

SE Forum Webinar # 5

Understanding the FAA Boards and Councils

April 1, 2014



Federal Aviation
Administration



Agenda

- Introduction to the Systems Engineering Forum
- Featured presentation:
Understanding the FAA Boards and Councils
- Info on next webinar
- Closing thoughts

Questions? Suggestions? Ideas?
Write to SEForum@faa.gov



Webinar Goals

Participants will learn and better understand the following aspects of several key boards:

- Purpose
- Responsibilities
- Membership
- Importance to Systems Engineers

It is important that systems engineers know how to effectively communicate and work with the boards

FAA Boards and Councils

- **Joint Resources Council (JRC)**
- **Acquisition Executive Board (AEB)**
 - Acquisition System Advisory Group (ASAG)
- **Capital Investment Team (CIT)**
- **NextGen Management Board (NMB)**
- **FAA Enterprise Architecture Board (FEAB)**
 - Technical Review Board (TRB)
 - Architecture Review Board (ARB)
 - Information and Data Advisory Board (IDAB)
- **NAS Configuration Control Boards (CCB)**

Joint Resources Council (JRC)

Presented by

Brandy Ingargiola

JRC Secretariat Senior Engineer, AAP-200



JRC Executive Secretariat Roles

- Facilitates the efforts of service organizations to ensure timely and effective investment decision-making
- Uses AMS-based readiness criteria to evaluate the status of investment initiatives seeking an investment decision before scheduling a JRC decision
- Coordinates JRC meeting dates, arranges logistics and develops meeting agendas
- Manages the electronic JRC process
- Prepares records of decision from JRC meetings, minutes from JRC Acquisition Quarterly Program Review meetings
- Develops and maintains JRC guidance documents and processes

JRC Executive Secretariat Roles (cont'd)

- Provides advisory and liaison support to JRC, Lines of Business, service organizations & stakeholders
- Conducts Familiarization meetings with investment programs seeking investment decisions
- Conducts JRC Workshops to educate the agency personnel on the JRC investment decision-making process
- Conducts bi-weekly meetings with JRC process stakeholder representatives to coordinate the JRC planning calendar and Enterprise Architecture decision point status
- Maintains the official repository of investment decision documentation, records of decision, meeting minutes and assigned action items

JRC Roles and Responsibilities

As outlined in the JRC Charter:

The JRC is the FAA's investment decision-making body charged with the responsibility of approving and overseeing the management of investments regardless of the type of funding appropriation, allocating resources, and establishing program offices chartered with the responsibility of managing approved investments.

- Chaired by the FAA Acquisition Executive (FAE) and ensures compliance with AMS policy
- Approves the annual F&E and R,E & D budgets
- Approves the FAA Enterprise Architecture (EA) on an annual basis and ensures that the investment programs meet the decision dates as outlined in the EA
- Makes investment decisions and baselines the required AMS documents associated with the investment decisions (the APB, final requirements document, Business Case and ISPD at final investment decision)

JRC Roles and Responsibilities (cont'd)

- Makes production decisions and in-service decisions or delegates the approval authority for these decisions to other senior management
- Makes acquisition program baseline change decisions that alter program performance, cost, and schedule baselines during Solution Implementation for approved investments
- Conducts Acquisition Quarterly Program Reviews to manage ongoing investments and operational assets in the NAS and reviews the results of Post Implementation Reviews. Based on the data from these reviews, they may require changes to the investment strategy or the approved program baseline
- Concurs (or non-concurs) with Acquisition Category designations for investment programs approved by the FAE and Acquisition Executive Board (AEB)

The FAE makes the final decision on AMS tailoring requests processed by the AEB

JRC Membership

ACQ-1	Chair: FAA Acquisition Executive (Deputy Assistant Administrator Acquisition and Business Services)
AJO-0	Chief Operating Officer
AVS-1	Associate Administrator for Aviation Safety *
ARP-1	Associate Administrator for Airports
AGC-1	Chief Counsel
ABA-1	Deputy Assistant Administrator Financial Services (Chief Financial Officer)
AIO-1	Deputy Assistant Administrator Information Services (Chief Information Officer)
ANG-1	Assistant Administrator for NextGen
AJM-0	ATO VP of Program Management
APL-1	Assistant Administrator Policy International Affairs and Environment
AJP-C	Director of JPDO

* *Represented by the Deputy Associate Administrator for Aviation Safety*

JRC Readiness System

Watch List

Access at:

https://employees.faa.gov/org/regional_offices/awp/apps/jrcrs/



MyFAA

• Login

Last updated: May 13 2013
[Color Legend](#)

JRC Readiness Watch List
Contact Information

View

Status: Decision Type: Planned Date: EA DP Date:

ACAT: EA Status:

Search JRC:

Reports

Exports

JRC Readiness Table Layout

Program Name	Decision Type	Planned Date	EA Type	EA DP #	EA DP Date	ACAT	PM/Rep	Status	Roadmap	Service Organization
<input type="checkbox"/> IDS-R	BCD	Mar 13, 2013	NAS	898	Mar 2013	4	PM: Juanita Kennedy Rep: John Evans	Active		AJM
<input type="checkbox"/> Northwest Mountain Regional Facility	IARD	May 15, 2013	non-NAS			2FI	PM: Margaretta Bradley	Active	Facilities	
<input type="checkbox"/> Runway Status Lights (RWSL)	BCD	May 15, 2013	NAS	799	Jun 2013	1NI	PM: Claude Jones Rep: Barbara Kratz	Active	Navigation	AJM
<input type="checkbox"/> National Test Equipment Program (NTEP)	FID	Jun 05, 2013	NAS	718	Jun 2013	4VQ	PM: Debora Agnelli POC: Varun Malhotra	Active	Facilities	AJW
<input type="checkbox"/> Fuel Storage Tanks (FST)	FID	Jun 05, 2013	NAS	792	Jun 2013	3VQ	Rep: Sam Swearingen	Active		AJW
<input type="checkbox"/> Energy Management and Compliance (EMC) Program	FID	Jun 05, 2013	NAS	793	Jun 2013	4FI	PM: Mitchell Berman	Active	Facilities	AJW
<input type="checkbox"/> Mobile Assets Management Program (MAMP)	FID	Jun 05, 2013	NAS	745	Jun 2013	4FI	PM: David Joyce, Rep: Lee Hingle, Richard Popp	Active		
<input type="checkbox"/> Power Cable Systems (Formerly Cable Loop, part of Power Systems Sustained Support)	FID	Jun 05, 2013	NAS	741	Jun 2013	3VQ	PM: Pedro Bracero Rep: Sam Swearingen	Active	Facilities	AJW
<input type="checkbox"/> Unstaffed Infrastructure Sustainment (UIS)	FID	Jun 05, 2013	NAS	797	Jun 2013	2FI	PM: Mark Price Rep: Sam Swearingen	Active		AJW
<input type="checkbox"/> Traffic Flow Management System (TFMS) Remote Site Tech Refresh	IARD	Jun 19, 2013		839	Jun 2013	5TR	Rep: Lisa Kemon	Active	Automation	AJM

Acquisition Executive Board (AEB) and Acquisition System Advisory Group (ASAG)

Presented by

Michele Merkle

NAS Systems Engineering Services Office, ANG-B

Acquisition Executive Board (AEB)

Purpose

Primary executive-level corporate FAA body

Assists and supports the FAA Acquisition Executive (FAE) and the JRC in establishing, changing, communicating, and implementing acquisition policy, practices, procedures and tools.

Acquisition Executive Board (AEB)

Responsibilities

Authorizes development and implementation of acquisition management policy, process, practices, procedures, tools, and training at all levels

- Oversees the complete institutionalization of Acquisition Best Practices
- Provides direction and oversight to subordinate boards that affect policy, process, practices, procedures, tools, and training including the Acquisition System Advisory Group (ASAG)
- Defines the criteria for acquisition categories (ACAT) and assigns the ACAT for all acquisition decisions prior to IARD

Acquisition Executive Board (AEB)

Membership

- Chaired by the FAE or his/her designee.
- Acquisition and Business Services (ACQ)
- Acquisition Policy and Oversight (AAP)
- Acquisition and Contracting (AAQ)
- Aviation Safety (AVS)
- En Route and Oceanic Services (AJE) and Terminal Services (AJT)
- Operations (AJN) and Financial Services (ABA)
- Information Services/Chief Information Office (AIO/CIO)
- NextGen (ANG) and Regions and Centers (ARC)
- System Operations Services (AJR)
- Technical Operations Services (AJW)
- Office of the Chief Counsel (AGC) will be consulted as needed

Acquisition Executive Board (AEB)

Importance to Systems Engineers

- Can benefit from knowing what the AEB focuses on if they plan on making recommendations to change the acquisition process.
- May have to brief AEB to get ACAT determination.

Acquisition System Advisory Group (ASAG)

Purpose

Perform configuration management of the AMS by developing, approving, and updating acquisition management and procurement policy and guidance

Acquisition System Advisory Group (ASAG)

Responsibilities

- Identify opportunities for improvement, as well as problems, weaknesses, inconsistencies, etc., in the AMS and initiate appropriate corrective action.
- Consult and coordinate with Service Organizations, Lines of Business stakeholders and other management teams, regarding change proposals.
- Provide a focal point for discussion of AMS policy and guidance topics.

Acquisition System Advisory Group (ASAG)

Membership

Chaired by the Manager, Acquisition Policy Division.

Core members come from the following organizations:

AAP-100	ANG-D23	AJM-0
AAP-130 (2 Members)	AAP-200	AFS-6
AJM-213	AJI-311	AFI-400
AJW-136	ASP-130	AFA-100
ACG-520	AMQ-1	

Note: Data taken from the 2014 ASAG charter

Acquisition System Advisory Group (ASAG)

Importance to Systems Engineers

- SEs need to work with ASAG to implement proposed changes to the AMS Policy and Guidance
- The AMS Change Manager forwards the change to the Acquisition Executive Board for review and concurrence

Capital Investment Team (CIT)

**Presented by
Michael Hritz**

NAS Enterprise Architecture Division, ANG-B2

Capital Investment Team (CIT)

Purpose

- Prepare capital budgets for the FAA
- Provide independent assessments of Facilities and Equipment (F&E) Capital projects

Capital Investment Team (CIT)

Responsibilities

- Ensure the FAA capital resources are allocated to acquire and support projects within FAA priorities
- Examine and decide whether changes to requirements, product design, and other system features are technically feasible, cost-effective and to be pursued.
- The assessments involve comprehensive reviews based on cost, schedule and performance of projects.
- Specific attention is given to the **objectives** of the program, the **need** for the project, and the corporate review to ensure the project is **not duplicating efforts**.

Capital Investment Team (CIT)

Membership

- Director, Investment Planning and Analysis (AFI-001)
- Manager, Capital Budget Formulation (ABP-340)
- Chief Scientist – Architecture and NextGen Dev. (ANG-3)
- NAS Chief Architect (ANG-B2)
- Deputy Vice President, Program Management Organization (AJM-0)
- Director, Operational Concepts & Requirements (AJV-&)
- Director, Air Traffic Control Facilities (AJW-2)
- COO – Senior Technical Advisor (AJO-0)
- Manager, Flight Technologies and Procedures Division (AFS-400)

Capital Investment Team (CIT)

Importance to Systems Engineers

- Crucial to be aware of the organization that controls the budget!
- The CIT decides when and if changes to requirements, product design, and other system features are technically feasible and cost-effective

NextGen Management Board (NMB)

**Presented by
Michele Merkle**

NAS Systems Engineering Services Office, ANG-B

NextGen Management Board (NMB)

Purpose

Develop and execute the FAA's NextGen Plan through an enterprise-wide approach

NextGen Management Board (NMB)

Responsibilities

- Approve updates to NAS Concepts of Operations
- Approve NAS Segment Implementation Plan
- Approve NAS operational capabilities including goals, objectives, and performance targets
- Approve alignment of NAS investments to operational capabilities
- Approve capture teams for operational capabilities
- Conduct portfolio review for operational capabilities
- Approve Operational Capability Integration Plans.

NextGen Management Board (NMB)

Membership

- Chair: Deputy Administrator
- Policy, International Affairs and Environment
- Airports
- Commercial Space Transportation
- JPDO
- ATO Chief Operating Officer
- NextGen Office
- Chief Counsel
- Finance and Management
- Aviation Safety
- Regions and Center Operations

NextGen Management Board (NMB)

Importance to Systems Engineers

- Manages cross-agency issues concerning NextGen
- May have to brief NMB on issues affecting NextGen plans

FAA Enterprise Architecture Board (FEAB)

Presented by

Michele Merkle

NAS Systems Engineering Services Office, ANG-B

FAA Enterprise Architecture Board (FEAB)

Purpose

The FEAB governs and administers the FAA Enterprise Architecture:

- NAS Architecture
- Non-NAS Architecture

FAA Enterprise Architecture Board (FEAB)

Responsibilities

- Administer the FAA enterprise architecture
- Ensure EA adheres to Federal EA requirements
- Align IT decisions with agency business and investment strategies; Minimize redundancy, foster standardization, and promote reuse
- Provide annual architecture approval recommendations to the JRC
- Endorse service analysis results and make determination on CRD readiness
- Champion enterprise architecture throughout FAA

FAA Enterprise Architecture Board (FEAB)

Membership

- FAA Chief Technology Officer (ARD-1) and the NextGen Director of the Office of NAS Systems Engineering Services (co-chairs)
- Air Traffic Organization: Chief Operating Officer
- Asst. Administrator for Finance and Management
 - Dep. Asst. Administrator for Information Services/Chief Information Officer
 - Dep. Asst. Administrator for Financial Services/Chief Financial Officer
 - Dep. Asst. Administrator for Acquisition and Business Services/Chief Acq. Officer
- Asst. Administrator for Next Generation Air Transportation System NextGen
- Chief Counsel
- Asst. Administrator for Aviation Safety
- Asst. Administrator for Airports
- Asst. Administrator for Human Resource Management
- Asst. Administrator for Security & Hazardous Materials
- Asst. Administrator for Policy, International Affairs, and Environment

FAA Enterprise Architecture Board (FEAB)

Importance to Systems Engineers

- Reviews and assesses EA products
 - JRC delegates the architecture review of FAA investments to the FEAB
- Approves roadmaps that guide the agency toward the target enterprise architecture

**Technical Review Board (TRB)
Architecture Review Board (ARB)
Information and Data Advisory
Board (IDAB)**

**Presented by
Michael Hritz**

NAS Enterprise Architect, ANG-B2

Technical Review Board (TRB)

Purpose

Works with the lines of business to time-phase operational improvements and operational sustainment in the NAS architecture roadmap.

Technical Review Board (TRB)

Responsibilities

- Conduct and submit Strategic Cases to the FEAB
- Provide the forum for resolving cross-cutting implementation and transition issues between Program Offices
- Lead the development of technical NAS EA content
- Provide assessments of the technical implications of budget and schedule decisions to the FEAB
- Review and recommend NASEA technology initiatives, etc. for FEAB approval
- Review and approve the configuration control of NASEA technical changes
- Support the FEAB in ensuring that the EA accurately reflects the current and desired technical content for standards, systems, and system infrastructure of the enterprise

Technical Review Board (TRB)

Membership

- Chief Scientist – Architecture and NextGen Development
- NAS Chief Architect
- AVS NAS Chief Architect
- FAA Chief Architect
- ATO Representative - Air Traffic Systems
- ATO Representative - Enterprise Services
- ATO Representative - Systems Integration and Requirements Analysis
- JPDO Chief Architect
- Director of Investment Planning and Analysis
- Office of Airports

Technical Review Board (TRB)

Importance to Systems Engineers

- Normally this is the first board to which the SE presents a justification for a change in systems engineering practices or documents
- The TRB performs the technical tasks for the FEAB

TRB approved the latest revision of the Systems Engineering Manual (SEM) on 3/21/14!

FAA SEM 1.0 is available from the NAS EA Portal

nasea.faa.gov

Architecture Review Board (ARB)

Purpose

- Oversee the technical content of the **non-NAS** EA
- Work with the lines of business to prioritize non-NAS service shortfalls and needs

Responsibilities

- Review and analyze non-NAS architecture submissions

Membership

- Membership is pending a consolidation into IT Shared Services

Importance to Systems Engineers

- Corresponds to the TRB for non-NAS systems engineering issues

Information and Data Advisory Board (IDAB)

Purpose

- Implement FAA information and data management policies to support the FAA's emerging net-centric environment.

Mission

- Provide oversight and resolve issues related to the Information and Data Management Program, which encompasses FAA information and data standards and architectures, lexicons, vocabularies, and data dictionaries;
- Identify and resolve standardization and interoperability issues related to FAA data;
- Serve as a conduit for information and coordination within the FAA multi-organization community; and
- Provide recommendations on net-centric standards as assigned to it by the EABs.

FAA Order 1375.1E Information/Data Management Appendix A: Charter for the FAA Information and Data Advisory Board



Information and Data Advisory Board (IDAB)

Responsibilities

- Standardization of the lexicons and vocabularies used in the representation, exchange, and analysis of information and data shared across all FAA lines of business and service organizations
- Identification and development of FAA Information and Data architecture
- Maintenance of corporate information management tools and services

Information and Data Advisory Board (IDAB)

Membership

Co-chairpersons:

- NextGen Director of the Office of Engineering Services
- FAA Chief Technology Officer

Executive Secretary: The Office of the Chief Technology Officer will provide the executive secretary and will oversee the coordination of IDAB activities

Permanent Members represent various FAA organizations

Information and Data Advisory Board (IDAB)

Importance to Systems Engineers

- Know and use the FAA policies and information management best practices in order to successfully engineer for exchange and interoperability
- Know which organization resolves data exchange and information management issues

Information and Data Advisory Board (IDAB)

Importance to NextGen

- NextGen is about greater sharing of data and information... All of these technologies are about sharing and using information more effectively.
- NextGen is not about compartmentalized sectors thinking about their piece of the puzzle. It is about holistic thinking – seeing all the moving parts and having greater situational awareness in the air and on the ground. As one of our FAA technical advisors likes to say, *“Information is the coin of the realm in NextGen.”*

Quotes from FAA Administrator Michael Huerta

Configuration Control Boards

Presented by
James Winbush, ANG-B3



Configuration Control Boards (CCB)

Purpose

- Establish configuration management baselines
- Review and acting upon changes to baselines
- Decide whether proposed changes to requirements, product design, and other system features are technically feasible and cost-effective
- Make Configuration Control Decisions

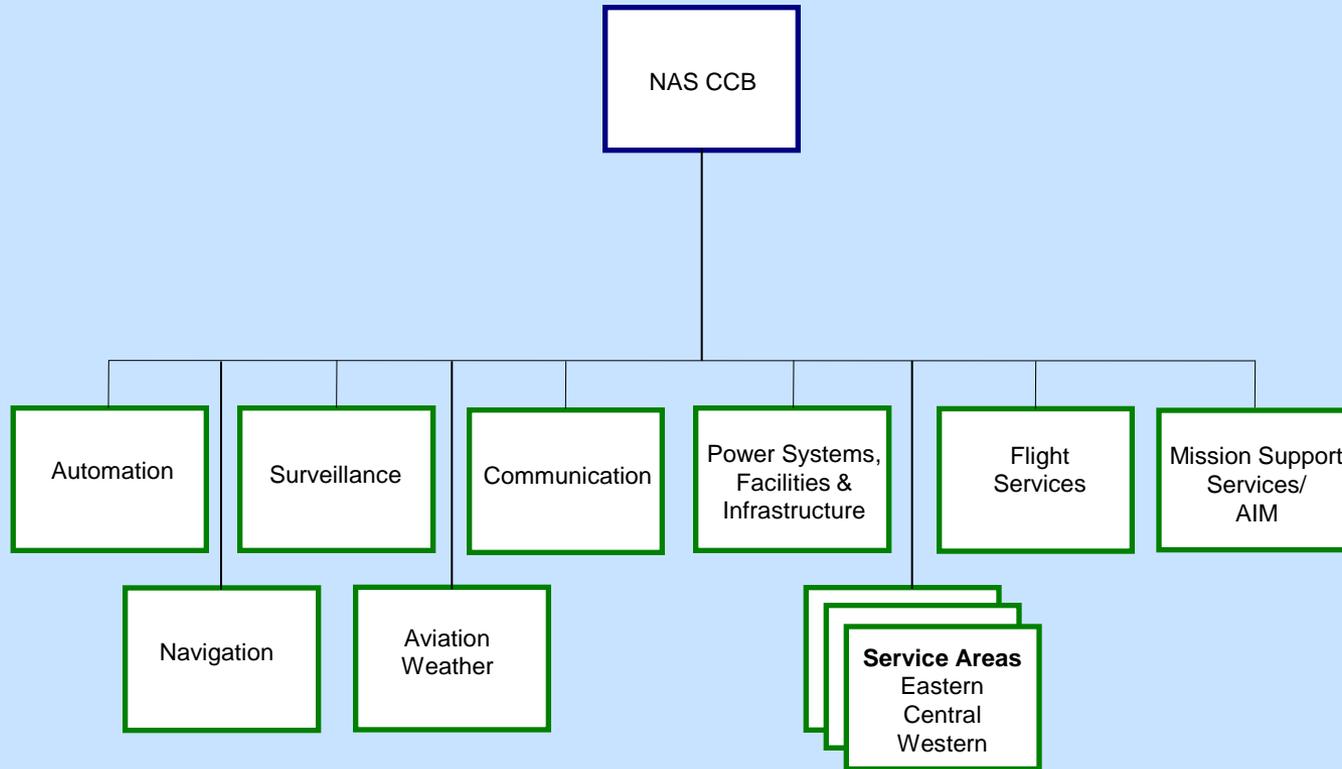
Configuration Control Boards

Responsibilities

The NAS CCB is the senior control board responsible for establishing and maintaining the NAS-level baseline and controlling changes to the NAS in concert with subordinate level CCBs:

- NAS-level Requirements
- Standards
- Interface Requirements Documents
- Interface Control Documents that have no parent IRD
- Interface connections between the NAS and prototypes or non-NAS systems
- Approving subordinate CCB Charters

CCB Structure



Configuration Control Boards (CCB)

Membership

NAS CCB is co-chaired by NextGen and ATO and comprised of organizations that are impacted by changes to the NAS infrastructure

Further details may be found in the NAS CCB Charter and subordinate CCB Charters

Configuration Control Boards (CCB)

Importance to Systems Engineers

Configuration Management is “a management process for establishing and maintaining consistency of a product’s performance, functional and physical attributes with its requirements, design, and operational information throughout its life.”

- NAS System Engineering Manual and FAA Order 1800.66

Configuration Control Boards (CCB)

Importance to Systems Engineers (cont'd)

Systems engineering is concerned with the transition from a need, to requirements definition, to a fully-defined system configuration ready for production and subsequent use... this iterative process of analysis, synthesis, evaluation, and design refinement leads initially to the establishment of the functional baseline, then the allocated baseline, and finally the product baseline. A good description of these configuration baselines, combined with a disciplined approach to baseline management, is essential for the successful implementation of the system engineering process."

[Blanchard, B. *System Engineering and Analysis*. 3rd edition. New York, NY: John Wiley & Sons, Inc., 1998.]

Q&A

Thank you for attending!

**Next webinar will be in 2-3 months,
always on the first Tuesday of a month**

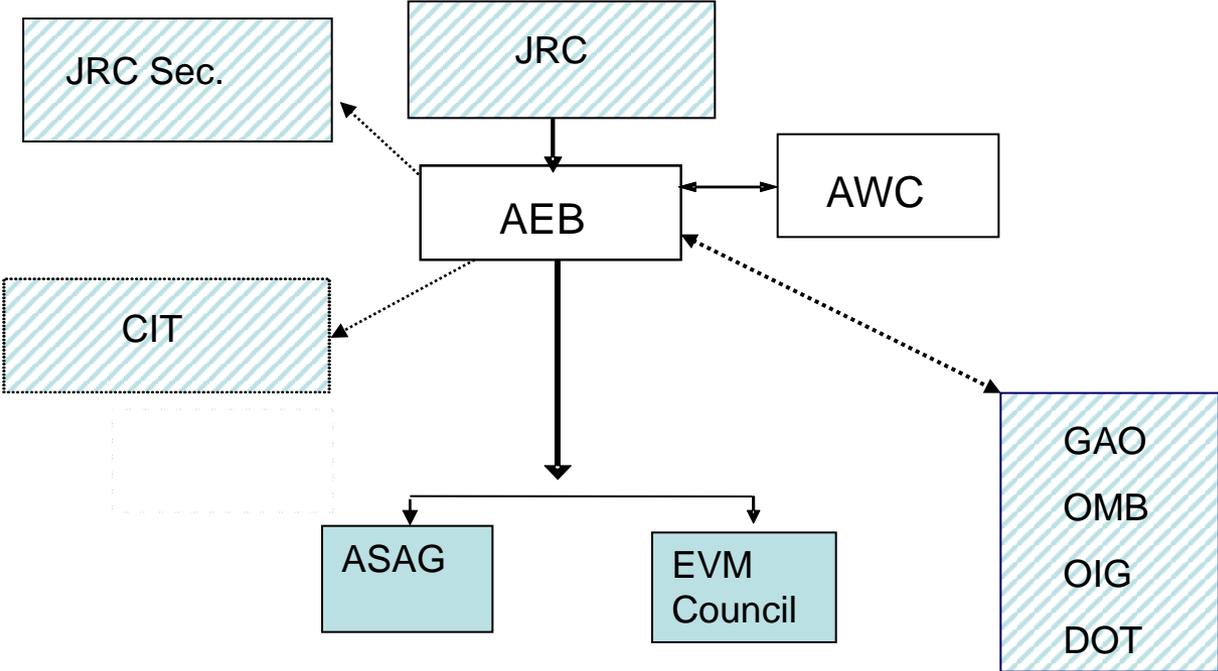
**Questions? Suggestions? Ideas?
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Backup Materials



Organizational Relationships



-  .. Organizations that use products whose format and granularity is governed by the AEB
-  .. Organizations that develop policy and practice that is governed by the board

Technical Review Board (TRB)

Presented by: Mike Hritz

Purpose

Works with the lines of business to time-phase operational improvements and operational sustainment in the NAS architecture roadmap.

Importance to SEs

Recommend

Responsibilities

Supports the FEAB in ensuring that the EA accurately reflects the current and desired technical content for standards, systems, and system infrastructure of the enterprise.

Membership

Architecture Review Board (ARB)

Purpose

- Oversee the technical content of the non-NAS EA
- Work with the lines of business to prioritize non-NAS service shortfalls and needs

Responsibilities

- Review and analyze non-NAS architecture submissions

Membership

- FAA Chief Enterprise Architect
- Financial Services (ATO)
- Financial Services (AFN)
- Acquisition and Business Services
- Information Services (Information Security)
- Regional and Center Operations
- Aviation Safety Services
- Human Resource Services
- Airport Services
- Security Services (ASH)
- NAS EA Engineering Services Liaison

Importance to SEs Recommend