NAS Requirements Services Update for the V&V Summit

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Changes in NAS Requirements Management

NAS Requirements Services Division

Where We Are Today

- Viewed as oversight, a repository, an optional resource
- Others "check the box"
- "Throw over the fence" collaboration
- Unclear role and value
- Circumvented
- Limited involvement in technical information exchanges between organizations

Where We Are Going

- Strategic involvement and active engagement with programs
- Tighter alignment and closer integration with other strategic groups
- Clear roles and responsibilities
- Provider of enterprise intelligence
- Key partner in developing solutions
- More sophisticated governance supporting consistency

FAA

NextGEN

Requirements Management Services & Initiatives

ANG-B1
Requirements Services Division

NAS Program Support

Enterprise Requirements Management

Requirements & Interface Management WG

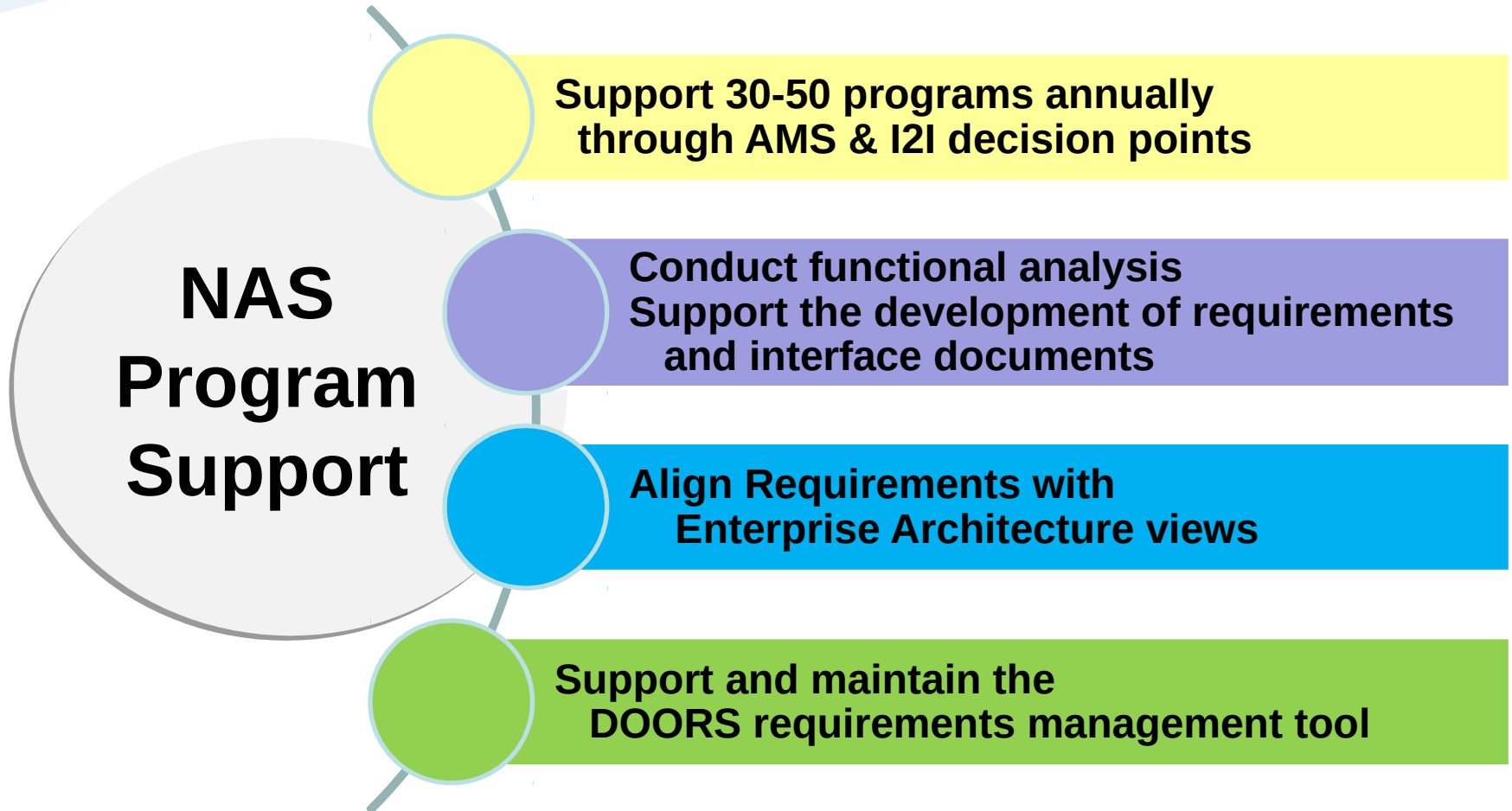Integrated Systems Engineering WG
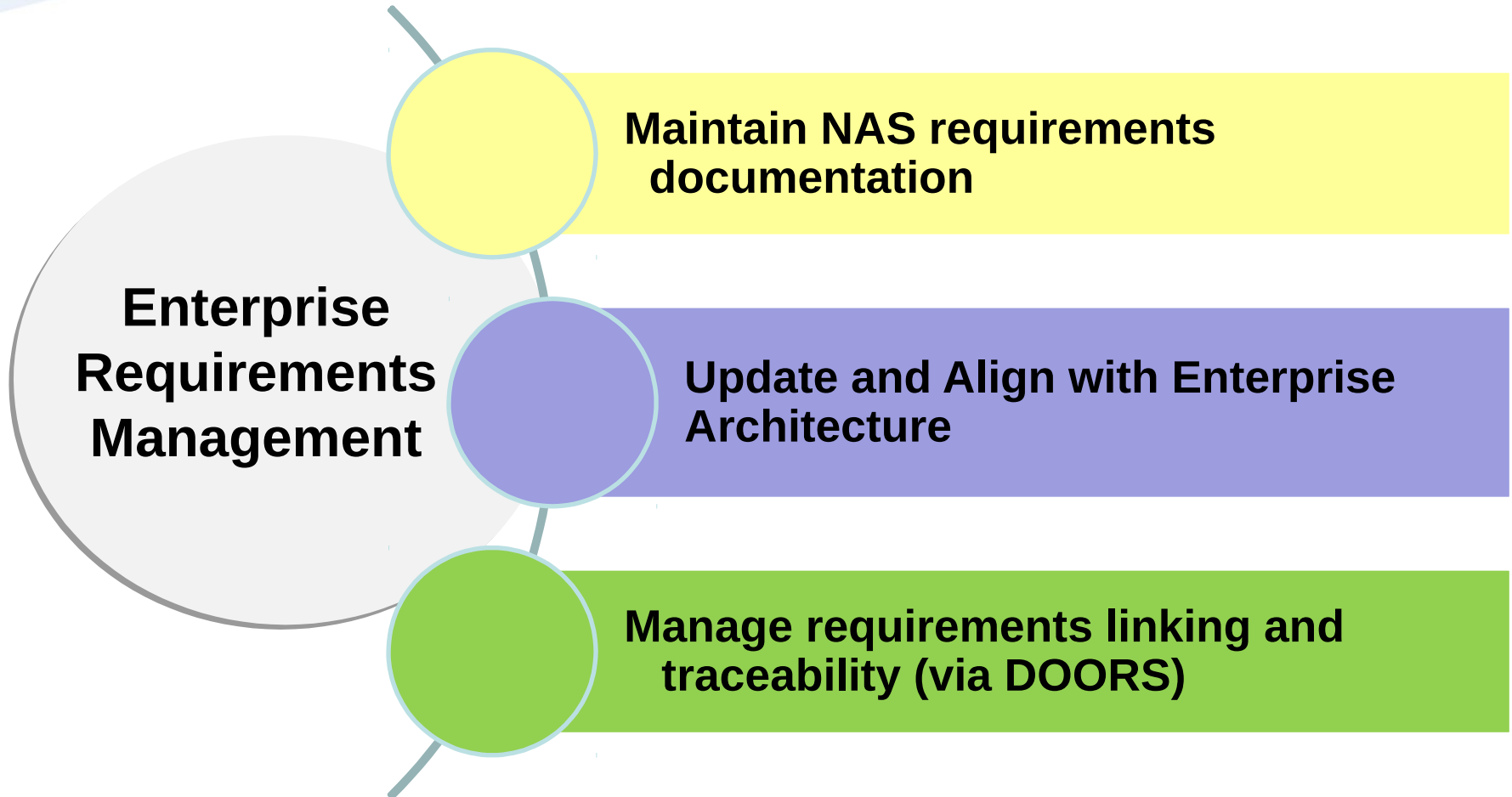
Systems Engineering Manual Update

FAA

NextGEN

ANG-B1 Services

NAS Program Support

Support 30-50 programs annually through AMS & I2I decision points

Conduct functional analysis
Support the development of requirements and interface documents

Align Requirements with Enterprise Architecture views

Support and maintain the DOORS requirements management tool

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NextGEN

ANG-B1 Services (2)

Enterprise Requirements Management

Maintain NAS requirements documentation

Update and Align with Enterprise Architecture

Manage requirements linking and traceability (via DOORS)

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NextGEN

DOORS
Requirements Management Tool

- DOORS requirements capabilities
  - Linking – enforces effective systems engineering practices at both program and enterprise levels
  - Traceability – enables V&V at any stage
  - Scripting – provides customizations for V&V
  - Compatibility – interfaces with Enterprise Architecture products for holist systems engineering perspective
- Training being developed
- Centralizing license management and building consistency of use in an integrated environment

FAA

NextGEN

Requirements Management Initiatives

- **Integrated Systems Engineering WG (ISEWG)**
  - Co-champion with NAS Enterprise Architect (ANG-B2)
  - Developed the NAS Integrated Systems Engineering Framework

- **Requirements & Interface Management WG (RIMWG)**
  - Aligned the NAS hierarchy with CM, EA, and NAS Requirements Documents
  - Updated the Program Requirements Document template with CPRs (Critical Performance Requirements)

- **Systems Engineering Manual (SEM) Update**
  - Held 4 workshops to gain stakeholder feedback
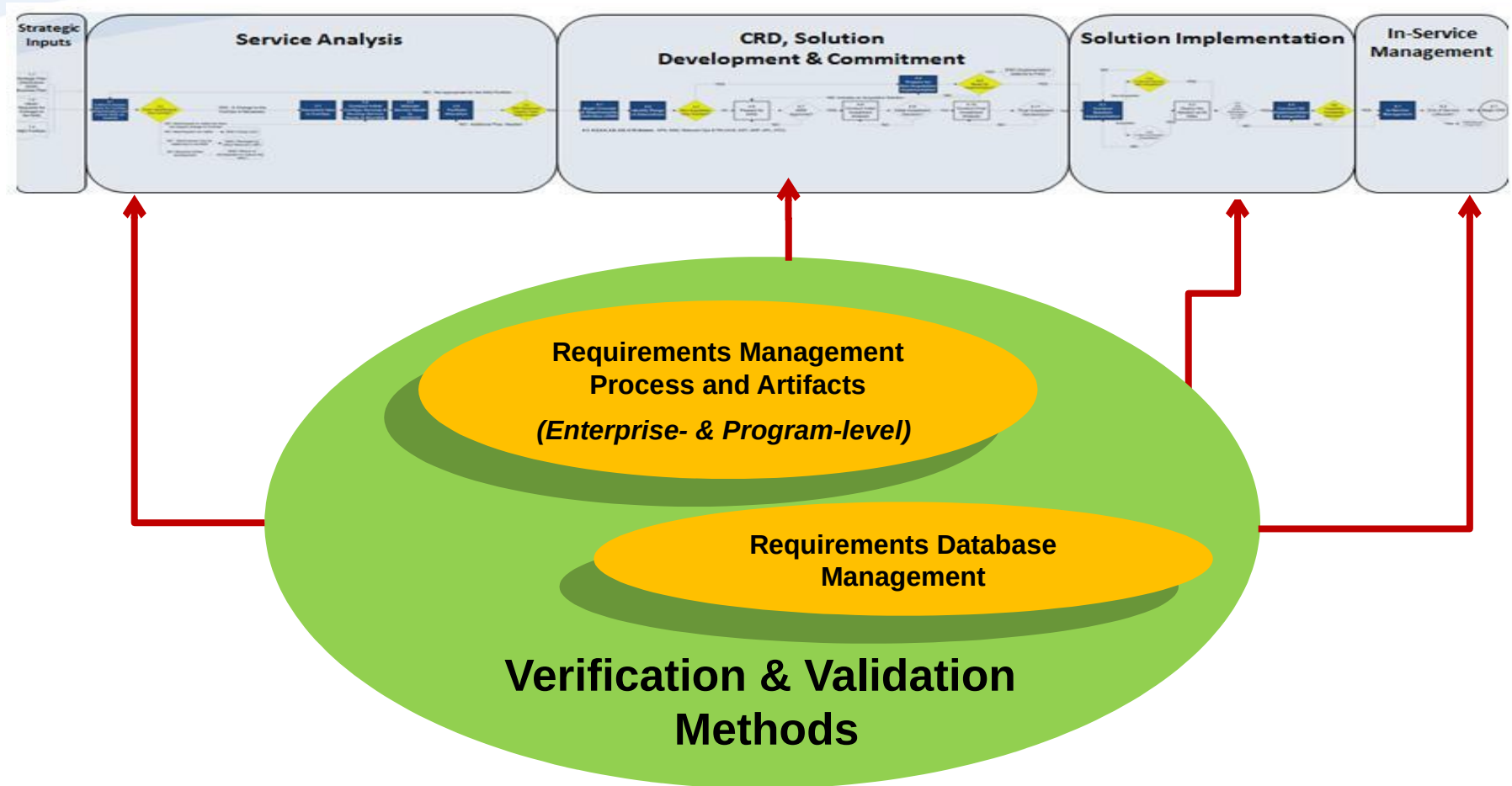 - Publishing an updated SEM in FY2013

Requirements Management Interfaces with I2I Process

Requirements Management V&V in the I2I Process

Summary

The NAS Requirements Services Division exists to help you by providing guidance and support in the following areas:

- NAS Program Requirements
- Requirements Database Management (DOORS)
- NAS-RD-20XX Documents
- NAS SV-1 diagram and hierarchy ("simplified NAS diagram")
- FAA Systems Engineering Manual (SEM)
- Requirements and Interface Management Working Group
- Integrated Systems Engineering Working Group

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