DoW Business Enterprise Architecture Guidebook

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Version 1.0

EXECUTIVE SUMMARY

The Department of War (DoW) operates one of the most complex business environments in the world, supported by thousands of systems across personnel, logistics, financial management, acquisition, training, and other essential functions. Without a shared structure, these systems naturally drift toward fragmentation, duplication, and misalignment—driving cost, reducing interoperability, and limiting leaders' ability to manage the enterprise as a whole. The Business Enterprise Architecture (BEA) exists to address this challenge by providing a common blueprint for how business processes, data, systems, and investments align to mission outcomes.

This guidebook establishes a practical, federated approach for implementing and using the BEA across the Department. It defines a three-layer model in which the DoW Chief Information Officer (CIO) sets authoritative enterprise standards and reference models, Principal Staff Assistant (PSA)-level Functional Sponsors translate those standards into mission-usable domain architectures, and Components tailor and implement solutions within their operational environments while remaining connected to the enterprise baseline. The BEA is structured around core models and anchored by real work elements such as operational activities and statutory requirements. It is operationalized through an integrated tooling ecosystem, with the Enterprise Knowledge Repository (EKR) servicing as the authoritative architecture repository and the War Data Platform (WDP) enabling enterprise-wide analytics and decision insight.

The BEA described here is not a compliance exercise; it is a leadership tool. When applied consistently, it informs investment decisions, strengthens Defense Business System (DBS) certification, guides modernization, supports portfolio rationalization, and improves data governance and operational performance. Governed through established forums and continuously updated as missions and technologies evolve, the BEA becomes a living capability that helps the Department reduce duplication, improve alignment, and modernize with intent, ultimately enabling stronger mission outcomes across the Enterprise.

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1. INTRODUCTION

The DoW relies on thousands of interconnected business systems to manage missions as diverse as personnel, logistics, finance, acquisition, and training. Without a unifying framework, these systems risk becoming fragmented, redundant, and misaligned with strategic priorities. The DoW BEA provides that framework. It is the Department's authoritative guide and blueprint for ensuring business processes, data, and systems align to support the warfighter and the enterprise.

The BEA ensures every business system investment serves a purpose, connects to the right processes, uses authoritative data, and adheres to standards that guarantee interoperability. It empowers leaders to see across the enterprise, compare options, and make choices based on mission priorities rather than isolated system needs.

This guidebook explains how the BEA is structured, who is responsible for it, and how it should be applied to support data-driven decision-making. It is built on a federated model where the Enterprise provides the architectural framework and PSA-level Functional Sponsors and Components tailor the architecture to their specific missions. This document is for PSA-level Functional Sponsors, Component CIOs, architects, program managers, and acquisition professionals who play a role in shaping and managing the DoW's business systems ecosystem.

2. PURPOSE OF THE GUIDEBOOK

The purpose of this guidebook is to provide the DoW with clear, practical, and consistent guidance on how to develop, maintain, and apply the BEA. Two primary authorities guide the development and implementation of the BEA: the Clinger-Cohen Act, which requires enterprise architectures for sound investment decisions, and Title 10 U.S.C. § 2222**,** which mandates that every DBS be integrated into a comprehensive DoW BEA. Together, these authorities ensure DoW leadership has a clear and transparent line of sight from mission requirements to the systems that support them. Specifically, this guidebook:

- ✓ **Defines the Framework:** Explains the federated structure of the BEA and how the architecture is scoped, defined, developed, and used across the Enterprise.
- ✓ **Establishes Roles and Responsibilities:** Outlines who owns, develops, and maintains different parts of the BEA, ensuring accountability at the Enterprise, Domain, and Component levels.
- ✓ **Serves as a Practical Toolbox:** Provides suggested artifacts, tools, and data considerations to serve as the foundation for a useful DoW BEA.
- ✓ **Drives Transformation and Modernization:** Positions the BEA as a strategic enabler for data-driven decision-making in key areas, including:
    - **System Consolidation:** Identifying redundant systems and IT for potential consolidation.
    - **IT Portfolio Management:** Providing visibility into IT spend to optimize investments.

- **Performance Management:** Enabling the measurement of business operations and supporting Business Process Reengineering (BPR).

By setting out this purpose, the guidebook ensures the BEA is understood as both a governance requirement and a strategic enabler that connects investments to mission priorities, reduces duplication, and ensures DoW's business systems deliver lasting value to the Department and Warfighter.

3. STRATEGIC CONTEXT AND VALUE

The BEA is both a statutory requirement and a strategic enabler. It ensures that the Department's business systems are aligned with mission priorities, interoperable across Components, and accountable to Congress and the public. Before turning to the framework itself, it is important to understand the context that mandates the BEA and the value it provides.

The BEA is grounded in law and policy. Title 10 U.S.C. § 2222 requires business system investments to align with enterprise architecture before funds are obligated. DoDD 5144.02 designates the DoW CIO as responsible for enterprise architecture. DoDI 5000.75 and 5000.87 mandate alignment during acquisition, while DoDI 5000.97 links architecture directly to digital engineering. Together, these directives make the BEA a legal obligation.

Most importantly, the BEA ensures business systems directly support readiness. By standardizing processes, enforcing data quality, and enabling interoperability, it reduces delays in recruiting, equipping, paying, and sustaining the force—translating into a better-prepared and supported warfighter.

The BEA is both mandatory and mission critical. It connects statutory requirements to operational outcomes, providing a framework that improves compliance, strengthens accountability, and accelerates modernization.

4. BEA FEDERATED FRAMEWORK & STRUCTURE

The BEA is organized as a federated framework, meaning it is not a single, centrally managed model, but a layered architecture that distributes authority and responsibility across the Department. This design recognizes the scale and complexity of DoW's business mission area: no one office can capture every process, data element, or system, yet the Department still requires a unifying structure to ensure interoperability, accountability, and compliance. The federated model balances these realities by combining enterprise direction with domain expertise and Component-level execution. The federated BEA consists of three layers:

- **DoW Enterprise Layer**: Led and managed by the DoW CIO, the DoW Enterprise layer sets the foundation for the DoW BEA. This layer defines the architectural elements that must be consistent across all organizations.

- **Functional Domain Architectures**: Managed by PSA-level Functional Sponsors, these architectures represent business functional areas (e.g., financial management, human resources, logistics) that span across Components. Functional domain architectures recognize that business outcomes do not belong to a single Component, rather they span multiple organizations and systems.
- **DoW Component Architectures**: Managed and led by DoW Components, these architectures tailor the BEA to reflect local missions, organizational needs, and system portfolios. Component Architectures do not replace enterprise or functional domain architectures; they connect to them through mapping and traceability.

Together, these layers form a hierarchy of alignment: enterprise sets the rules, domains translate them into functional terms, and Components implement them in systems and operations. Figure 1 shows the relationship between the Enterprise, Functional Domain, and DoW Component layer.

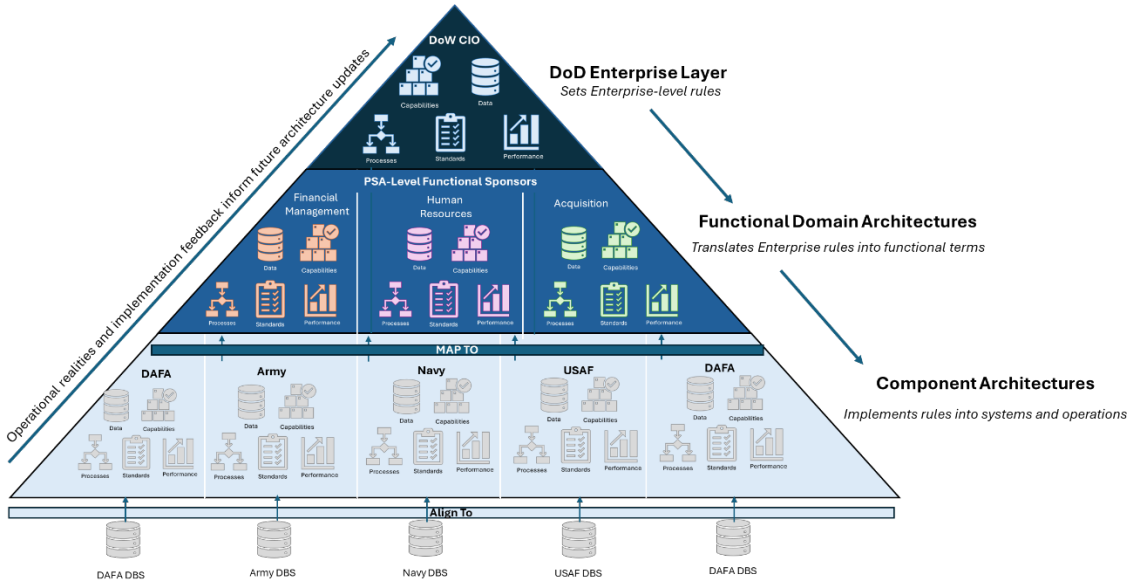

Figure 1 - Federated Model

Across the Enterprise, Domain, and Component architectures, the BEA uses the same set of Core Reference Models to enable each architecture to connect. The Core Reference Models are:

- **Capabilities**: What outcomes must be delivered
- End-to-End (E2E) Processes: How work is performed
- **Data**: What information is used and shared
- **Standards**: Technical, business, and interoperability rules
- **Performance**: How success is measured

What changes across each layer is not the model types, but rather the level of detail. The Enterprise Layer defines the Core Reference Models at a high level, Functional Domain

Architectures decompose and contextualize them, and Components implement them in systems and operations.

Core Reference Models provide structure, but structure alone does not make architecture usable. In a federated environment, architecture only works when grounded mission, operational reality, and legal authority. This is the role of Contextual Reference Elements. The two primary contextual elements are:

- **Operational Activities (OAs)**: Describes the work required to execute processes.
- **Laws, Regulations, and Policies (LRPs)**: The legal and policy foundation that explain why capabilities exist, why processes must function in certain ways, and why systems must enforce certain constraints.

This structure ensures that the Department does not create a single monolithic architecture that no one can implement or independent architectures that cannot be compared or governed.

5. FEDERATED BEA IMPLEMENTATION

Implementing the BEA requires coordination across the DoW Enterprise Layer, Functional Domain Architectures, and DoW Component Architectures. Each layer has distinct responsibilities, but the true value comes from how they work together. This section describes how to implement each layer and then discusses how each layer connects, ensuring the BEA is authoritative, enforceable, and mission relevant.

5.1 BEA ENTERPRISE LAYER IMPLEMENTATION. The implementation of the BEA can be understood through five key activities:

- Establishing core reference models
- Establishing contextual elements
- Governance
- Tools
- Feedback

5.1.1 ESTABLISH CORE REFERENCE MODELS. The Core Reference Models are the backbone of the BEA. They provide the basic "building blocks" for describing how the Department does business, manages data, and measures performance. Table 1 provides plain-language definitions of each Core Reference Model, indicates whether the model is part of the architectural baseline that allows the BEA to be usable, clarifies roles and responsibilities using a Responsible, Accountable, Consulted, and Informed (RACI) alignment, and establishes where the responsible party will implement the model. Appendix E contains a list of DoDAF artifact options that can be used to support specific architectural requirements.

Model	Required Baseline	Definition	RACI Roles	Implemented Through
Enterprise Capability Model	X	Defines what the Department must be able to do (e.g., readiness, hire, procure), organized into a capability hierarchy.	**Responsible**: DoW CIO **Accountable**: DoW CIO **Consulted**: PSA-Level Functional Sponsors (mission expertise) **Informed**: Components (implementation)	Modeled and maintained in EKR
Enterprise Process Model	X	Defines how work is carried out in terms of L0-L1 E2E processes (e.g., Hire to Retire)	**Responsible**: DoW CIO **Accountable**: DoW CIO **Consulted**: PSA-Level Functional Sponsors (mission expertise) **Informed**: Components (implementation)	Modeled and maintained in EKR
Enterprise Data Model	X	Defines standard data elements and authoritative data sources (ADS), ensuring consistency and auditability.	**Responsible**: DoW CIO **Accountable**: DoW CIO **Consulted**: PSA-Level Functional Sponsors (domain data) **Informed**: Components (system compliance, ADS use)	Maintained in EKR; used by the WDP to structure data integration
Enterprise Standards Profile	X	Lists technical, business, and interoperability standards that systems must follow.	**Responsible**: DoW CIO **Accountable**: DoW CIO **Consulted**: PSA-Level Functional Sponsors (mission-specific standards) **Informed**: Components (system/application adherence)	Maintained in EKR; used to assess alignment
Enterprise Performance Model	X	Identifies measures and key performance indicators (KPI) to assess effectiveness of processes and investments.	**Responsible**: DoW CIO **Accountable**: DoW CIO **Consulted**: PSA-Level Functional Sponsors (mission measures) **Informed**: Components (system reporting, KPI alignment)	Defined in EKR; tracked and visualized within the WDP

Table 1 - Enterprise Layer Core Reference Model

5.1.2 DEFINE CONTEXTUAL REFERENCE ELEMENTS. Contextual elements make the enterprise architecture real and enforceable. OAs serve as the bridge, connecting enterprise-level models to Component-level implementation. LRPs are maintained at the Enterprise layer and mapped to relevant capabilities, operational activities, and processes to ensure business operations align to statutory requirements. Table 2 below describes each contextual element, whether it's required as part of the architectural baseline, its definition, RACI roles, and how responsible parties implement it within the BEA tool ecosystem.

Element	Required Baseline	Definition	RACI Roles	Implemented Through
Enterprise OA Hierarchy	X	Provides detailed descriptions of the work performed in processes; serve as the link between enterprise models and system design.	**Responsible:** PSA-level Functional Sponsors (domain activity definitions) **Accountable:** DoW CIO **Consulted:** DoW CIO (for enterprise alignment) **Informed:** Components (implement activities in workflows/systems)	Modeled and maintained in EKR
Enterprise LRP Registry	X	Supply the legal and policy foundation; mapped directly to capabilities, processes, operational activities to demonstrate compliance.	**Responsible:** PSA-level Functional Sponsors **Accountable:** DoW CIO **Consulted**: N/A **Informed:** Components (apply LRPs in workflows, certifications, modernization)	Maintained in EKR; supports traceability for governance and oversight

Table 2 - Enterprise Layer Contextual Reference Model

5.1.3 GOVERNANCE AND OVERSIGHT. The DoW CIO leverages the Defense Business Council (DBC), DBS Cross Functional Board (CFB), and the BEA Working Group (WG) to review, approve, and update enterprise-level models. PSA-level Functional Sponsors and Components participate in these forums, ensuring that the Enterprise layer incorporates both domain expertise and operational realities. Oversight bodies rely on the outputs to validate compliance, creating accountability from enterprise vision down to Component execution.

5.1.4 TOOLS AND REPOSITORIES. The DoW CIO uses the Army's EKR environment as the authoritative repository for the DoW BEA. Active DBS within the Defense Information Technology Portfolio Repository (DBS) align to BEA within the IT Portal or via DoW Component capabilities. The WDP ingests BEA alignment data to provide leaders, PSA-level Functional Sponsors and Components visibility into how the architecture is applied and used to inform portfolio decisions across portfolios.

5.1.5 CONTINUOUS FEEDBACK AND EVOLUTION. The DoW Enterprise Layer is where the BEA begins, but it is not static. It is continuously refined through collaboration between the DoW CIO, PSA-Functional Sponsors, and Components, ensuring that enterprise layer remain authoritative, practical, and enforceable. By linking Core Reference Models with Contextual Reference Elements and maintaining them through governance and feedback, the Enterprise Layer provides the single source of truth that underpins the entire federated BEA.

5.2 BEA FUNCTIONAL DOMAIN ARCHITECTURE IMPLEMENTATION. The Functional Domain Layer, managed by PSA-level Functional Sponsors, provides the mission translation of the BEA. It extends the Enterprise layer into the DBS Functional Areas, ensuring that core reference models and contextual reference elements meet domain needs. Functional Sponsors shape and maintain these architectures with mission expertise, Components validate them through operational realities, and the DoW CIO ensures consistency with the enterprise baseline. Together, these roles create an integrated framework that connects enterprise direction with mission execution.

5.2.1 EXTENDING CORE REFERENCE MODELS. The Core Reference Models remain the backbone of the BEA but require domain-specific detail to be actionable. PSA-level Functional Sponsors extend the Enterprise layer into their mission areas. At the domain level, these models provide the necessary detail to connect enterprise direction with operational execution. PSA-level Functional Sponsors develop and publish these extensions in close coordination with the DoW CIO (to maintain enterprise alignment) and with Components (to ensure practical applicability). Table 3 describes each core reference model, whether the model is required as part of the BEA baseline, its definition, RACI roles, and how the model is implemented within the BEA tooling ecosystem. Appendix E contains a list of DoDAF artifact options that can be used to support specific architectural requirements.

Model	Required Baseline	Definition	RACI Roles	Implemented Through
Domain Capability Model	X	Breaks down enterprise capabilities into domain-specific hierarchies that define mission functions.	**Responsible:** PSA-level Functional Sponsors **Accountable:** PSA-level Functional Sponsors **Consulted:** DoW CIO (enterprise traceability) **Informed:** Components (implementation)	Modeled in EKR and explicitly mapped to Enterprise layer capabilities

Model	Required Baseline	Definition	RACI Roles	Implemented Through
Domain Process Models	X	Adds detail to enterprise E2E processes to define how work is performed within the domain	**Responsible:** PSA-level Functional Sponsors **Accountable:** PSA-level Functional Sponsors **Consulted:** DoW CIO (enterprise traceability) **Informed:** Components (implementation)	Modeled in EKR and connected to L0-L1 E2Es
Domain Data Model	X	Defines domain-specific data standards and clarifies ADS usage	**Responsible:** PSA-level Functional Sponsors **Accountable:** PSA-level Functional Sponsors **Consulted:** DoW CIO **Informed:** Components	Captured in EKR; informs WDP data integration logic
Domain Standards Profile	X	Establishes domain-specific rules and formats, aligned with enterprise standards.	**Responsible:** PSA-level Functional Sponsors **Accountable:** PSA-level Functional Sponsors **Consulted:** DoW CIO **Informed:** Components	Governed in EKR and used during portfolio reviews
Domain Performance Model	X	Defines domain KPIs to measure mission outcomes and effectiveness.	**Responsible:** PSA-level Functional Sponsors **Accountable:** PSA-level Functional Sponsors **Consulted:** DoW CIO **Informed:** Components	Defined in EKR

Table 3 - Functional Domain Architecture Core Reference Model

5.2.2 APPLYING CONTEXTUAL REFERENCE ELEMENTS. At the domain level, enterprise LRPs are interpreted in the context of specific missions. PSA-level Functional Sponsors identify how requirements such as financial accountability, acquisition statutes, or personnel policies apply to their domains. These are mapped to relevant architectural models (e.g., E2E processes, operational activities), ensuring compliance is visible not only at the enterprise level but within the processes that drive mission execution. Table 4 highlights the required contextual reference element, its definition, RACI roles, and implementation methodology.

Element	Required Baseline	Definition	RACI Roles	Implemented Through
LRPs	X	Interpret statutes and policies specific to the domain and embed them directly into models for compliance traceability.	**Responsible:** Functional Sponsors **Accountable:** Functional Sponsors **Consulted:** DoW CIO **Informed**: Components	Maintained in EKR; ensures consistent applicable across Components

Table 4 - Functional Domain Architecture Contextual Reference Elements

5.2.3 GOVERNANCE AND COLLABORATION. PSA-Level Functional Sponsors lead governance within their domains to review, validate, and update domain models. Components contribute operational insight, while the DoW CIO ensures traceability to the enterprise through the BEA WG. Each oversight body relies on these outputs to confirm compliance and alignment, providing accountability from enterprise vision through domain architecture to Component implementation.

5.2.4 TOOLS AND REPOSITORIES. PSA-Level Functional Sponsors store domain architectures in EKR alongside enterprise content and ensure that domain extensions are visible, traceable, and connected to enterprise baselines. Data is ingested into the WGP to enable portfolio reviews, audits, and modernization planning.

5.2.5 CONTINUOUS FEEDBACK AND REFINEMENT. Domain architectures evolve as mission requirements and systems change. PSA-level Functional Sponsors collect feedback from Components, refine their models, and coordinate with the CIO to update enterprise layer where necessary. This ensures the architecture remains relevant and practical while preserving enterprise alignment.

5.3 BEA DOW COMPONENT ARCHITECTURES IMPLEMENTATION. DoW Component Architectures, managed by Component CIOs and Program Managers, bring the BEA to life in operational systems and portfolios. These architectures apply and tailor enterprise and domain guidance to the realities of Component missions, ensuring that investments remain interoperable, compliant, and mission-effective.

The content of this layer includes mission-based Component architectures as well as the application of Core Reference Modes and Contextual Elements from the Functional Domains and Enterprise layers. The Component Architectures must be applied and mapped back to the Enterprise Layer and Functional Domain Architectures to ensure local execution connections directly to Enterprise direction and mission requirements.

5.3.1 APPLYING CORE REFERENCE MODELS. At the Component level, CIOs and Program Managers both define and apply core reference models to reflect Component-specific realities. Table 5 depicts mapping requirements between the DoW Component layer and the Functional Domain and Enterprise Layers. It does not address the full range of architectural models that can or should exist within a DoW Component architecture, rather, it focuses on the

minimum requirements to demonstrate application of the Enterprise Layer and Functional Domain Architectures.

Model	Required	Definition	RACI Roles	Implemented Through
Capability Model	System-to Capability Mapping	Map Component architectures, systems, and portfolios to enterprise and domain capabilities.	**Responsible:** Program Managers **Accountable:** Component CIOs **Consulted**: Functional Sponsors **Informed:** DoW CIO	Maintained in EKR or by Components; used by WDP
Process Model	System to Process Mapping	Align Component workflows and system functions with enterprise/domain E2E processes.	**Responsible:** Program Managers **Accountable:** Component CIOs **Consulted:** Functional Sponsors **Informed:** DoW CIO	Captured in EKR to support traceability
Data Model	ADS Usage	Apply enterprise/domain data standards; designate and manage Component-level ADS.	**Responsible**: Data Stewards / System Owners **Accountable:** Component CIOs **Consulted:** Functional Sponsors **Informed:** DoW CIO	Maintained in EKR; informs WDP integration
Standards Profile	Standards Compliance Evidence	Apply enterprise/domain technical and interoperability standards in system design and modernization.	**Responsible**: Program Managers / Architects **Accountable**: Component CIOs **Consulted:** Functional Sponsors **Informed:** DoW CIO	Documented in EKR for government visibility.
Performance Model	KPI Contribution	Report system- and portfolio-level KPIs aligned with enterprise/domain measures.	**Responsible:** Program Managers / System Owners **Accountable:** Component CIOs **Consulted:** Functional Sponsors **Informed:** DoW CIO	Defined in EKR; tracked via the WDP

Table 5 - Applying Core Reference Models

5.3. APPLYING CONTEXTUAL REFERENCE ELEMENTS. At the Component level, contextual elements ensure that architectures reflect real mission execution and compliance requirements. Table 6 highlights the requirements for mapping back to the Enterprise Layer and Functional Domain architectures.

Element	Required	Definition	RACI Roles	Implemented Through
OAs	System to OA Mapping	Map domain-defined activities into Component workflows, portfolios, and system designs.	**Responsible:** System Architects **Accountable:** Program Managers **Consulted:** Functional Sponsors **Informed:** DoW CIO	Maintained in EKR or by Components; used by WDP
LRPs	LRP compliance evidence	Apply statutory and policy requirements within Component architectures, systems, and modernization plans.	**Responsible:** Compliance Leads / Program Managers **Accountable**: Component CIOs **Consulted:** Functional Sponsors **Informed**: DoW CIO	Documented in EKR for governance visibility

Table 6 - Applying Contextual Reference Models

5.3.3 GOVERNANCE AND OVERSIGHT. Component CIOs and Program Managers ensure that all portfolios, systems, and modernization efforts comply with enterprise and domain architectures. They provide alignment evidence in certification reviews, support governance forums, and highlight implementation challenges that require enterprise or domain-level resolution.

5.3.4 TOOLS AND REPOSITORIES. Components rely on the EKR as the authoritative source for enterprise and domain models, and they contribute their architectures and system mappings back into the repository. Integration with platforms like WDP enables visibility into how Component portfolios align with enterprise standards, support mission outcomes, and satisfy compliance requirements.

5.3.5 CONTINUOUS FEEDBACK AND EVOLUTION. The Component Layer serves as the primary feedback loop for the federated BEA. Program Managers report gaps discovered during implementation; certification reviews and audits identify where standards or policies need refinement; and lessons learned inform the evolution of the Enterprise Layer and Functional Domain architectures.

The Component Layer ensures the BEA is put into action across systems, portfolios, and missions. By applying Core Reference Models and Contextual Elements, maintaining governance, and feeding back lessons, Component Architectures link enterprise standards and domain expertise to operational execution. In the next section, we will address how Component, Domain, and Enterprise layers map and connect together to create a unified federated architecture that is consistent, interoperable, and mission-driven.

5.4 MAPPING & CONNECTING THE LAYERS. At its core, federation means that each organization owns its architecture, but those architectures are connected through agreed-upon enterprise baselines and mapping rules. No single architecture replaces another; instead, they interoperate. To demonstrate the connections between the architecture layers outlined

earlier, the following outlines an example of the connections between DoW Architectures & Component Architectures.

5.4.1 FEDERATION BETWEEN DOW ARCHITECTURES & COMPONENT ARCHITECTURES EXAMPLE.

Each DoW Component can maintain its own Component Architecture, reflecting its unique mission, organizational structure, and system landscape. Under the Federated BEA structure, these architectures are not replaced, they are connected. This connection is achieved through mapping, not consolidation:

- **Capabilities**: The DoW defines enterprise capabilities such as Manage Workforce or Sustain Forces. Components maps their own capabilities to these enterprise definitions. The Army may map IPPS-A capabilities, while the Navy maps its civilian and military personnel systems—different implementations, same enterprise outcome.
- **Processes**: The DoW establishes the E2E process, Hire-to-Retire. DoW Components extend and implement Hire-to-Retire processes according to Component-specific policies and systems. While execution differs, each Department can demonstrate how its processes align to the same enterprise process.
- **Data**: The DoW establishes enterprise data standards and authoritative sources. DoW Components implement these standards within their own data environments, ensuring that workforce, financial, and logistics data can be shared, aggregated, and audited at the enterprise level.
- **Standards and Performance**: Enterprise standards and KPIs apply across all Departments, while each Component measures performance through its own systems and reports results in a consistent way.

Using this example, it is critical to understand that each DoW Component does not need to look identical architecturally as long as they are both traceable to the Enterprise and Functional Domain layer. Component architectures connect upward by demonstrating alignment through structured mappings. This typically includes mapping local capabilities to enterprise and domain capabilities, tracing Component processes to enterprise E2E processes, implementing enterprise and domain data standards, and reporting performance in ways that align to Enterprise and domain KPIs. These connections allow multiple Component architectures to coexist while remaining interoperable and comparable.

5.4.2 FEDERATION THROUGH FUNCTIONAL DOMAINS EXAMPLE.

Functional Domain Architectures provide the connective tissue between DoW enterprise direction and Component execution. PSA-level Functional Sponsors translate enterprise standards into mission-specific architectures to which all Components can align. The Hire-to-Retire (H2R) process provides a clear example of how the BEA's federated model connects Enterprise strategy to Component-level execution and demonstrates how different layers of architecture work with distinct responsibilities.

Layer	Owner	Role & Responsibilities
Enterprise Layer	DoW CIO	Establishes the high-level strategic intent. Defines the Manage Workforce capability and the H2R E2E process. Sets the rules, such as

		enterprise HR data standards and KPIs (e.g., time-to-hire), without prescribing specific systems.
Functional Domain Layer	HR Functional Sponsor	Translates strategic intent into actionable guidance. Decomposes the H2R flow into detailed processes like recruiting and onboarding, refines data definitions, and interprets policy into operational rules for all Components.
Component Layer	Army / Navy	Implements the guidance using Component-specific systems. Maps their systems (e.g., IPPS-A) and workflows to the enterprise capabilities and domain processes. Implements the enterprise data standards and reports against the same enterprise outcomes.

Table 7 - Functional Domain Architectures

This structure ensures that while the Army and Navy architectures differ, both are traceable to the same enterprise intent. A governance review can validate this alignment, confirming compliance and interoperability from the enterprise definition down to the Component implementation. This connected approach preserves Component autonomy while enabling enterprise visibility. It provides auditable traceability from statute to system and supports modernization at different paces. The BEA succeeds by ensuring architectures are connected, not consolidated, moving from policy to practice and delivering measurable value.

5.4.3 HOW ARCHITECTURES ARE CONNECTED. Federation does not mean merging architectures into one, instead, architectures are connected through explicit mapping which balances Component autonomy with Enterprise coherence. It enables leadership to compare outcomes across the Department without mandating uniform systems and allows modernization at different speeds while ensuring interoperability. For oversight bodies, it provides clear traceability from policy to execution. The BEA is not a single, centralized architecture but a system of connected architectures. Figure 2 depicts how the relationship between the BEA layers and how each layer connects to create traceability across layers.

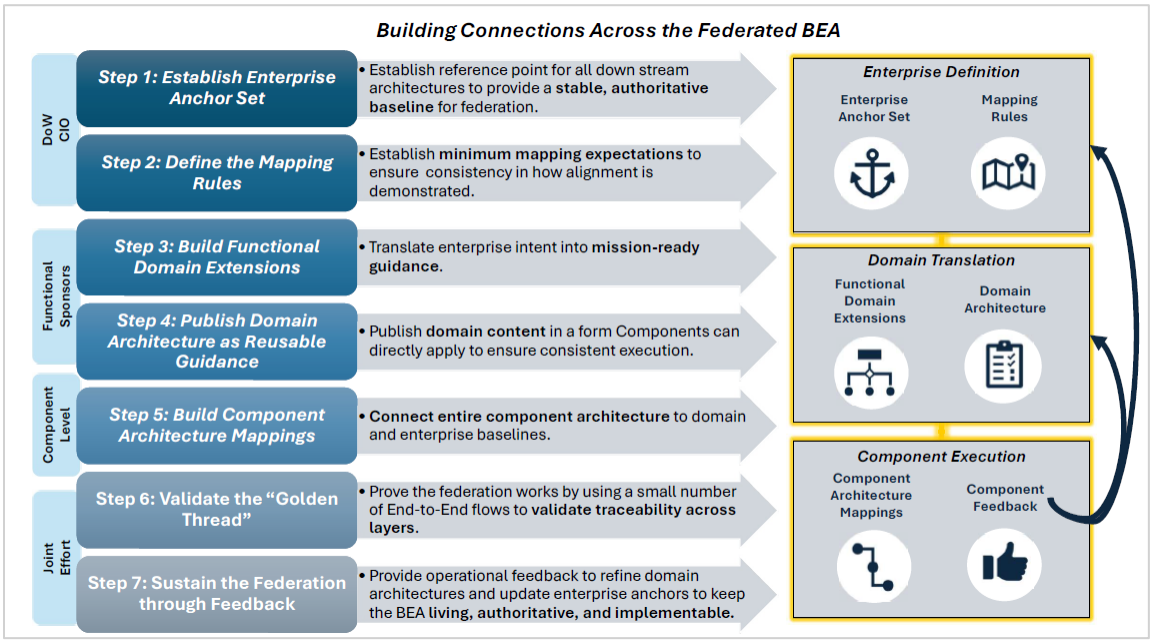

Figure 2 - Building Connections Across The Federated BEA

6. BEA GOVERNANCE

The effectiveness of the BEA depends not only on its structure but how it's governed as a living enterprise asset. The BEA must evolve with mission needs, technology, policy, and operational realities while remaining authoritative and consistent across a federated Department. This section describes how the Department will govern, change, update, and use the BEA.

6.1 GOVERNANCE BODIES. BEA governance is designed to preserve the authority of the Enterprise layer, enable PSA-level Functional Sponsors and Components to shape architecture based on real needs, and ensure the BEA continuously improves rather than stagnates. This balance is essential in a federated environment. Governance does not centralize control of all architectures. Instead, it governs the connections between architectures, the integrity of enterprise baselines, and the transparency of deviations.

Governance of the BEA operates through a tiered ecosystem of forums that align to the structure of the architecture itself. At the highest level, governance focuses on enterprise direction and accountability. At lower levels, governance focuses on coordination, validation, and implementation. The following governance bodies support the DoW BEA.

6.1.1 DEFENSE BUSINESS COUNCIL (DBC). The DBC is the DoW's four-start governance body for all matters associated with DBS. Per 10 U.S.C. § 2222, DoW CIO and the Director of Administration and Management chair the DBC. The DBC is responsible for providing advice to the Secretary of War on developing the DoW BEA, re-engineering the Department's business processes, developing and deploying DBS, and developing requirements for DBS. In the context of the BEA, the DBC provides:

- Executive endorsement of enterprise architecture direction
- Oversight of major architectural priorities
- Resolution of cross-domain and cross-Component issues
- Strategic guidance on modernization and investment alignment

The DBC does not review architectural models' line-by-lines, rather, it ensures the BEA remains aligned with Department priorities and that enterprise architecture is treated as a strategic asset, not a technical artifact.

6.1.2 DBS CROSS FUNCTIONAL BOARD (DBS CFB). The DBS CFB is chaired by the Deputy Chief Information Officer for Information Enterprise (DCIO(IE)) and is responsible for developing certification management strategies and processes; establishing and maintaining the DoW BEA: and facilitating assessment of the DBS portfolio for rationalization opportunities. In the context of the BEA, the DBS CFB provides:

- Approval for major Enterprise layer and Functional Domain Architecture changes
- A forum to address implementation concerns and roadblocks
- Evaluation of portfolio alignment to the BEA

6.1.3 DOW BEA WORKING GROUP (BEA WG). Action officer led governance body chaired by DoW CIO that is responsible for the development and maintenance of the DoW BEA. The BEA WG serves as the BEA Change Control Board and facilitates communication and coordination across the Federation to develop and maintain the BEA in alignment with Department priorities. The BEA WG:

- Reviews proposed changes to the Enterprise and Functional Domain Architecture
- Coordinates across Domains and Components
- Ensures consistency across the Enterprise Layer
- Validates traceability across layers
- Identifies gaps and conflicts within the BEA
- Recommends updates to the Enterprise Layer

6.2 CHANGE CONTROL PROCESS. As a living asset, BEA changes are expected. New policy, new systems, new mission needs, audit findings, and modernization efforts all generate legitimate pressure to update the architecture. DoW CIO will oversee the BEA change control process to ensure the BEA remains relevant, coherent, and synchronized across the entire federation. Figure 3 depicts the BEA change control process:

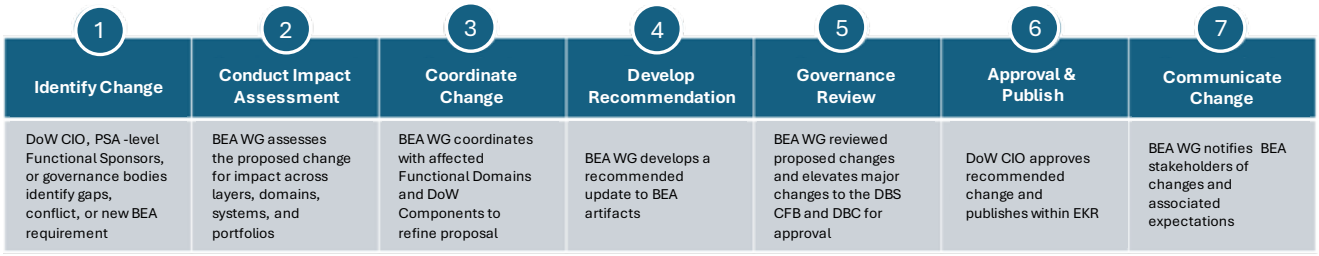

Figure 3 - Change Control Process

Appendix G highlights BEA approval authorities for key architectural artifacts. Appendix H reflects the procedural details for initiating a change to the DoW BEA.

6.3 BEA UPDATE AND ASSESSMENT CYCLE. The BEA must be assessed and refreshed on a predictable cycle. This ensures that it does not become stale, disconnected from operations, or misaligned with Department priorities. The BEA update cycle will occur annually in alignment with the DBS Annual Certification timeline to validate the relevancy of enterprise models, incorporate lessons learned from implementation, address new policy and statutory requirements, and align with emerging modernization priorities. Figure 4 shows the BEA update and assessment process and associated timeline.

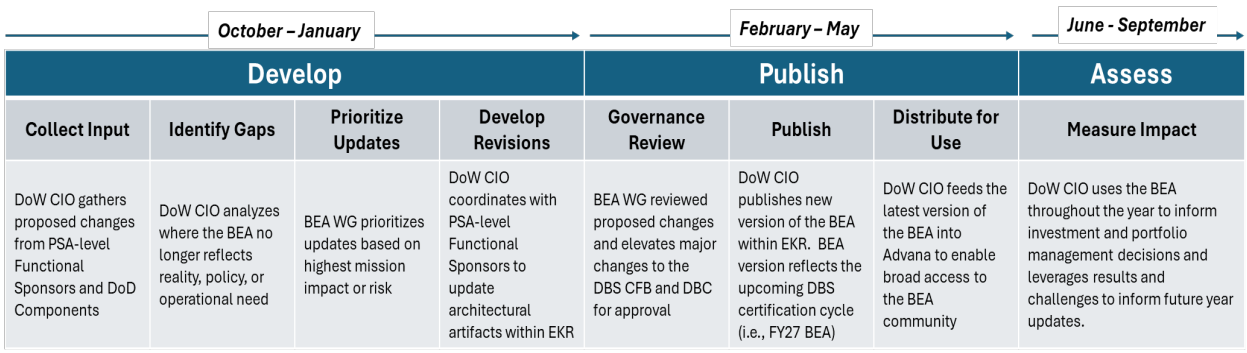

Figure 4 - BEA Update and Assessment Cycle

6.4 APPLYING THE BEA IN DECISION MAKING. The BEA is not intended to be a compliance exercise. Its primary purpose is to improve the quality of decisions the Department makes about investments, modernization, and mission enablement. When applied correctly, the BEA becomes a practical tool that allows the Department to evaluate options, compare alternatives, and make defensible choices grounded in mission outcomes, enterprise priorities, and operational reality.

This section explains how the Department will use the BEA to shape DBS certification, portfolio rationalization, and modernization planning decisions.

6.4.1 DBS CERTIFICATION. DBS certification is one of the most visible points where architecture and statutory accountability intersect. Per 10 Title 10 U.S.C. § 2222, the Department must certify, certify with conditions, or decline to certify that a DBS is or will be compliant with the BEA. The BEA provides the structure that allows certification to be based on evidence rather than narrative. When used properly, certification reviews become confirmation that the Component designed the BEA into the solution. Alignment and compliance with the BEA demonstrate:

- What enterprise and domain capabilities and OAs the system supports
- Which E2E processes it enables
- Whether it uses authoritative data sources
- Whether it complies with enterprise standards and LRPs
- How it contributes to enterprise and domain performance outcomes

At the Component level, program teams use BEA artifacts to design solutions that are architecturally sound. At the Domain and Enterprise levels, BEA alignment provides evidence that DBSs provide value, allowing DoW CIO to make informed investment decisions.

6.4.2 PORTFOLIO RATIONALIZATION. Portfolio rationalization is where the BEA most clearly demonstrates that it is more than a compliance tool. DoW CIO, PSA-level Functional Sponsors, and DoW Components use the BEA to consistently examine the DBS portfolio to determine which systems are essential to business operations, where the Department is funding duplicative solutions, and which investments support Department wide objectives and

outcomes. DBS Alignment to Core Reference Models and Contextual Reference Elements enable rationalization in the following ways:

- **Capabilities and Operational Activities**: Multiple systems mapped to the same capability or operational activity often reveal unnecessary duplication.
- **Processes**: Multiple systems supporting the same process step may indicate inefficiency or fragmentation.
- **Data**: Independent systems managing the same data outside authoritative sources often signal architectural risk.
- **Standards**: Divergence from enterprise standards often predicts integration cost and technical debt.
- **Performance**: Systems that do not measurably contribute to outcomes raise legitimate value questions.
- **Laws, Regulations, and Policies**: Non-adherence to laws, regulations, and policies often indicate misalignment with Department-wide goals and objectives.

6.4.3 MODERNIZATION PLANNING. Technology refresh without architectural input often results in faster delivery of the same fragmentation. The BEA enables the Department to answer key questions to enable modernization planning and delivery:

- Which legacy systems are blocking enterprise E2E processes?
- Where are outdated data structures preventing the use of authoritative data sources?
- Which modernization efforts reinforce enterprise standards rather than diverge from them?
- Which investments create reusable capabilities across Components?
- How does this initiative move us closer to the target architecture?

The use of the BEA allows the Department to shift from a discussion of "What can we modernize" to "What should we modernize to deliver the most value to the Department."

The BEA's value is not measured by how comprehensive the documentation is, but by how often it informs real decisions. When used to shape DBS certification, portfolio rationalization, and modernization planning, the BEA becomes more than an architectural framework—it becomes a practical instrument for leadership, accountability, and transformation. Compliance will naturally follow when architecture is applied with intent, but the true measure of success is whether the BEA helps the Department invest more wisely, modernize more coherently, and deliver outcomes more effectively.

7. BEA TOOL ECOSYSTEM

For the BEA to function as a living enterprise asset, its content must be accessible, authoritative, and connected to the decisions it intends to inform. Architecture that exists only in slide decks or disconnected documents cannot support federation, traceability, or enterprise decision-making. This section describes the Department's core BEA tooling ecosystem which includes EKR, WDP, DITPR, and IT Portal.

The BEA Tool Ecosystem enables the Department to use the BEA to make informed portfolio decisions. Figure 5 shows the relationship between the tools/capabilities within the BEA Tool Ecosystem:

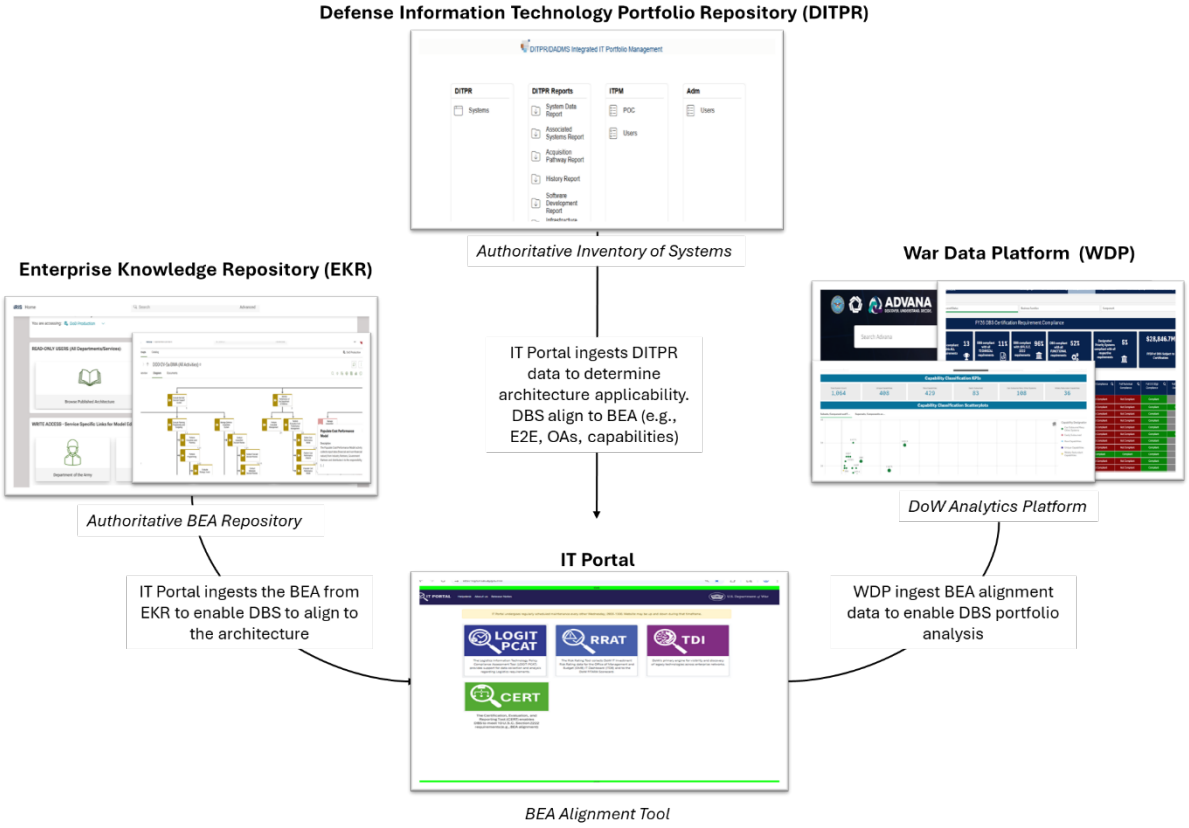

Figure 5 - BEA Tool Ecosystem

7.1 ENTERPRISE KNOWLEDGE REPOSITORY (EKR). EKR serves as the Department's authoritative repository for BEA content. It is where enterprise architecture artifacts are created, maintained, governed, and published. EKR is not simply a document library, it is the system of record for architectural structure, relationships, and traceability. EKR is the authoritative source of the following BEA information:

- Enterprise and Functional Domain Layer Core Reference Models
- Enterprise and Functional Domain Layer Contextual Reference Models
- Mappings between federation layers
- Linkages between architectural elements and LRPs
- Linkages between architectural elements and systems

Appendix F further details the EKR environment and provides instructions for gaining access.

7.2 WAR DATA PLATFORM (WDP). WDP is a technology platform housing a collection of enterprise data with analytics, data management, and data science tools that support

business decision makers across the Department. WDP will ingest BEA data from EKR and integrate it with other authoritative data sources (e.g., system inventories, portfolio data) to support the identification of duplication and redundancies; alignment with enterprise requirements and standards; to benchmark portfolios; and to validate compliance and progress against Department objectives. WDP will be the authoritative source for portfolio, financial, and performance analytics and executive dashboards.

7.3 DEFENSE INFORMATION TECHNOLOGY PORTFOLIO REPOSITORY (DITPR). The DITPR is the Department's inventory of IT systems and serves as the authoritative source of DBS information. It provides a comprehensive unclassified inventory of mission-critical and mission-essential DoW information systems as required by 10 U.S.C. Section 2223(a)(5) and DoDD 5144.02, "Chief Information Officer." DITPR includes system names, acronyms, descriptions, sponsoring component, authorizing official, points of contact and other basic information. DBS registered within DITPR are required to comply and align with the BEA.

7.4 IT PORTAL. The IT Portal is a data collection capability designed to support DoW CIO's IT portfolio management objectives. It contains the most recent published version of the DoW BEA and enables DBS to align with enterprise models (e.g., E2E processes, OAs) and demonstrate compliance with standards and LRPs. WDP will ingest data from IT Portal to support the DBS Annual Certification process, providing visibility into the DBS portfolio and enabling the identification of system rationalization opportunities.

8. BEA IN PRACTICE: USE CASES AND EXAMPLES

The BEA's value is ultimately demonstrated through use. This section brings the structure, governance, artifacts, and tooling described above into practical, real-world use cases that illustrate how the BEA operates as an enterprise capability, not just a framework. Each use case demonstrates how the BEA supports decision-making across layers, how EKR and WDP enable execution, and how federation is preserved while alignment is maintained. This section presents use cases that solve specific business problems and provides working examples that illustrate its federated structure in action.

8.1 BEA USE CASES.

8.1.1 INFORMING INVESTMENT REVIEWS. When a Component proposes a new business system, the BEA ensures fiscal and operational alignment. Components align the proposed system to operational activities in IT Portal and WDP ingest alignment data for analysis. Analysis reveals overlap with existing systems already supporting the same operational activities and supplemental WDP dashboards show current investment levels and performance for that capability area. The Functional Sponsor validates whether the proposed investment aligns with domain architecture. DoW CIO uses this evidence to recommend reuse or integration instead of new development. These activities ensure the investment decision is based on architecture-backed evidence, not narrative justification.

8.1.2 ARCHITECTING ACQUISITION REQUIREMENTS. When a program office is developing acquisition requirements for a new solution, the BEA provides the framework to ensure alignment from the start. Architects use operational activities and processes to shape functional requirements. Enterprise standards and data requirements are incorporated into acquisition language. The program ensures the solution aligns relevant E2E processes and WDP is used to benchmark against similar capabilities deployed across the Department. This process ensures the acquisition is architected for alignment by design, reducing downstream rework and compliance issues.

8.1.3 STRENGTHENING DATA GOVERNANCE. When multiple Components report inconsistent data for workforce readiness, the Department will use the BEA to establish a single source of truth. Data managers reference enterprise data standards and ADS definitions in EKR and determine which systems are aligned with appropriate standards. The WDP highlights inconsistencies in reported data across Components. The Functional Sponsor works with Components to correct alignment at the source. These actions ensure data quality improves because governance is grounded in a shared architectural definition, not ad hoc enforcement.

8.1.4 IMPROVING OPERATIONAL INSIGHT. When a Domain owner wants to understand whether operational execution aligns with intended processes, the BEA provides the necessary tools for analysis. The domain process and activity models in EKR are used as the reference standard. Components map their workflows to those activities. WDP is used to visualize performance against defined KPIs. This allows for the identification of gaps between the intended process and actual outcomes. This application of the BEA makes architecture a tool for operational insight, not just design documentation.

8.1.5 DRIVING PORTFOLIO RATIONALIZATION. When leadership directs a reduction of duplicative systems across a portfolio, the BEA provides the structural analysis to do so effectively. System-to-capability mappings in EKR identify clusters of systems supporting the same outcomes. WDP aggregates cost, usage, and performance data by capability. The Functional Sponsor assesses which systems best align to the domain architecture. The governance forum uses this evidence to prioritize consolidation. This process ensures rationalization decisions are based on structure and traceability, not anecdote.

8.1.6 STREAMLINING DBS CERTIFICATION. When a system requires DBS certification approval, the BEA is used to provide clear, evidence-based justification. The program demonstrates the system's mapping to enterprise capabilities and E2Es in EKR. The Domain validates the system's alignment to operational activities and processes. The EKR shows standards compliance and LRP traceability. WDP confirms how the system contributes to enterprise outcomes and KPIs. The certification authority then evaluates this evidence rather than a simple narrative. This approach makes certification a confirmation of good architecture, not just a documentation drill.

8.2 THE FEDERATED MODEL IN ACTION: WORKING EXAMPLES. These use cases show that architecture is used proactively to inform decisions, relying on shared evidence and authoritative structures while preserving component autonomy. By using architecture proactively, the BEA provides the necessary structure and insight to achieve

coherence without centralization, alignment without rigidity, and modernization without fragmentation.

8.2.1 CROSS-LAYER FEDERATION HIRE-TO-RETIRE (H2R). The Hire-to-Retire (H2R) process demonstrates federation across layers. The Enterprise Layer defines H2R as a critical End-to-End outcome. The HR Domain then decomposes H2R into authoritative processes and activities, which are organized into segments such as onboarding, training, pay, and separation. A Component, like the Army, maps its IPPS-A workflows to these standard HR activities in the EKR. WDP aggregates performance data to show metrics like time-to-hire across all Components. As a result, different systems and organizations remain autonomous, but leadership can still see a coherent enterprise view of workforce performance.

8.2.2 CROSS-DOMAIN FEDERATION PROCURE-TO-PAY (P2P). The Procure-to-Pay (P2P) process illustrates federation across functions. The Enterprise Layer defines the P2P process as an End-to-End flow that spans the acquisition, logistics, and finance domains. The Acquisition Domain defines contracting activities, the Logistics Domain defines receipt and acceptance activities, and the Financial Domain defines obligation, payment, and reconciliation activities. Components implement their portion of the process in local systems. The EKR maintains the connective structure between all these parts, while WDP enables enterprise visibility into delays, duplication, and cost drivers. This allows the Department to govern and improve the entire outcome, even though no single owner controls the process.

9. COMMON PITFALLS & LESSONS LEARNED

The BEA framework, structure, and governance model described in this guidebook are designed to be practical and durable. However, even strong architecture frameworks fail when they are misunderstood, misapplied, or treated as purely procedural exercises. This section captures common pitfalls observed in large-scale architecture efforts and the corresponding lessons learned. Its purpose is not to prescribe additional requirements, but to help practitioners, leaders, and stakeholders apply the BEA effectively and avoid predictable failure modes.

The patterns described in Figure 6 below are not theoretical. They reflect issues commonly encountered in enterprise architecture programs and are included to help ensure the BEA is applied as an enabler rather than becoming an administrative burden.

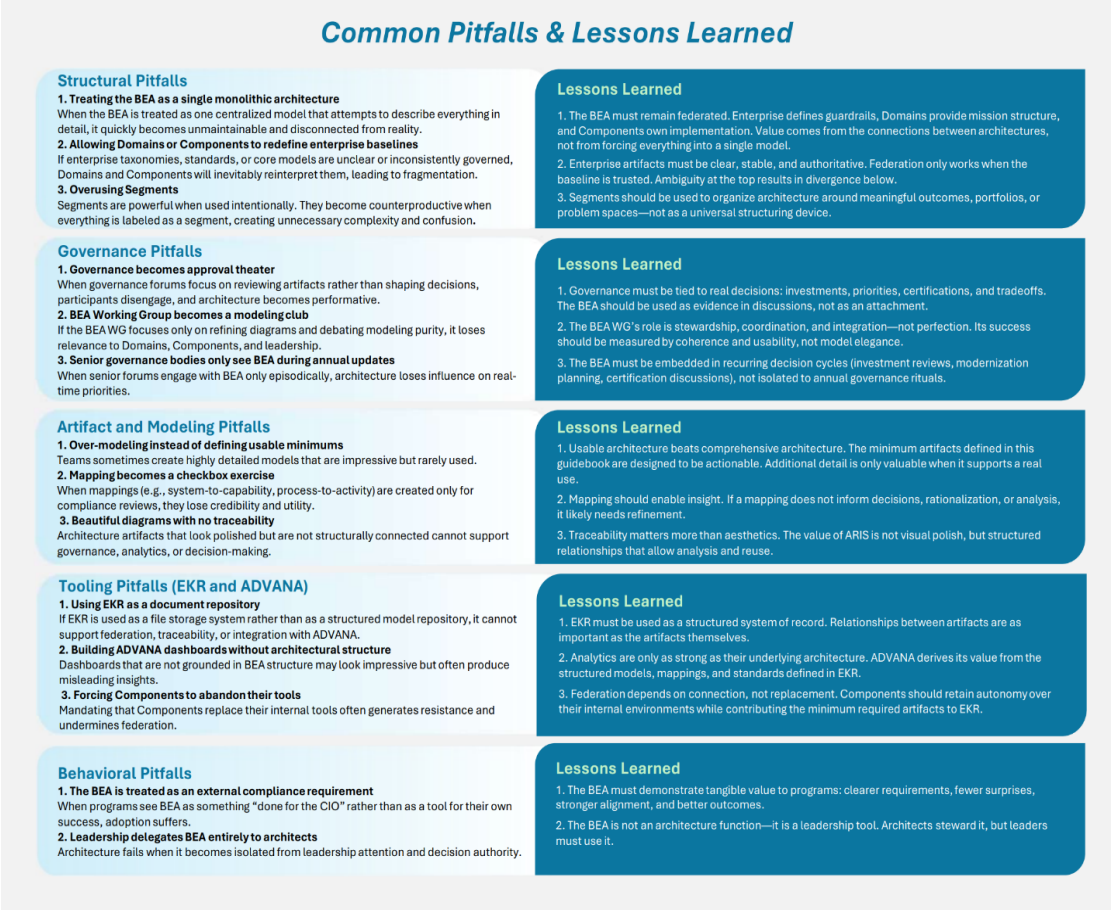

Figure 6 - Common Pitfalls and Lessons Learned

10. CONCLUSION

This guidebook establishes a practical, federated approach to implementing and using the BEA across the Department. It shows how the BEA can be structured, governed, tooled, and used to improve real decisions about investments, modernization, and mission execution.

The structure, governance, tooling, and artifacts outlined in this guidebook are designed to be durable. As missions evolve, technology advances, and statutory requirements change, the BEA must adapt. That adaptation occurs through the governance, change control, and assessment processes described earlier in this guidebook.

Updates to the BEA will be reflected not only in the architecture artifacts maintained in EKR and analyzed through authoritative data sources in the WDP, but also in future iterations of this guidebook. This ensures that both the architecture and its supporting guidance remain relevant and aligned with how the Department actually operates.

The ultimate success of the BEA and this guidebook will be measured by whether architecture is reference in real decisions, investments are more aligned to outcomes, duplication and fragmentation decrease over time, data quality improves, and portfolio management discussions are grounded in evidence. When these outcomes begin to occur, the BEA has achieved its purpose.

By using this guidebook as intended—engaging with the architecture, participating in governance, contributing to continuous improvement, and applying the framework in real decisions—every stakeholder plays a role in strengthening coherence across the Department and advancing the Department's ability to deliver effective, accountable, and mission-aligned business capabilities.

APPENDICES

APPENDIX A – ENABLING AUTHORITIES

TITLE 10 U.S.C. § 2222

(g) APPROVALS REQUIRED FOR DEVELOPMENT.-

(1) INITIAL APPROVAL REQUIRED.—The Secretary shall ensure that a covered defense business system program cannot proceed into development (or, if no development is required, into production or fielding) unless the appropriate approval official (as specified in paragraph (2)) determines that-

(A) the system has been, or is being, reengineered to be as streamlined and efficient as practicable, and the implementation of the system will maximize the elimination of unique software requirements and unique interfaces;

(B) the system and business system portfolio are or will be in compliance with the defense business enterprise architecture developed pursuant to subsection (e) or will be in compliance as a result of modifications planned;

(C) the system has valid, achievable requirements and a viable plan for implementing those requirements (including, as appropriate, market research, business process reengineering, and prototyping activities);

(D) the system has an acquisition strategy designed to eliminate or reduce the need to tailor commercial off-the-shelf systems to meet unique requirements, incorporate unique requirements, or incorporate unique interfaces to the maximum extent practicable; and

(E) the system is in compliance with the Department's auditability requirements.

(3) ANNUAL CERTIFICATION.- For any fiscal year in which funds are expended for development or sustainment pursuant to a covered defense business system program, the appropriate approval official shall review the system and certify, certify with conditions, or decline to certify, as the case may be, that it continues to satisfy the requirements of paragraph (1). If the approval official determines that certification cannot be granted, the approval official shall notify the milestone decision authority for the program and provide a recommendation for corrective action.

CLINGER COHEN ACT (CODIFIED IN 40 U.S.C § 11315)

The Chief Information Officer of an agency is responsible for-

(2) Developing, maintaining, and facilitating the implementation of a sound and integrated information technology architecture for the executive agency.

APPENDIX B – DEFINITIONS

Term	Definition
Architecture	A structured way of describing how capabilities, processes, data, systems, and standards work together to achieve outcomes.
Enterprise Knowledge Repository (EKR)	The Department's authoritative repository (Army owned) for BEA content, used to maintain architectural models, relationships, and traceability across all layers.
Authoritative Data Source (ADS)	The officially designated system or source responsible for maintaining accurate and trusted data for a specific data element.
BEA (Business Enterprise Architecture)	The Department's authoritative framework for aligning business processes, data, systems, and investments to mission outcomes and enterprise priorities.
Capability	What the organization must be able to do to achieve its mission (e.g., recruit personnel, process payments, manage contracts).
Component Architecture	Architecture owned by a DoW Component (e.g., Army, Navy, Air Force, Agencies) that aligns local systems and portfolios to enterprise and domain baselines.
Contextual Reference Elements	Architectural elements that anchor models in real-world requirements, including End-to-End flows, Operational Activities, and Laws, Regulations, and Policies (LRPs).
Core Reference Models	The foundational BEA models: capabilities, processes, data, standards, and performance. These define the minimum baseline for interoperability and alignment.
Data Model	A structured definition of data elements, relationships, and standards used to ensure consistency across systems.
Domain (Functional Domain)	A mission area such as Human Resources, Logistics, Financial Management, or Acquisition, managed by a PSA-level Functional Sponsor.
End-to-End (E2E) Process	A cross-domain view of how multiple organizations and systems work together to deliver an outcome (e.g., Hire-to-Retire, Procure-to-Pay).

Federation	A governance and architecture approach where enterprise standards provide unity, while Domains and Components retain autonomy over their detailed architectures and implementations.
Functional Domain Architecture	Architecture owned by Functional Sponsors that extends enterprise models into domain-specific detail.
Governance	The structures and forums used to guide decisions, approve changes, resolve conflicts, and ensure architectural coherence.
KPI (Key Performance Indicator)	A measurable indicator used to assess how effectively a process, system, or capability is performing.
Laws, Regulations, and Policies (LRPs)	Statutory and policy drivers that must be traceably reflected in architecture, systems, and processes.
Mapping	The explicit connection between architectural elements (e.g., system-to-capability, process-to-activity) used to establish traceability.
Operational Activity	A specific unit of work performed within a process that can be implemented in systems and workflows.
Performance Model	The architectural model that defines enterprise and domain outcomes and how success is measured.
Portfolio Rationalization	The process of evaluating systems and investments to identify duplication, gaps, and opportunities for consolidation or modernization.
Process Model	A representation of how work is performed, often expressed as flows, activities, and sequences.
RACI	A responsibility model that identifies who is Responsible, Accountable, Consulted, and Informed for specific functions. • Responsible: Performs the work and develops the artifacts • Accountable: Ultimately owns the decision and outcome • Consulted: Provides input that shapes outcome • Informed: Must understand the outcome and apply it
Repository	The authoritative location where architecture artifacts are stored and managed (ARIS for BEA).

Segment	A focused subset of architecture organized around a specific outcome, portfolio, or mission area within a Domain.
Standards Profile	The set of technical, business, and interoperability standards systems are expected to follow.
Traceability	The ability to follow relationships between capabilities, processes, systems, data, and requirements across layers.
WDP (Enterprise Data Environment)	The Department's enterprise data environment that integrates BEA data from EKR with broader Department data to support analytics, dashboards, and executive decision-making.

APPENDIX C – ACRONYMS

Acronym	Meaning
ADS	Authoritative Data Source
ARIS	Architecture Repository and Integrated System (used here as the BEA repository)
BEA	Business Enterprise Architecture
BEA WG	Business Enterprise Architecture Working Group
CFB	Cross Functional Board
CIO	Chief Information Officer
CV	Capability View (DoDAF)
DBC	Defense Business Council
DBS	Defense Business System
DIV	Data and Information View (DoDAF)
DoDAF	Department of Defense Architecture Framework
E2E	End-to-End
HR	Human Resources
H2R	Hire-to-Retire
KPI	Key Performance Indicator
LRP	Laws, Regulations, and Policies
OV	Operational View (DoDAF)
P2P	Procure-to-Pay
PM	Program Manager
PSA	Principal Staff Assistant
RACI	Responsible, Accountable, Consulted, Informed
StdV	Standards View (DoDAF)
WG	Working Group

APPENDIX D – FEDERATED BEA IMPLEMENTATION CHECKLIST

This checklist provides a practical, repeatable method for building, connecting, validating, and sustaining architectures across the DoW Enterprise Layer, Functional Domain Architectures, and DoW Component Architectures. It operationalizes the federated BEA approach described throughout this guidebook.

STEP 1: ESTABLISH THE ENTERPRISE LAYER

Owner: DoW CIO (Enterprise Layer)
Objective: Define the authoritative baseline that all architectures must map to.

- ☐ Publish enterprise capability taxonomy (with IDs, definitions, versioning)
- ☐ Publish enterprise OAs
- ☐ Publish enterprise E2E processes (e.g., Hire-to-Retire, Procure-to-Pay)
- ☐ Publish enterprise data standards ADS
- ☐ Publish enterprise technical, business, and interoperability standards
- ☐ Publish enterprise performance outcomes and KPIs
- ☐ Publish authoritative registry of LRPs
- ☐ Publish OA to E2E mapping
- ☐ Publish OA to LRP mapping
- ☐ Publish OA to Standard mapping
- ☐ Assign ownership and version control to all enterprise artifacts
- ☐ Make all enterprise artifacts available in the authoritative repository

Success looks like: Every PSA-level Functional Sponsor and Component can point to a single authoritative source for enterprise baselines.

STEP 2: DEFINE MAPPING RULES AND MINIMUM EVIDENCE

Owner: DoW CIO (with Domain and Component input)
Objective: Ensure alignment means the same thing across the Department.

- ☐ Define what must be mapped (capabilities, processes, data, standards, performance, LRPs)
- ☐ Define minimum depth of mapping (e.g., capability roll-up required for all systems)
- ☐ Define what counts as:
  - Aligned
  - Tailored
  - Divergent (requires waiver)
- ☐ Define required evidence for mapping (tables, models, trace links, repository entries)
- ☐ Publish mapping guidance for Domains and Components
- ☐ Establish standard templates for mapping artifacts

Success looks like: Two Components mapping the same element produce comparable, consistent artifacts.

STEP 3: BUILD FUNCTIONAL DOMAIN ARCHITECTURE EXTENSIONS

Owner: Functional Sponsors (Functional Domain Architectures)
Objective: Translate enterprise intent into mission-usable architecture.

- ☐ Decompose enterprise capabilities into domain capability hierarchy
- ☐ Ensure every domain capability maps to an enterprise parent
- ☐ Extend enterprise E2E processes into domain-specific processes
- ☐ Refine enterprise data standards for domain usage
- ☐ Identify domain-level ADS where applicable
- ☐ Define domain-specific standards (business rules, constraints, formats)
- ☐ Define domain KPIs aligned to enterprise outcomes
- ☐ Interpret LRPs into operational domain guidance
- ☐ Validate that all domain artifacts trace to enterprise layer
- ☐ Publish domain architecture for Component use

Success looks like: A Component can implement domain guidance without needing to reinterpret enterprise policy.

STEP 4: PUBLISH DOMAIN GUIDANCE AS IMPLEMENTABLE PRODUCTS

Owner: Functional Sponsors
Objective: Make domain architecture usable, not theoretical.

- ☐ Publish domain process flows and activity definitions
- ☐ Publish domain data dictionaries and ADS guidance
- ☐ Publish domain standards and interface expectations
- ☐ Publish KPI definitions and reporting expectations
- ☐ Publish domain LRP interpretations
- ☐ Provide examples of how Components should map to domain artifacts
- ☐ Ensure all artifacts are accessible via the authoritative repository

Success looks like: Components can directly consume domain architecture when designing or modernizing systems.

STEP 5: BUILD COMPONENT ARCHITECTURE MAPPINGS

Owner: Component CIOs and Program Managers
Objective: Implement BEA through full Component Architectures.

- ☐ Map portfolios and systems to domain and enterprise capabilities

- ☐ Map workflows and functions to domain processes and E2E flows
- ☐ Map data elements to enterprise/domain data standards and ADS
- ☐ Document standards compliance (technical, business, interoperability)
- ☐ Map system metrics to domain and enterprise KPIs
- ☐ Document how LRPs are enforced in workflows, controls, and logic
- ☐ Maintain mapping artifacts as part of the Component architecture
- ☐ Ensure mapping is updated when systems or processes change

Success looks like: A Component can explain how every major system supports enterprise and domain intent.

STEP 6: VALIDATE THE "GOLDEN THREAD" ACROSS LAYERS

Owner: DoW CIO + Functional Sponsor + Component (joint review)
Objective: Prove that federation works end-to-end.

- ☐ Select a priority End-to-End flow (e.g., Hire-to-Retire)
- ☐ Trace enterprise definition (capability, process, KPI, LRP)
- ☐ Trace domain translation (process detail, activities, data, rules)
- ☐ Trace Component implementation (systems, workflows, metrics)
- ☐ Confirm all three layers are connected and consistent
- ☐ Document gaps and corrective actions if traceability breaks

Success looks like: Leadership can see a continuous thread from enterprise intent to system execution.

STEP 7: BASELINE, VERSION, AND GOVERN THE CONNECTIONS

Owner: All layers (with CIO oversight)
Objective: Prevent drift and fragmentation over time.

- ☐ Baseline enterprise artifacts based on BEA Update and Assessment Cycle
- ☐ Baseline domain architectures based on BEA Update and Assessment Cycle
- ☐ Require Components to update mappings after major change
- ☐ Track exceptions and waivers explicitly
- ☐ Document impacts of changes across layers
- ☐ Ensure architecture updates are reflected in the repository

Success looks like: The BEA remains current and reliable, not stale documentation.

STEP 8: SUSTAIN THE FEEDBACK LOOP

Owner: All layers
Objective: Keep the BEA living and implementable.

- Components report implementation challenges
- Functional Sponsors refine architectures based on feedback
- CIO updates enterprise baselines when systemic issues appear
- Lessons learned are documented and shared across the federation
- Architecture updates are communicated clearly across layers

Success looks like: The BEA improves over time based on real operational experience.

WHAT "GOOD" LOOKS LIKE IN PRACTICE

An organization implementing the BEA effectively can answer:

- Which systems support this enterprise capability?
- How does this Component execute this E2E process?
- Which authoritative data source supports this report?
- Which law or policy drives this system behavior?
- Where are we aligned vs intentionally divergent?

If those answers are visible and defensible, federation is working.

APPENDIX E: DODAF ARTIFACTS

Table 8 highlights DoDAF Artifacts for Core Reference Model and Contextual Reference Elements within the Enterprise, Functional Domain, and Component layers of the BEA. The table below is not exhaustive and does not mandate the creation of all artifacts; rather, it provides a flexible set of options that may be used to support specific architectural requirements.

Layer	Model	Applicable DoDAF Artifacts
Enterprise	Capability	Capability Views (CV-1 Vision, CV-2 Taxonomy, CV-3 Phasing, CV-6 Activity Mapping, CV-7 Service Mapping)
Enterprise	Process	Operational Views (OV-5a Activity Tree, OV-5b Activity Model, OV-6c Event-Trace
Enterprise	Data	Data Views (DIV-1 Conceptual, DIV-2 Logical, DIV-3 Physical, AV-2 Dictionary
Enterprise	Standards	Standards Views (StdV-1 Standards Profile, StdV-2 Standards Forecast
Enterprise	Performance	Performance elements embedded in OV-3 Resource Flow, SV-7 Systems Measures, SvcV-7 Services, CV-7 Traceability
Enterprise	Operational Activities	Operational Views (OV-5a Activity Tree, OV-5b Activity Model) mapped to Systems/Services Views (SV-1, Svc-1)
Enterprise	LRPs	All viewpoints (AV-1 Overview & Summary, AV-2 Dictionary), cross-linked to CV-, OV, DIV, StdV
Functional Domain	Capability	CV-2 Capability Taxonomy, CV-6 Capability to Activity Mapping
Functional Domain	Process	OV-5a Activity Decomposition, OV-5b Activity Model, OV-6c Event Trace
Functional Domain	Data	DIV-2 Logical Data Model, DIV-3 Physical Data Model
Functional Domain	Standards	StdV-1 Standards Profile
Functional Domain	Performance Model	CV-7 Capability to Measures Mapping, OV-3 Resource Flow Measures, SV-7 Systems Measure
Functional Domain	Operational Activity	OV-5a Activity Tree, OV-5b Activity Model mapped to SV-1/SvcV-1
Functional Domain	LRPs	AV-1 Overview & Summary, AV-2 Dictionary linked to CV/OV/DIV/StdVs
Component	Capability	CV-6 Capability to Activity Mapping
Component	Process	OV-5b Activity Model, OV-6c Event Trace
Component	Data	DIV-3 Physical Data Model
Component	Standards	StdV-1 Standards Profile
Component	Performance	SV-7 Systems Measure, SvcV-7 Services Measure
Component	Operational Activity	OV-5b Activity Model, SV-1 System Interface Description
Component	LRP	AV-1 Overview, AV-2 Dictionary cross linked to CV/OV/DIV

Table 8 - DoDAF Artifacts

APPENDIX F: EKR STRUCTURE AND ACCESS

EKR STRUCTURE: The Federated DoW BEA exists within the DoW environment in EKR. The DoW environment contains two major areas: DoW Sandbox and DoW Production.

- **DoW Sandbox**: PSA-level Functional Leads and DoW Components use this area to develop architecture content for their respective Functional Domain or DoW Component Architectures. This area is only accessible to EKR users with write (designer) access. The content is not published and not considered official.
- **DoW Production**: This area contains the approved/published version of the DoW Enterprise Layer and Functional Domain Architectures. While viewable to all EKR users, only EKR Librarians can publish content to DoW Production.

REQUESTING EKR ACCESS: EKR is accessible using Government Furnished Equipment (GFE). To gain access to EKR, prospective users should send an email to the DoW BEA mailbox at: osd.mc-alex.dod-cio.mbx.dod-bea@mail.mil with the following information:

- **Email Title:** EKR Access Request
- **Name:** Person and Organization Requesting Access
- **Desired EKR User Group:** Read (Viewer) or Write (Designer)
  - Read (Viewer): Can view all architecture content within DoW Production
  - Write (Designer): Read (Viewer) privileges plus can create architecture content within the DoW Sandbox.
- **Rationale/Need for EKR Access:** Must include what aspects of the architecture the user will support.

APPENDIX G: BEA APPROVAL AUTHORITIES FOR ENTERPRISE LAYER

The DoW BEA governance bodies will review architectural changes to ensure proposed changes comply with DoW architectural methods and conventions; validate that proposed changes align to ongoing modernization efforts, legislative changes, and organizational priorities; and determine the impact on the DoW Enterprise Layer, Functional Domain Layer, and DoW Component Architectures and the relationship between the layers.

Architecture Artifact	Architectural Change	Final Approval Authority
E2E Process	New L0 E2E	DBC
	New L1 Process Steps	DBC
	Removal of L0 E2E	DBC
	Removal of L1 Process Step	DBC
	Modifications to Existing L1 Process Step Definition	DoW BEA WG
	Modifications to Existing L1 Process Step Name	DoW BEA WG
Capabilities	New Capability	DBS CFB
	Removal of Capability	DBS CFB
	Modifications to Existing Capability Definition	DoW BEA WG
	Modifications to Existing Capability Name	DoW BEA WG
OA	New OA	DBS CFB
	New OA Hierarchy	DBS CFB
	Removal of OA	DBS CFB
	Modifications to Existing OA Definition	DoW BEA WG
	Modifications to Existing OA Name	DoW BEA WG
	Modifications to Existing OA Hierarchy	DoW BEA WG
Data	New Authoritative Data Source	DBS CFB
	New Data Standard	DoW BEA WG
	Modifications to Data Model	DoW BEA WG
	Modifications to Data Standard	DoW BEA WG
Standards	New Standard	DoW BEA WG
	New Standard Alignment	DoW BEA WG
	Modifications to Existing Standard	DoW BEA WG
	Modifications to Existing Alignment	DoW BEA WG
Laws, Regulations, and Policies	New LRP	DoW BEA WG
	New OA to LRP Alignment	DoW BEA WG
	Modifications to Existing LRP	DoW BEA WG
	Modifications to Existing OA to LRP Alignment	DoW BEA WG
Performance	New KPI	DBS CFB
	Modification to Existing KPI	DoW BEA WG
DoW Component Alignments	Mapping between DoW Component Architecture & DoW Enterprise Layer	DoW BEA WG

Table 9 - BEA Approval Authorities

APPENDIX H: SUBMITTING A BEA CHANGE REQUEST

To initiate a change request, DoW Components must submit a BEA change request to the DoW BEA mailbox at: osd.mc-alex.dod-cio.mbx.dod-bea@mail.mil. The change request must include the following information:

CHANGE REQUEST INFORMATION:

- **Requestor Name:** Full Name of Requestor
- **Organization:** DoW Organization Affiliation
- **Position/Title:** Job Title of Requestor
- **Email Address**: Contact Email
- **Phone Number:** Contact Phone Number
- **Date of Request:** Date the change is requested

CHANGE REQUEST OVERVIEW:

- **Change Request Title**: A brief title summarizing the change request
- **BEA Model Affected**: Example: E2E, OAs, LRPs, OA to LRP
- **Change Request Category**: Addition, Deletion, Modification

CHANGE REQUEST DETAILS:

- **Change Request Description**: Describe the proposed change in detail, including what will be added, removed or updated
- **Justification/Expected Benefits**: Justify the need for the change. Outline anticipated benefits or improvements resulting from the change.
- **Impacted Stakeholders**: Identify stakeholders potentially impacted by requested change.

CHANGE REQUEST SUPPORTING DOCUMENTATION:

- Diagrams, analysis, reports, policies, or existing architectural references that further explain or justify proposed change.