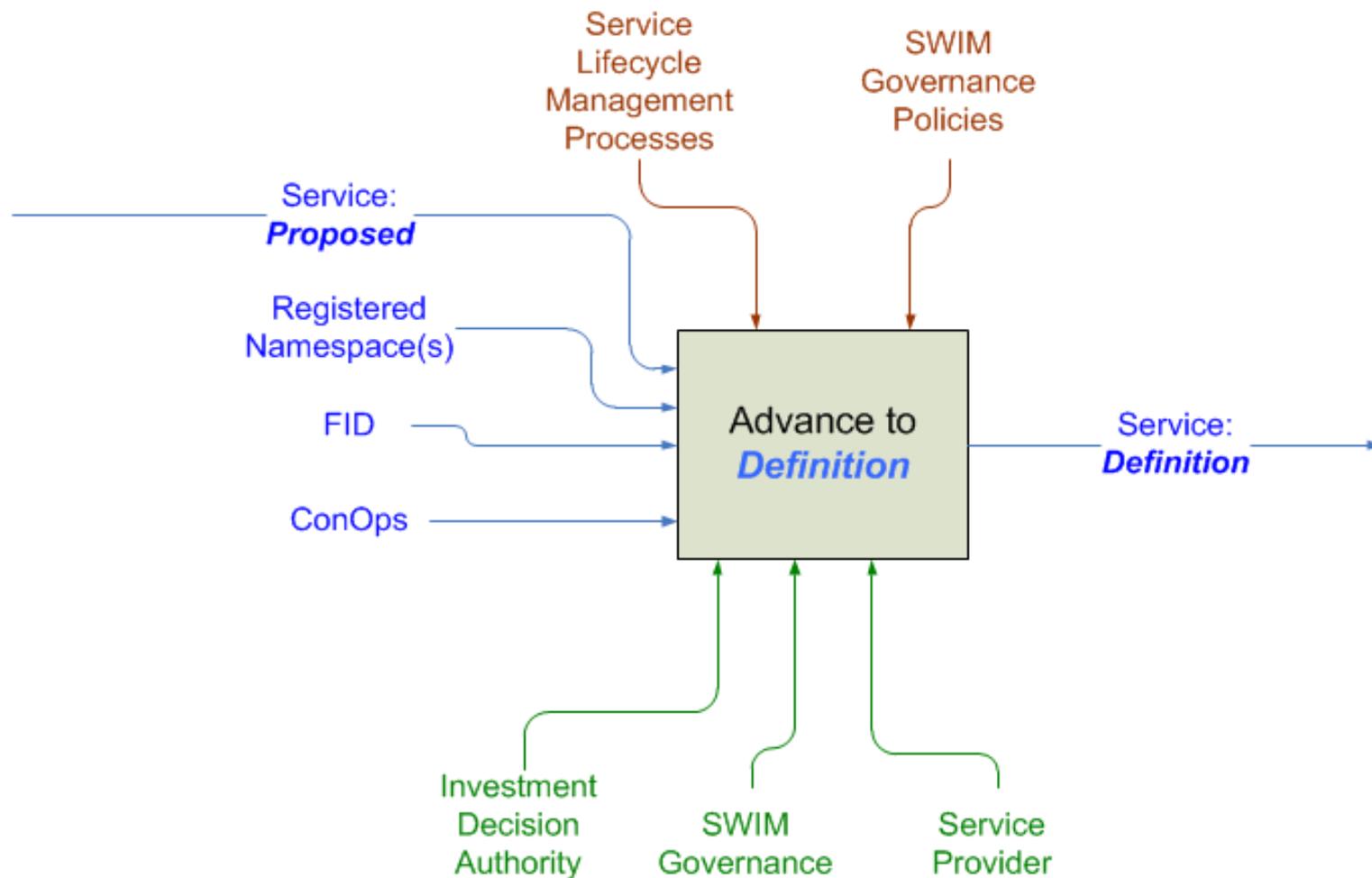
Service Lifecycle Management Process



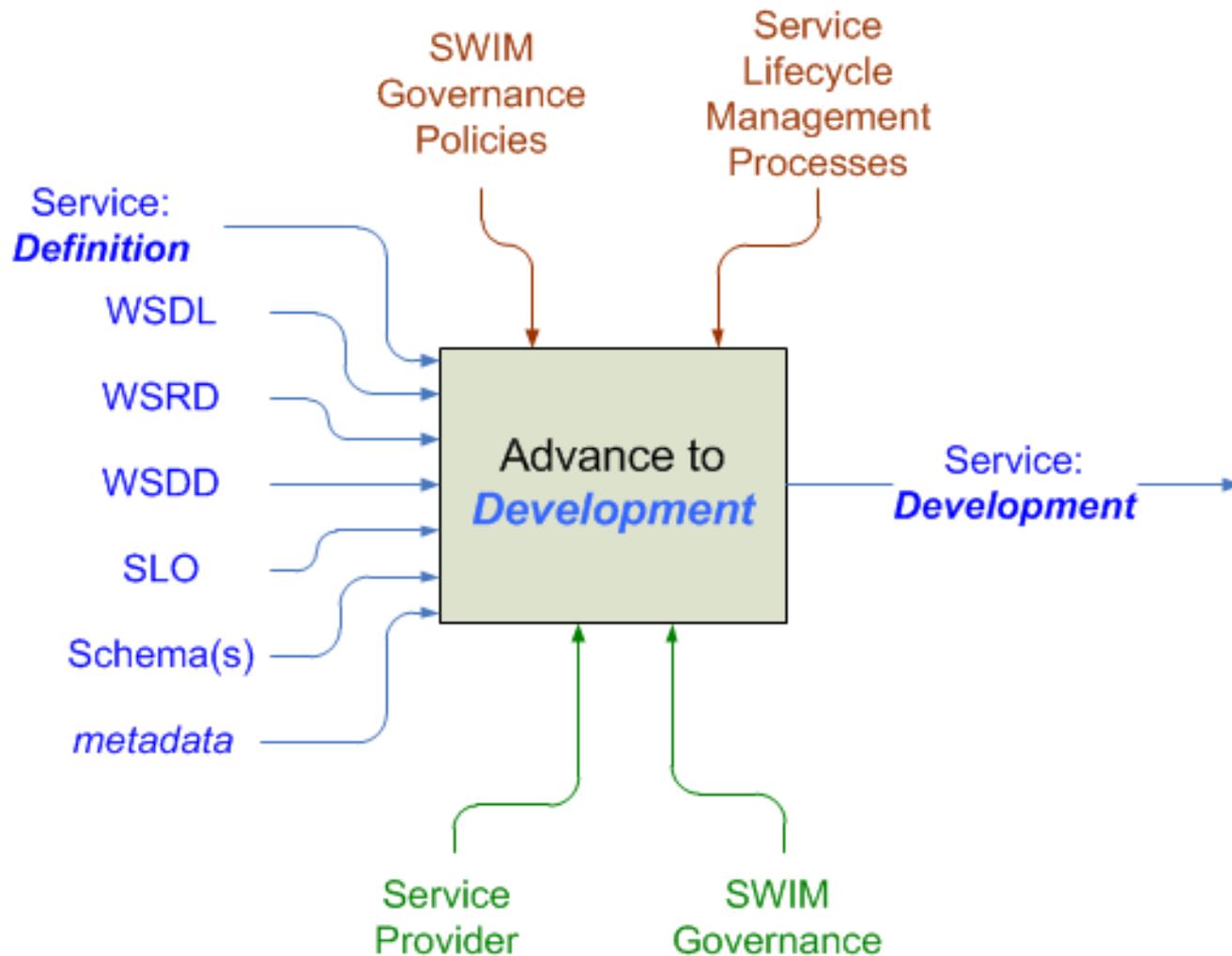
Proposed Stage Activity



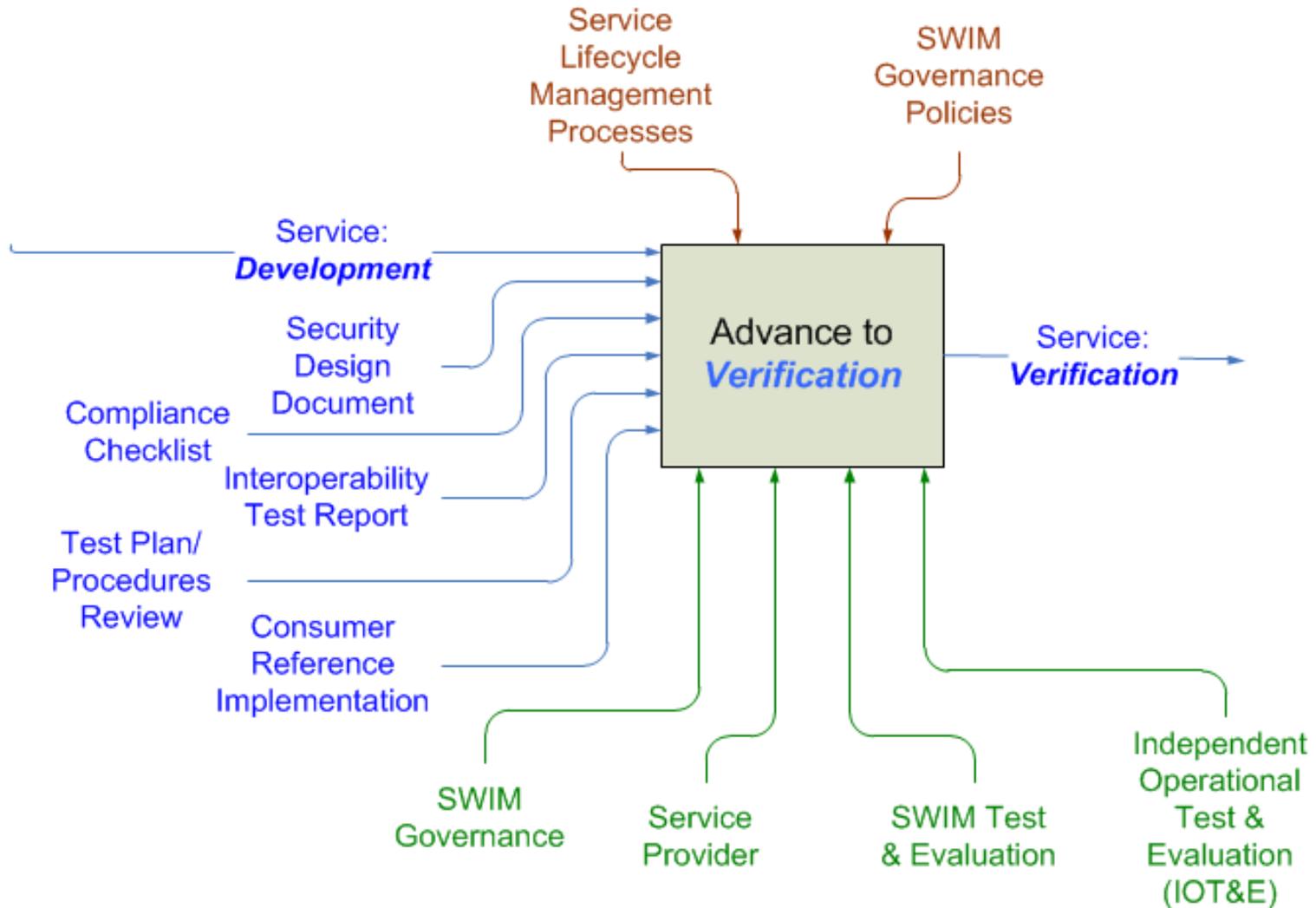
Definition Stage Activity



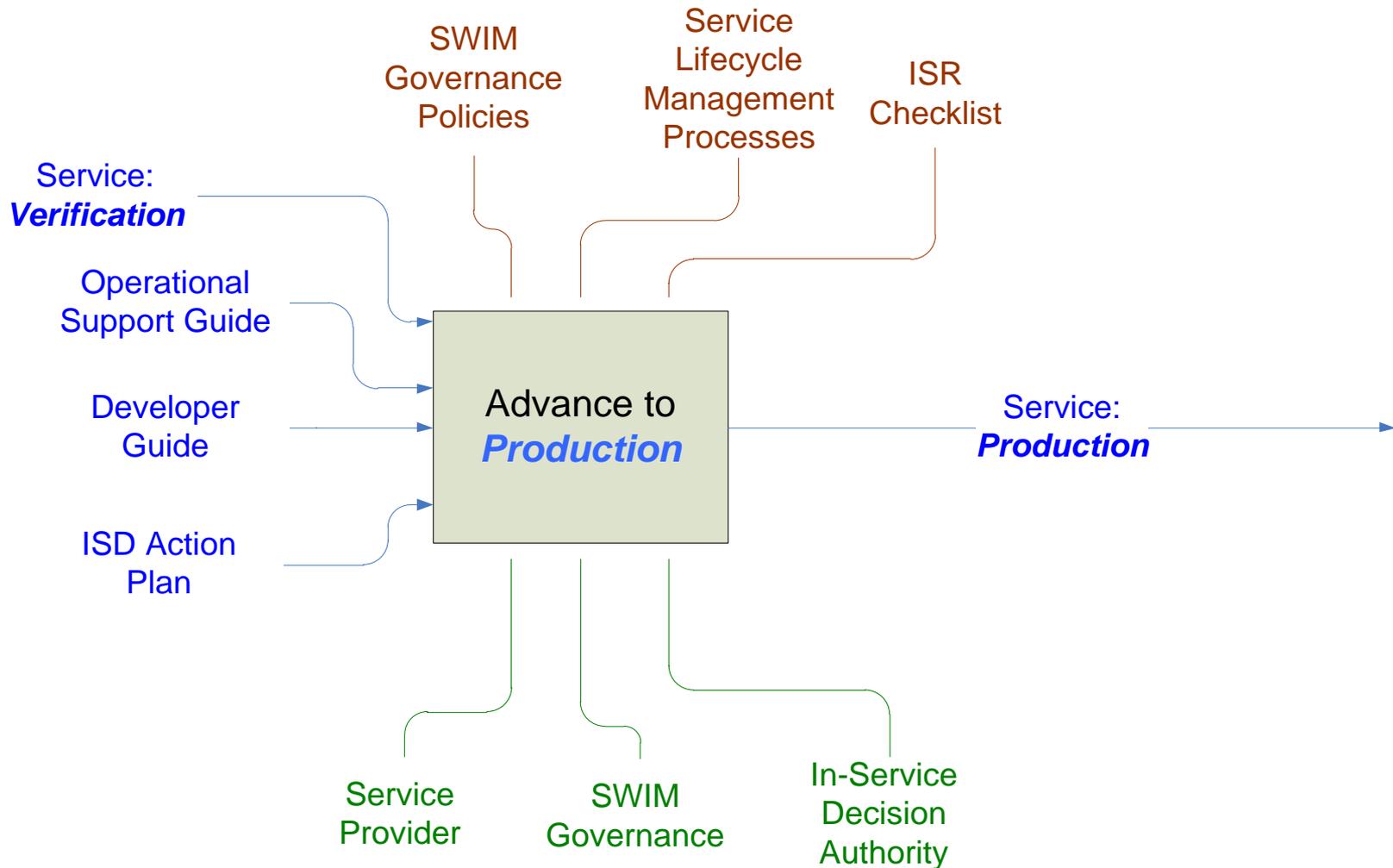
Development Stage Activities



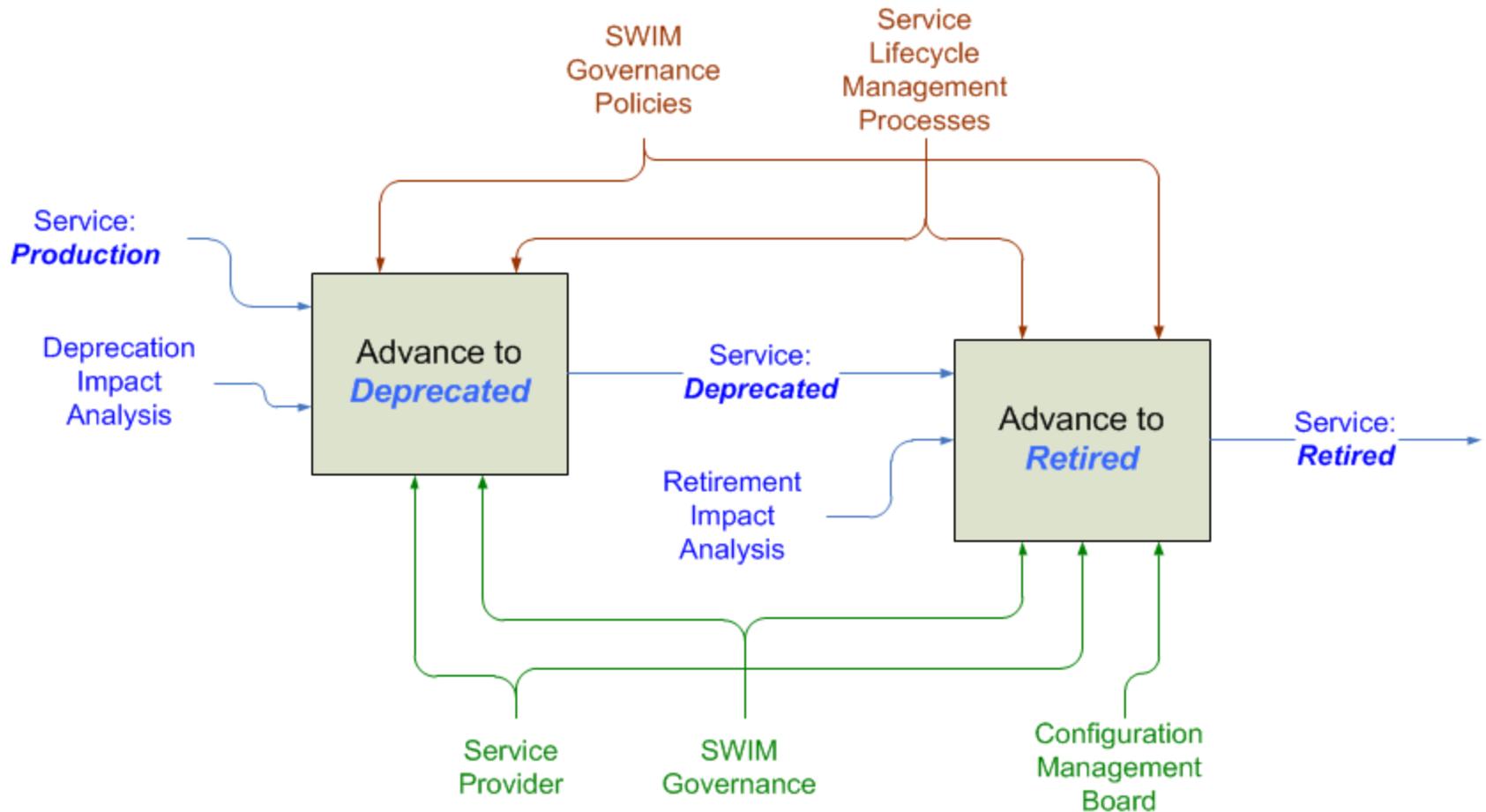
Verification Stage Activities



Production Stage Activities



Deprecation and Retirement Activities



Summary

- NAS SOA governance is realized through the body of policies that drive the overall behavioral model of the participants and ensures their interoperability
- The governance policies include service lifecycle management policies, technical policies and standards compliance policies
- NSRR is a single point of control and the main tool for automated, policies-based service management throughout the services lifecycle



References

[1] NAS SOA Governance Policies (Draft), December 2013

[2] SWIM Controlled Vocabulary, March 2013

<http://www.faa.gov/go/swimvocabulary>

[3] FAA SWIM Governance and Interoperability Initiatives, Presentation at Twelfth Working Group Meeting of Aeronautical Telecommunication Network Implementation Coordination Group(ATNICG WG/12), Mark Kaplun, August 2013

http://www.icao.int/APAC/Meetings/_layouts/mobile/disppform.aspx?List=bd3f4f91-1680-4170-bf40-8a02baf3ce86&View=756970c5-3285-46fd-8535-51f6ef20ca34&ID=24

