DoD Business Enterprise

Architecture: Compliance Guide

--FY 2018 and 19--

Ver: 1.5: March 31, 2018

Version History

Version	Publication Date	Author	Summary of Changes
1.0	March 3, 2014		Updated Guide for FY15
	March 5, 2014		Clarified guidance around Operational Activities, Planned Operational Activities, and gap handling
	March 15, 2014		Added references to FS/OEP Guidance
1.1	April 02, 2015	D. Brown	Updated Guide for FY16
1.2	April 23, 2015	D. Brown	- Updated links for HTML posting - Corrected IE alignment to cover all exchanges, versus only DBS produced exchanges
1.3	March 31, 2017	M. Doehnert	Updated to address changes based on the FY 2016 National Defense Authorization Act and the investment management guidance (e.g., addressing the need for transition plans). Added a new section 3.2 that addresses BEA compliance for all defense business systems, regardless of certification thresholds. Made other changes to help improve compliance process efficiency and effectiveness. Added content on scoping and asserting Defense Logistics Management Standards (DLMS) compliance
1.4	May 17, 2017	M. Doehnert	Added note to address when a system has both compliant and planned compliant elements associated to its assertion.

| 1.5 | March 2, 2018 | | Changed dates and fiscal years to apply for FY18-FY19, changed DCMO to CMO of DoD. Updated BEA compliance table and the definition of a legacy system. Updated section 4.6 compliance. Added footnote on how to view any BEA assessment. |

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1. Introduction

The Business Enterprise Architecture (BEA) is the enterprise architecture that covers all defense business systems (DBSs), and the functions and activities supported by defense business systems in the Department of Defense (DoD). The BEA reflects the DoD's business transformation priorities, the business capabilities required to support those priorities, and the combination of enterprise systems and initiatives that enable those capabilities.

Per section (§)2222(b)(2), (d)(1) and (e) of title 10, United States Code (U.S.C.) (Reference (a)), the overarching purposes of the BEA are to serve as the "blueprint to guide the development of integrated business processes within the [DoD];" "guide, constrain, and permit implementation of interoperable[1] defense business system solutions" across the DoD; and enable the Department to:

- Comply with all applicable law, including Federal accounting, financial management, and reporting requirements;
- Routinely produce timely, accurate, and reliable business and financial information for management purposes; and
- Integrate budget, accounting, and program information and systems

By 10 U.S.C. §2222, the BEA is required to include policies, procedures, business data standards, business performance measures, and business information requirements that are to apply uniformly throughout the DoD. It also must identify whether each existing business system is a part of the business systems environment outlined by the defense business enterprise architecture, will become a part of that environment with appropriate modifications, or is not a part of that environment. [2]

The Defense Business Council (DBC) oversees the BEA implementation for all business mission area (BMA) systems. In addition to Component architectures, the BEA enables the DBC to assess investments relative to the organization's functional needs and evaluate the impact on business processes. These products and processes provide both the end-state and the roadmap to deliver more robust business capabilities. The BEA also serves as a mechanism for identifying and reducing duplicative investments, promoting sharing of common services, and establishing or identifying department-wide standards and ensuring compliance with those standards.

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[1] "Interoperability" per 44 U.S.C. 3601 means "the ability of different operating and software systems, applications, and services to communicate and exchange data in an accurate, effective, and consistent manner." DoD Instruction (DoDI) 8330.01 defines is as "The ability of systems, units, or forces to provide data, information, materiel, and services to, and accept the same from, other systems, units, or forces, and to use the data, information, materiel, and services exchanged to enable them to operate effectively together. IT interoperability includes both the technical exchange of information and the end-to-end operational effectiveness of that exchange of information as required for mission accomplishment. Interoperability is more than just information exchange. It includes systems, processes, procedures, organizations, and missions over the life cycle and must be balanced with cybersecurity."

[2] Transition plans are still a required part of an enterprise architecture (EA) because per 44 U.S.C. 3601, an EA "means- a strategic information asset base, which defines the mission; the information necessary to perform the mission; the technologies necessary to perform the mission; and the transitional processes for implementing new technologies in response to changing mission needs; and includes- a baseline architecture; a target architecture; and a sequencing plan."

Subject to thresholds and authorities of reference (a) and internal thresholds set by the Chief Management Officers (CMOs), certain DBSs that will have a total cost in excess of said thresholds over the period of the current future-years defense program and are planned, designed, acquired, developed, deployed, operated, maintained and modernized will demonstrate compliance with the BEA in order to obtain certification approval from the designated CMO as part of the investment review process.

2. Purpose and Scope

The DoD Business Enterprise Architecture: Compliance Guide (henceforth, "Guide") provides direction on assessing and asserting compliance to the BEA, in support of the "Defense Business Systems Investment Management Guidance[3] and 10 U.S.C. §2222. It is intended for the following Office of the Secretary of Defense (OSD) or DoD Component personnel responsible for, accountable for, contributing to, and/or supporting the development of Defense Business Systems (DBSs), specifically for the BEA compliance assessment process:

Functional Sponsors	Chief Information Officers (CIOs)
Chief Management Officers (CMOs)	Program Managers (PMs)
Program Executive Offices (PEOs)	Acquisition Executives
Precertification Authorities (PCAs)	Principal Staff Assistants (PSAs)
DoD DBC membership and leadership	Test Community
Milestone Decision Authorities (MDAs)	Functional Leads

After reviewing this Guide, the reader should understand: (1) the overall BEA compliance process and the key elements of BEA compliance; (2) the rules, roles, and responsibilities involved in demonstrating and certifying DBS to have BEA compliance; and (3) the artifacts, processes, and tools that may facilitate BEA compliance assertion and certification.

For the FY 2018 investment cycle, BEA version 10.0 is the version relevant for compliance. For the FY 2019 cycle, it is version 11.1. If a subsequent version (e.g., 12.0) is issued during FY2018 or the FY2019 cycle, it will not be mandatory for compliance unless otherwise noted.

The guidance seeks assurance for compliance, considering cost factors in relation to expected benefits. These benefits include DoD enterprise benefits that may not be visible at the component level. As examples to facilitate efficiency of the process, the compliance assessment tool uses filters, whereby when a component identifies applicable operational activities, subsequent attributes, such as information exchanges, are filtered so that the full list of choices is not presented. If no values show up in a filtered view, components could remove the filter and search through lengthy lists. However, since this not required for compliance, instead components should enter a gap comment as discussed in section 4.5.

This Guide document does <u>not</u> establish DoD architecture development requirements and policies.

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[3] Available at http://dcmo.defense.gov/Governance/Defense-Business-Council/

3. Business Enterprise Architecture (BEA)

3.1. BEA Overview

A key purpose of the BEA is to help defense business process and system owners and program managers make informed decisions in support of the Department. The BEA helps ensure that business processes within the DoD are integrated; that defense business system solutions are interoperable; that applicable laws are complied with; that timely, accurate, and reliable business and financial information is produced for management purposes; that budget, accounting, and program *information* and systems are integrated. It helps ensure the information necessary to perform the DoD business mission is defined and available; the technologies necessary to perform the business mission are defined; and the transitional processes for implementing new technologies in response to changing mission needs are addressed.

3.2. BEA Compliance

Pursuant to 10 U.S.C. §2222(g), a covered defense business system program cannot proceed into development (or, if no development is required, into production or fielding) unless the system and business system portfolio are or will be in compliance with the BEA as a result of modifications planned. This determination must be made by the appropriate approval official cited in §2222. More broadly, enterprise architecture (EA) requirements statutorily apply to all DBS per the Clinger Cohen Act of 1996 (codified in 40 U.S.C. 1401 et seq.) 40 U.S.C. 11315[4] for the Chief Information Officer and per §2222 (e) which shows the BEA applies to all DBS.

Fundamentally, BEA compliance means that as DoD components adhere to the business capability acquisition cycle (BCAC) in DoD Instruction (DoDI) 5000.75[5] for business systems requirements and acquisition, they follow the applicable BEA policies and procedures to include entering and updating data in authoritative systems, identify and make use of (and comply with) relevant business data standards and business information requirements that are to apply uniformly throughout the DoD, and acquire systems (develop or modernize over their lifecycle) in a manner that will results in the applicable objectives of §2222(e)(2) and (3)(B) being met as outcomes,[6] as well as enabling the DoD to meet other statutory requirements.[7]

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[4] 40 U.S.C. 11315 requires developing, maintaining, and facilitating the implementation of an integrated information technology architecture for each federal executive agency, DoD Directive 8000.01, Management of the Department of Defense Information Enterprise (DoD IE), March 17, 2016, which implements these requirements. 10 U. S. C. §2222€ requires the BEA be integrated the CIO information technology enterprise architecture.

[5] "Business Systems Requirements and Acquisition", or prior to 5000.75's issuance, DoDI 5000.02 and its predecessors

[6] E.g., their system and information will integrate with other applicable budget, accounting, and program information and systems, whereby others in DoD can obtain verifiable, timely, accurate, and reliable integrated business and financial information for DoD management purposes.

[7] E.g., 44 U.S.C. 3601 transition plans and Office of Management and Budget (OMB) Circular A-130 (2016) requirement for the agency's EA must align to their information resources management (IRM) Strategic Plan.

The tables below summarize compliance expectations for all defense business systems (DBS) – those below 10 U.S.C. §2222 thresholds and internal thresholds (e.g., <$1M) and those above thresholds.[8]

<div align="center"><u>All DBS (includes those below thresholds and above thresholds)</u></div>

BEA / EA Requirement	Fulfills
System recorded in the DoD IT Portfolio Repository (DITPR) with lifecycle and migration information complete and up to date, associated systems and interfaces data entered; Unique Investment Identifier (UII), number of users, business function, and hosting environment identified.[9] DITPR lifecycle should be consistent with budget and future years defense program (FYDP) data in the Select and Native Programming Data Input Systems for IT (SNaP-IT) for those in the DoD IT budget.	Lifecycle and migration information fulfills 44 U.S.C. 3601 / OMB Circular A-130 transition plan requirements Associated systems and interfaces information fulfills 44 U.S.C.3601 / 10 USC §2222 interoperability and §2223 consolidated inventory interfaces, and interoperability requirements Business function facilitates development of integrated business processes and hosting environment into the CIO integrated EA, fulfilling. UII and number of users is used for integrated budget and program information. Facilitates §2222(c)(1) required Secretary of Defense guidance to provide for the coordination of, and decision making for, the planning, programming, and control of investments in covered defense business systems.
Component follows DoDI 5000.75 / DoDI 8330.01,[10] Clinger Cohen Act, etc. for system development / acquisition / sustainment. For systems below thresholds, this compliance is verified at least at the component level.[11]	Fulfills[12] the use of applicable standards and applicable objectives of §2222(e)(1), (2) and (3)(B) being met as outcomes. Results in fulfilling use of business data standards and business information requirements that apply uniformly throughout DoD. Results in reducing duplicative investments and promoting sharing of common services.

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[8] Items fulfilled are also supported by guidance such as "A Practical Guide to Federal Enterprise Architecture" http://www.gao.gov/assets/590/588407.pdf
[9] Appendix G of the "Defense Business Systems Investment Management Guidance" lists mandatory data elements. While these elements are listed in the context of covered DBS, they are required of DITPR for all system records.
[10] "Interoperability of Information Technology (IT), Including National Security Systems (NSS)"
[11] As part this DoDI 5000.75 effort, as one goes to the various authority to proceed (ATP) decision points of the BCAC, the Functional Requirements ATP and Acquisition ATP and defines detailed design specifications, standards are identified and ultimately addressed in these business system design specifications.
[12] For example, as one develops requirements, one uses enterprise architecture to ensure the system will integrate budget, accounting, and program information and systems as applicable, that appropriate business process reengineering is conducted, and so forth.

Covered DBS (above thresholds)[13]

BEA / EA Requirement	Fulfills
BEA assessment completed in Integrated Business Framework Data Alignment Portal (IBF-DAP) BEA module per this BEA compliance guide.	Fulfills §2222(g) compliance and supports §2222(c)(1) for DoD level guidance. This compliance methodology is the as-is BEA environment that requires mapping to relevant operational activities, processes, system functions, business capabilities, and End-to-Ends helps support the new §2222(e) requirement for the BEA to manage integrated business processes within the DoD.
System development and modernization (Dev Mod) conducted using DoDI 5000.75 (BCAC)[14]	Fulfills requirement on the use of applicable standards and applicable objectives of §2222(e)(1), (2) and (3)(B) being met as outcomes. Results in use of business data standards and business information requirements that apply uniformly throughout DoD. Results in reducing duplicative investments and promoting sharing of common services. Results in interoperable DBS solutions and integrated budget, accounting, and program information and systems. Helps result in development of integrated business processes within the DoD. Results in documenting changes to processes.
BEA determination recorded in DoD Information Technology Investment Portal (DITIP)	Follows §2222(c)(1) required Secretary of Defense guidance to provide for the coordination of, and decision making for, the planning, programming, and control of investments in covered defense business systems; fulfills use of business data standards and business information requirements for BEA compliance that apply uniformly

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[13] Components can assess compliance in the IBF-DAP BEA module, can record BEA compliance determinations in DITIP, and can map investments (systems) to strategies in the IBF-DAP OEP module even though the systems are below thresholds.

[14] Makes use of a systematic process for standards selection (e.g., ASSIST at https://assist.dla.mil, DoD Information Technology Standards Repository (DISR) at https://gtg.csd.disa.mil/disr, or DoD issuances) to identify, process maps, data elements relational data. Ideally BEA assessment and BCAC address information and process integration (i.e., 10 USC 2222 (e)(3)(ii) and (iii) routinely produce verifiable, timely, accurate, and reliable business and financial information for management purposes; integrate budget, accounting, and program information and systems)

BEA / EA Requirement	Fulfills
	throughout DoD and enables integrating DBS information.
BEA compliance verified by PCA (entered in DITIP) and approved by CMO / CMO of the DoD (CMO for 4th estate and all priority defense business systems) [15]	Fulfills §2222(g)(1)(B)
Components map investments (DBS) to functional strategies using the organizational execution plan (OEP) module in IBF-DAP	Helps fulfill OMB A-130 requirement for the agency's EA to align to their IRM Strategic Plan, with the functional strategies supporting the Agency Strategic Plan and the DoD IRM strategic plan.

3.3.   BEA Content Structure and BEA Data

The BEA content[16] uses DoD Architecture Framework. Version (DoDAF) 2.0 naming conventions and comprises a set of integrated products including the All Viewpoint (AV), Capability Viewpoint (CV), Operational Viewpoint (OV), Systems Viewpoint (SV), Services Viewpoint (SvcV), Standards Viewpoint (StdV), and Data & Information Viewpoint (DIV). Together, these viewpoints display capabilities, activities, processes, data, information exchanges, business rules, system functions, services, system data exchanges, technical standards, terms, and linkages to Laws, Regulations, and Policies (LRP). BEA content and requirements will continue to mature to address the 10 U.S.C. §2222(e) requirements.

The BEA also includes DoD business processes and defense business systems related data in authoritative data sources such as the DoD Information Technology Portfolio Repository (DITPR); Select and Native Programming Data Input Systems for Information Technology (SNaP-IT); Integrated Business Framework Data Alignment Portal (IBF-DAP); and the DoD Information Technology Investment Portal (DITIP). For example, functional strategy data is part of the IBF-DAP.

3.3.1. BEA Products

As stated, the BEA content comprises a set of DoDAF products. The CMO of DoD has selected content from these products as key elements for BEA compliance: Operational Activities (OAs), processes, Information Exchanges (IEs), data attributes and associated metadata (*e.g.*, length, type,

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[15] Verification of compliance above the component level is a key difference between those below thresholds and those above threshold.

[16] "BEA content" here refers to the BEA DoDAF models, or artifacts, such as the Capability Viewpoint (CV) models CV-2 Capability Taxonomy and CV-6 Capability to Operational Activities Mapping, and described in more detail in the BEA Architecture Product Guide (March 15, 2012). It includes some other content, such as the BEA Architecture Product Guide itself. It does not refer to all BEA content (for example, it does not refer to DITPR lifecycle BEA content).

and permitted values), Standard Financial Information Structure (SFIS), Defense Financial Management Improvement Guidance (DFMIG) Statements (which include Federal Financial Management Improvement Act (FFMIA) requirements), business rules, and LRPs.

The following table identifies and hyperlinks the BEA DoDAF 2.0 content used for BEA compliance, depicts the key elements for compliance, and how each element is used. The table references key terms in the BEA compliance process:

- Alignment is the identification and mapping of relevant BEA compliance requirements associated with a particular program or system.
- Compliance Assertion is a claim of compliance, made by a user against a requirement.

In addition, an analysis that should occur during capability requirements determination and materiel solution analyses before investing in new DBS's, as well as during annual portfolio reviews of existing systems, is investigation and review for potential duplication and overlap. Therefore this is a required alignment and mapping activity, done as part of operational activities and processes alignment and mapping or reviews. The IBF-DAP helps perform these reviews. For annual reviews, this could be the entire portfolios or subsets of systems during the year, and based on factors such as strategic alignment, scope, cost, complexity, and risk. Components should state in their capabilities requirements documentation and annual review results in their organizational execution plan (OEP), that this investigation or review was conducted, along with any significant findings.

Additional terms and definitions can be found in Appendix B.

Table 1. Scoping and Compliance Summary and BEA DoDAF 2.0 Artifacts Used

BEA DoDAF Product/Content Name	Compliance Element	Alignment and Compliance Requirement	Compliance Function
OV-5a Operational Activity Decomposition Tree OV-5b Operational Activity Model	Operational Activities	Relevant Operational Activities identified and aligned in the BEA	Alignment Mapping
OV-3 Operational Resource Flow Matrix Information Exchanges Available	Information Exchanges	Available Information Exchanges in the BEA relevant to the DBS are identified for interoperability to the maximum extent practicable Number of interfaces to other systems and associated systems are identified in DITPR	Alignment Mapping and Assertion

BEA DoDAF Product/Content Name	Compliance Element	Alignment and Compliance Requirement	Compliance Function
OV-6c Business Process Model	Processes	Relevant DBS Processes identified and aligned in the BEA	Alignment Mapping
DIV-2 Logical Data Model	Data Attributes	A logical data model exists for the system Relevant Data Attributes identified and aligned in the BEA	Alignment Mapping
LRP Laws, Regulations, and Policies Repository	LRP	Relevant LRPs identified and aligned in the BEA	Alignment Mapping and Assertion
Defense Financial Management Improvement Guidance	DFMIG	Relevant DFMIG identified and aligned to the DBS	Alignment Mapping and Assertion
OV-6a Operational Rules Model	Process Business Rules and Data Business Rules	Relevant Process Business Rules identified and aligned in the BEA	Alignment Mapping and Assertion
The Standard Financial Information Structure (SFIS) Checklist	SFIS System Categories	Relevant SFIS identified and alignment to the DBS	Alignment Mapping and Assertion
Enterprise Standards	Standards[17]	Relevant Enterprise Standards identified and aligned in the BEA	Alignment Mapping and Assertion

[17] In the as-is BEA, some of these standards are identified in the functional strategies, in the BEA 10 content, and the LRP at the level of the overall name of the standard (e.g., Procurement Data Standard (PDS), Standard Financial Information Structure (SFIS)), and in Information Exchanges, Data Attributes, and Business Rules at the element level. However, not all relevant business data standards are currently identified. Therefore, components identify relevant standards as part of the business capability acquisition cycle (BCAC) for business systems requirements and acquisition, which is part of BEA compliance.

3.3.2. BEA Compliance Process

The BEA Compliance process is used to determine the extent to which a Defense Business System (DBS) meets the requirements provided in the BEA. Compliance Assessment is the process of determining and documenting whether or not specific aspects of a system comply with the BEA. It is the 'technical' identification of elements in the DBS that meet the requirements in the BEA; a formal assessment of the DBS using the BEA as the compliance baseline. It is followed by a Compliance Determination. Compliance Determination is a declaration by the Defense Business System Pre-Certification Authority (PCA) as to whether or not the specified DBS is in compliance with the BEA (e.g. the DBS meets requirements identified in the BEA). One of the factors on which the PCA bases this declaration of compliance is the Compliance Assessment.

Assessment of compliance and documentation of alignment must be completed using the Integrated Business Framework Data Alignment Portal (IBF-DAP) according to annual Investment Management Guidance. Training for the annual investment review is conducted to assist DBS owners in completing the annual BEA compliance assessment.

Not all DBS are required to be BEA compliant. Legacy and certain DBS using non-appropriated funds do not have to be BEA compliant. A Legacy DBS is any system with a sunset date within 36 months of the date of the certification approval. For non-covered DBSs, legacy systems are enduring systems with an operations and support life cycle date of less than 36 months from the start of the fiscal year in the organizational execution plan (OEP). Non-legacy or core DBS must be BEA compliant. A Core DBS is an enduring business system with a sunset date greater than 36 months from the date of the certification request. For non-covered DBSs, enduring systems are those with an operations and support life cycle date of greater than 36 months from the start of the fiscal year in the OEP.

Components and other requirements (e.g., auditability) may necessitate legacy DBS to be BEA compliant in order to operate during the three year legacy period.

Appendix C has been added to this guidance to address scoping and asserting Defense Logistics Management Standards (DLMS) compliance, pursuant to DoD Directive 8190.01E. While not part of BEA 10.0 content, DLMS has been added for BEA 11.0.

3.3.3. Compliance for DBS Systems Previously Assessed in FY18

Unless otherwise notified by the functional owner or PCA, the CMO of DoD will copy previous FY18 compliance assessments over in the IBF-DAP BEA module into the FY19 baseline. DBS owners that have completed a prior BEA Compliance assessment should validate that any changes previously recorded have been correctly captured in the IBF-DAP Compliance Module.

Upon assurance that all prior data has been moved to IBF-DAP for FY19, the assessor should make any changes that are necessary and lock the assessment record in the IBF-DAP tool.

4. Compliance Process for DBS's not included in the FY18 OEP

The following graphic is an illustration of the BEA alignment mapping and compliance assertion sieve that implements the BEA compliance process. The sieve has alignment mapping and compliance elements. Alignment maps the DBS to the BEA compliance elements by filtering out BEA compliance requirements that are not applicable to the DBS and determining applicable requirements as well as identifying key elements of the BEA, such as Operational Activities, relevant to the DBS. Through the filtering the compliance assessment is limited to compliance requirements provided by only the applicable compliance elements.
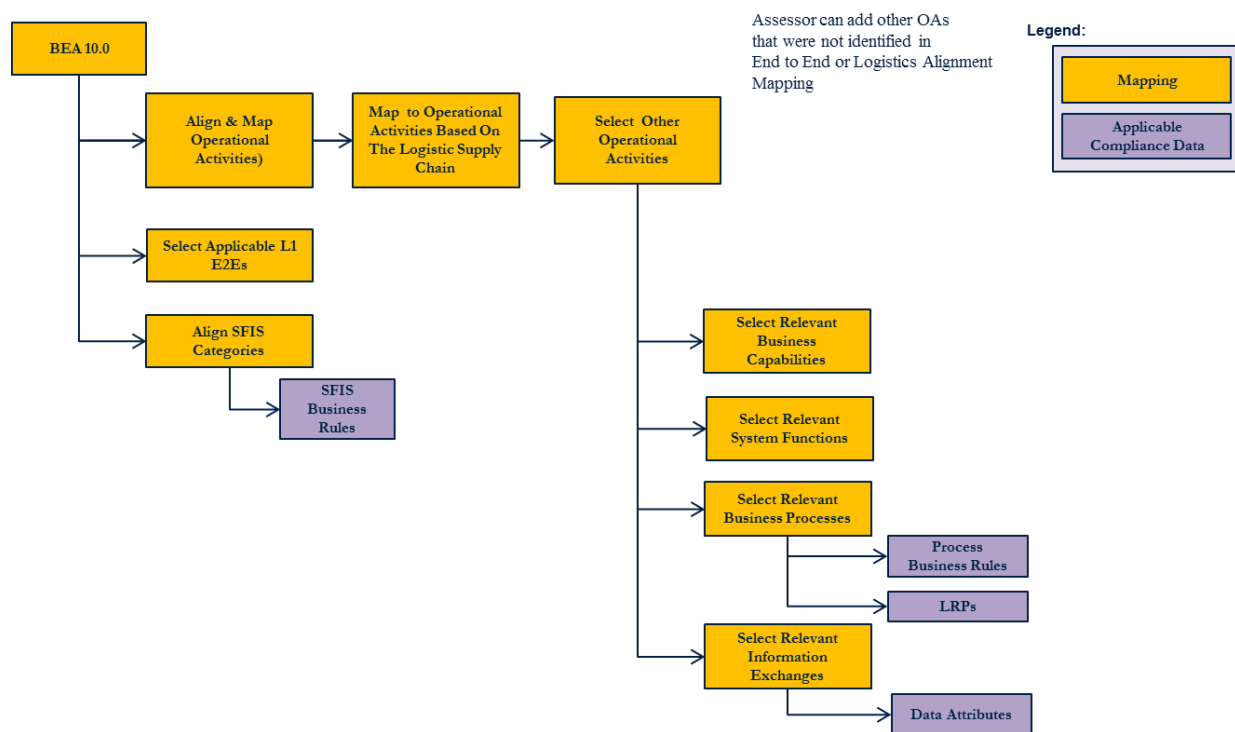
Figure 1. BEA Alignment Mapping and Compliance Data

To achieve the full range of BEA compliance requirements, it is important to understand the different ways that alignment mapping and asserting are applied in the BEA Compliance process. The BEA Compliance Process has three process steps:

- Align DBS Functionality
- Align to BEA Operational Activities, Level 1 End to Ends, Business Capabilities, SFIS Categories and System Functions
- Align to Business Processes and Information Exchanges, and assert compliance to applicable data elements (LRP, data attributes, business rules, SFIS rules, etc.)

The first process steps are focused on how the DBS functions relate to the BEA. To achieve this, the Assessor will need to fully relate the DBS's operational and performance requirements to the BEA Operational Activities, Business Capabilities, SFIS Categories, System Functions and End-to-End Business Flows. The following process steps identify and relate the BEA Business Processes and Information Exchanges

After the Assessor completes the alignment and mapping process steps, the Assessor asserts BEA compliance to the relevant Data Attributes, Data and Process Business Rules, Standards, LRP, DFMIG, and SFIS Checklist Rules.

An Assessor should have an understanding of what the BEA is and what information it contains. Before asserting compliance, an Assessor must also have an in-depth understanding of the Defense Business System, what the system does, and which Operational Activities and Business Processes it performs. Look up and comparison matrices are provided throughout this guide to assist in aligning and mapping DBS's with the BEA.

4.1. Understanding the Defense Business System

A Defense Business System (DBS) performs one or more major functions in the collection, processing, maintenance, use, sharing, dissemination or disposition of information, and provides data for stakeholder consumption. The following description uses the Defense Logistics Agency's Defense Agencies Initiative (DAI) system as an example.
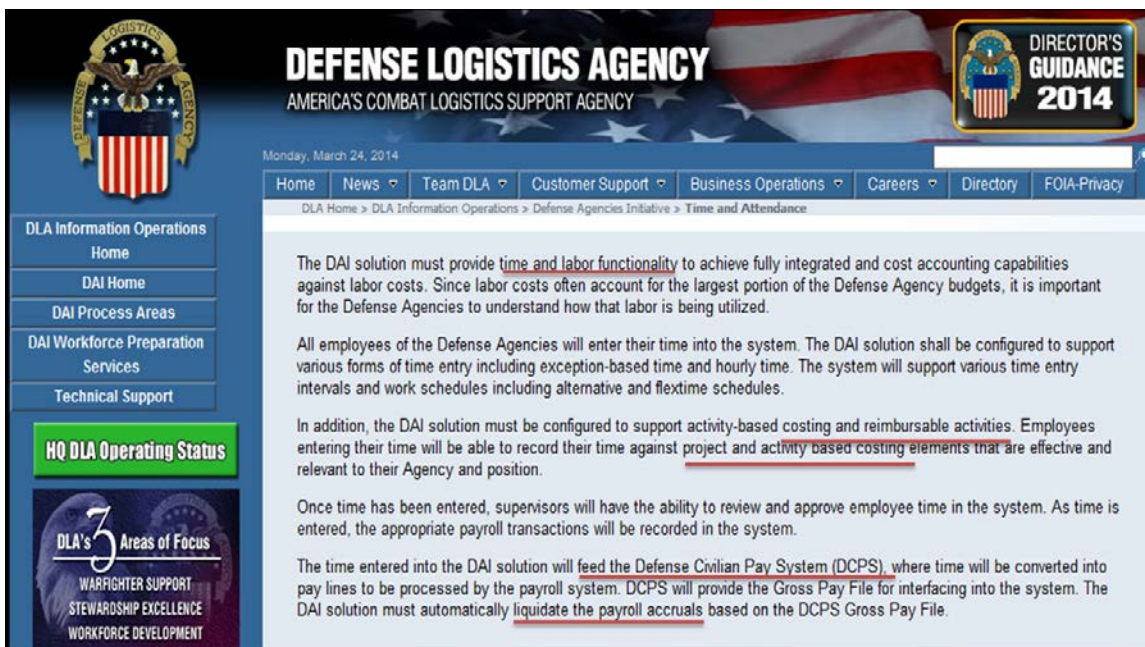
Based on the system overview, some of the main functions of the system are time and labor related, and integrated with cost accounting, reimbursable activities, as well as project and activity based costing. The system also exchanges payroll information with Defense Civilian Pay System (DCPS) and liquidates/transforms payroll data. Two potential scoping items were identified in this simple overview: Operational Activities, Information Exchanges. The time and labor

functions relate to Human Resource Operational Activities while cost accounting, reimbursable and activity based costing relate to Financial Management Operational Activities. The overview also gives clues on a major Information Exchange as Time and Payroll are related to Services Rendered, and there are interfaces with DCPS. A deep dive into the system would surely provide greater insight into areas that relate to the BEA. The Assessor should have a thorough understanding of the DBS and have access to Subject Matter Experts on the DBS being assessed to make the appropriate choices during the BEA Compliance Process.

4.2. Align and Map DBS Functionality with BEA Architecture Elements

Identifying the portion of the BEA that is applicable to the DBS is critically important to an accurate and successful compliance assessment. Operational Activities relevant to the DBS are aligned and mapped first followed by Business Processes associated with those Operational Activities. Once Operational Activities and Business Processes are mapped, the End-to-End process flows associated with them should be examined and a determination made as to which End-to-Ends are in scope for the DBS. After the End-to-Ends are scoped, they should be cross-checked with the Operational Activities and Business Processes to ensure that there are no inconsistencies between them.
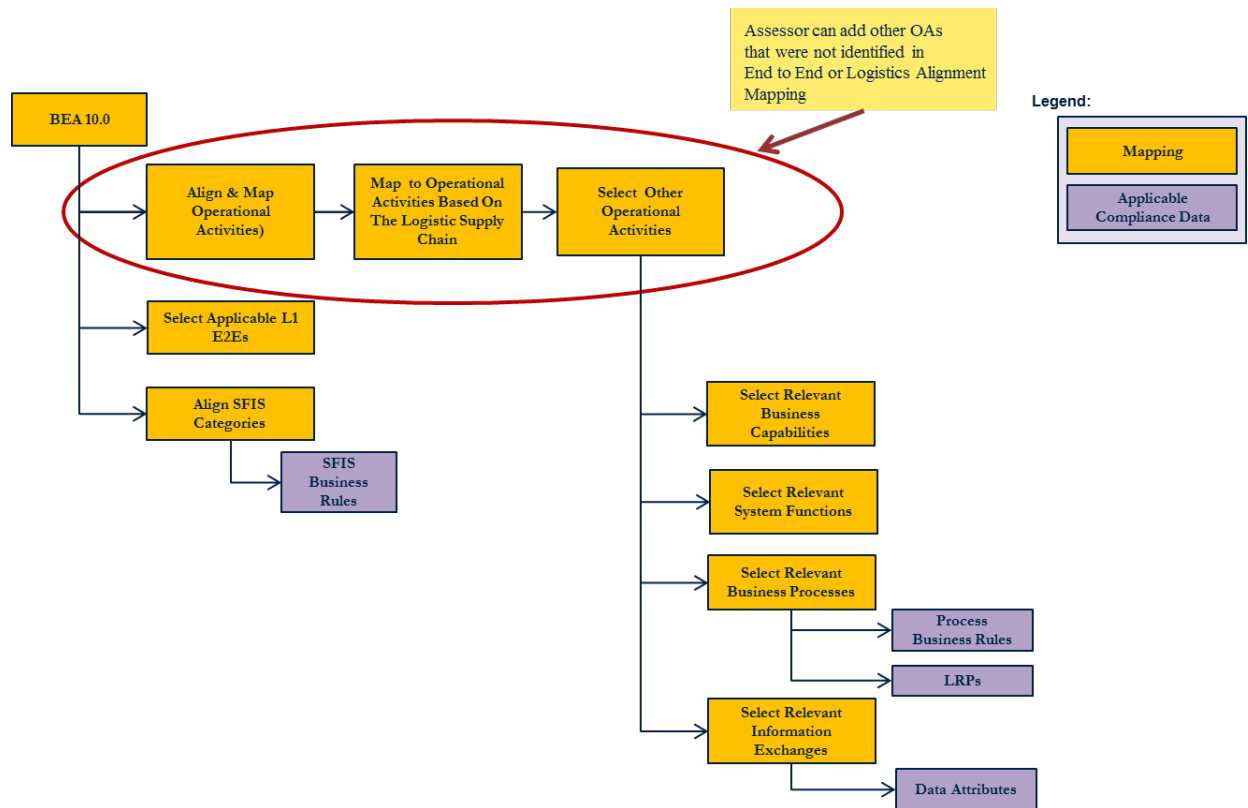

Figure 2. Mapping Operational Activities

4.2.1. Mapping Operational Activities

The BEA Operational Activity model is a decomposition of the major activities of the DoD Business Mission Area (BMA). It begins with *Manage the Department of Defense Business Mission* then decomposes into more detailed activities. Follow the decomposition down to detailed activities that may be relevant to the DBS. Below is sample hierarchy of *Perform Human Resources Management* that decomposes to the Operational Activities related to *Time, Absence, and Labor Information*. A download of the BEA 10.0 architecture products can be made available to provide additional context.
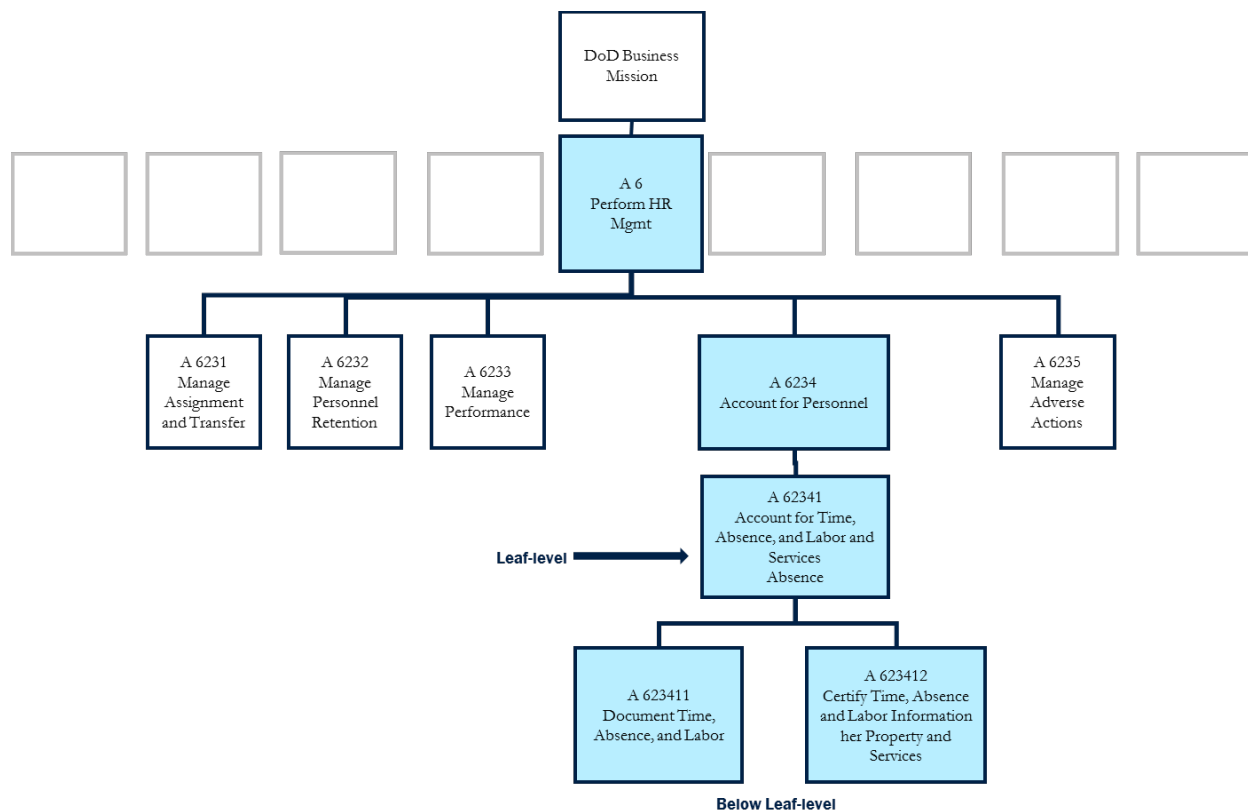
Figure 3. OA Decomposition - At, Below, and Above Leaf Level Activities

Mapping to BEA Planned Logistics Operational Activities

Operational Activities that represent the Logistics Supply Chain (LSC245) model that is planned for inclusion in a future version of the BEA should be mapped where applicable to enhance the ability to conduct portfolio management by capturing specific logistics capabilities and activities in the architecture. If the DBS does not include logistics functionality, LSC245 Planned Operational Activities would NOT be scoped. There are two products that will help determine which LSC245 activities may be relevant to the DBS. The [Operational Activities to Planned Operational Activities Map](#) and the [Operational Activity – Planned Logistics Diagram.](#) The Map relates the Planned

Operational Activities to the corresponding Operational Activities and the Logistics Supply Chain model. The Diagram provides the decomposition of the Planned Operational Activities.

Operational Activity Level	Operational Activity Title	OA Leaf-level?	Column	Associated POA Level	Associated POA Title	POA Leaf-Level?	Colu	Associated LSC Code	New LSC245 Level	New LSC 245 Title
				P0	Perform Logistics	FALSE		LSC	0	LSC Logistics Supply Chain
A4.1	Conduct Logistics Business Planning	TRUE		P1	Plan	FALSE		P	1	Plan
				P1.1	Plan Supply Chain	FALSE		P1	1.1	Plan Supply Chain
A4.1.1	Determine Demand Forecast	FALSE		P1.1.1	Identify, Prioritize and Aggregate Supply Chain Requirements	TRUE		P1.1	1.1.1	Identify, Prioritize and Aggregate Supply Chain Requirements
A4.1.2	Determine Available Supply Chain Resources	FALSE		P1.1.2	Identify, Prioritize and Aggregate Supply Chain Resources	TRUE		P1.2	1.1.2	Identify, Prioritize and Aggregate Supply Chain Resources
A4.1.3	Balance Supply Chain Resources with Demand	FALSE		P1.1.3	Balance Supply Chain	TRUE		P1.3	1.1.3	Balance Supply Chain
A4.1.4	Publish Supply Chain Plans	FALSE		P1.1.4	Establish And Communicate Supply Chain Plans	TRUE		P1.4	1.1.4	Establish And Communicate Supply Chain Plans

Figure 4. OA / POA / LSC Mapping

Use the Operational Activity Title or the New LSC245 Activity Title column in the map shown in Figure 4 as the point of reference to identify associated Planned Operational Activities. If an Operational Activity on the map was selected during scoping, the associated Planned Operational Activity should be examined to determine its relevance. In the example above Operational Activity *A4.1.1 Determine Demand Forecast* was scoped for the DBS so the associated Planned Operational Activity *P1.3 Identify, Prioritize and Aggregate Supply Chain Requirements* should be examined to determine its relevance. When there is no Operational Activity listed next to the Planned Operational Activity in the map, the Assessor should follow the steps below to evaluate it in greater detail.

To determine if the Planned Operational Activity is relevant to the DBS, evaluate the name as it can help identify logistics activities. Evaluate the description of the logistics activity. If all or part of the logistics activity is performed by the DBS, then the Planned Operational Activity is relevant to the DBS and should be scoped.

The following steps highlight the required mapping activities.

Identify As-Is and To-Be Functionality

For each selected Planned Operational Activity, identify whether it is As-Is (functionality currently implemented in the DBS) or To-Be (functionality that will be in the DBS). If the Assessor has annotated "As Is" or "To Be" functionality for an activity, it should also be scoped to the DBS.

Map Leaf Level Activity

After several levels of decomposition, "leaf level" activities that contain detailed requirements used for compliance are encountered and should be evaluated to determine if they are within scope of the DBS.

A report is provided to assist the Assessor to identify Operational Activities that are within scope called the Operational Activities Used in DBS Alignment and Compliance Report. The report indicates whether each activity is a leaf-level activity, and whether it is associated with Business Processes, Information Exchanges for compliance or System Functions.

To determine if the activity is relevant to the DBS, evaluate the name as it can help identify Operational Activities. Evaluate the description of the activity. If all or part of the activity is performed by the DBS, then the Operational Activity is relevant to the DBS and should be mapped.

Ideally the leaf level contains all compliance requirements. However, there are cases in the BEA where the requirements are also included above and/or below the leaf level.

Map Above and/or Below Leaf Level Activity

After mapping a leaf-level activity within scope, determine if there are Operational Activities above the leaf-level that are relevant to the DBS and contain content for compliance such as Processes, IE for Compliance or System Functions. This can be done by working backwards up the Operational Activity decomposition levels. These activities are also within scope and should be selected.

Determine if there are activities below the leaf-level activity that are applicable to the DBS using the same criteria used for leaf-level activities. Those activities are also within scope. If there are multiple levels below the leaf-level, the Assessor should bypass the intermediate levels and select the lowest level applicable.

Figure 5. OAs Used in DBS Alignment and Compliance Report

In the example above, the Operational Activity *Account for Time, Absence, and Labor* is designated as leaf-level Operational Activity, so it would be in scope for the DBS. Additionally *Account for Personnel* is above the leaf-level but contains the IEs for Compliance so would be in scope. The three Operational Activities *(1) Document, (2) Certify and (3) Adjust Time, Absence, and Labor Information* are below the leaf-level but have processes associated with them, so they should also be mapped if relevant to the DBS.

Assessors should be careful to avoid scope creep when identifying Operational Activities within the scope of the DBS functionality. This occurs when an Assessor mistakenly determines that DBS

functionality that is only <u>associated</u> with an Operational Activity is within scope of the activity. For example *Adjust Time Absence, and Labor Information* may generate a transaction to adjust hours worked in the payroll system (so it is associated), but the actual payroll adjustments are within the Manage Compensation activity that are not done in this DBS so it would NOT be in scope.

Identify Operational Activities Gap

If the Assessor does not find any Operational Activities relevant to the DBS, it is possible that the business functionality that relates to the DBS is not included in the BEA. When this occurs, identify an appropriate place in a preceding node of the Operational Activity tree and record the missing functionality as a BEA gap. This is accomplished by completing the provided IBF-DAP fields BEA Gap with information describing the gap. Ensure that the DBS business functionality truly falls in a BEA Gap because recordation of a BEA Gap when there are relevant activities in the BEA is an indication of an inadequate scoping effort.

> If the Assessor cannot identify any relevant operational activities and has provided a gap for the Operational Activity, then there is no requirement to continue and map to Processes, System Functions, Business Capabilities, End-to-Ends, Information Exchanges, Data Attributes, Laws, Regulations & Policies, Business Rules, DFMIG, and/or SFIS. That being said, if there are any of these that apply and can be identified by scanning the lists, please select the relevant ones, because it will help in further refining the architecture. Section 4.5 provides more information on how to do this.
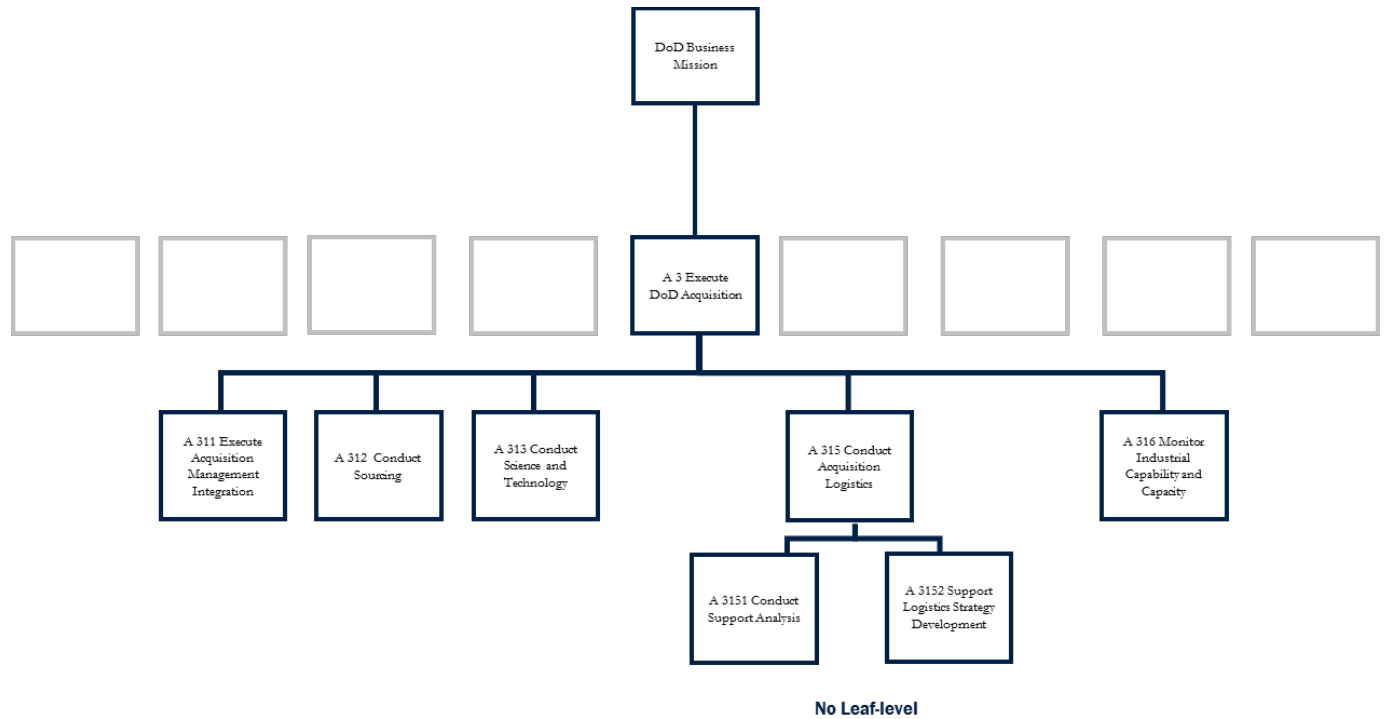
Figure 6. OA Decomposition - No Leaf Level Activities

In the example above, *A3.1.5 Conduct Acquisition Logistics* does not have any leaf-level Operational Activities in its decomposition. When this occurs, identify an appropriate place in the Operational Activity model at a higher level and record the missing leaf-level as a BEA Gap. This is accomplished by recording the Operational Activity gap in the IBF-DAP. BEA Gap least one leaf-level Operational Activity must be scoped or a BEA Gap recorded.
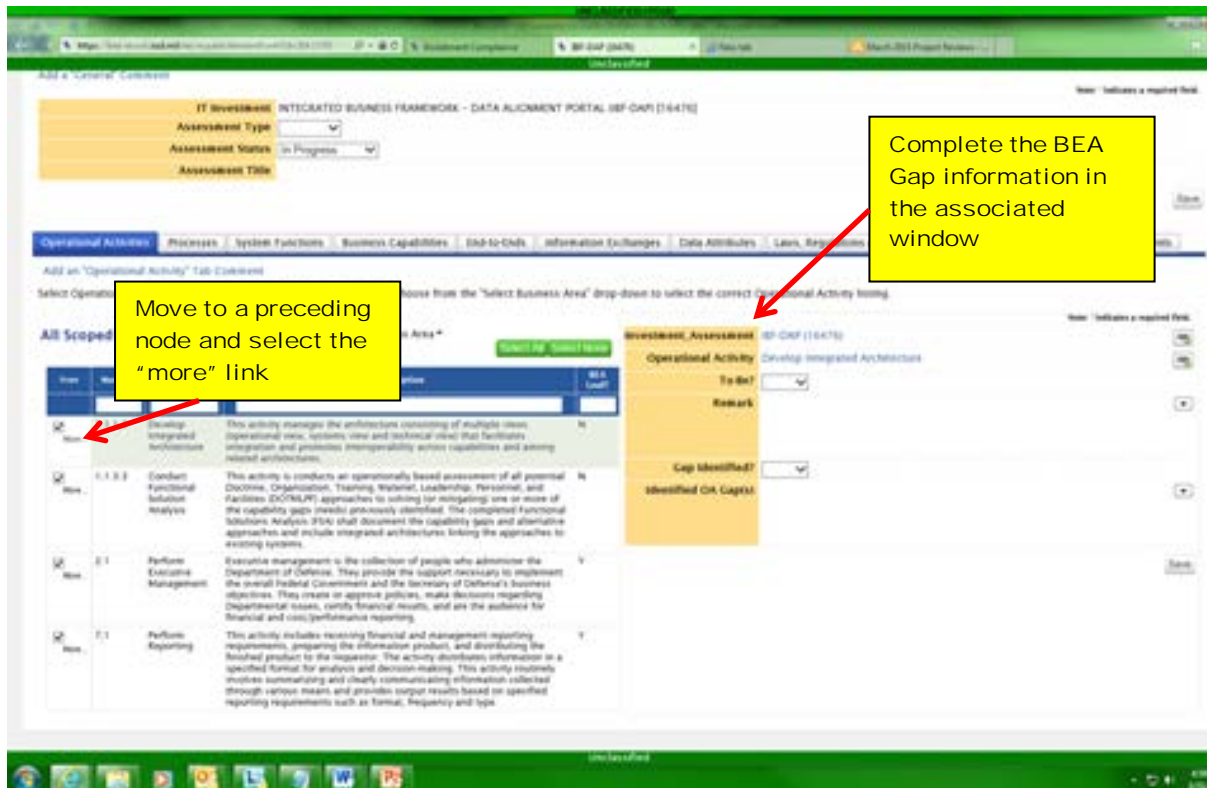
Figure 7. OA BEA Gap

Identify As-Is and To-Be Functionality

For each selected Operational Activity, identify whether it is "As-Is" (functionality currently implemented in the DBS) or "To-Be" (functionality that will be in the DBS).

Since *Account for Time, Absence, and Labor* is in the system as described in the BEA, it is annotated "As Is" in the IBF-DAP tool. If it were not currently in the system but planned for a future release it would be annotated as "To Be".

Note that if the Assessor has annotated new "As Is" or "To Be" functionality for the Activity, it should also be aligned and mapped to the DBS.

4.3. Mapping End to Ends, Business Capabilities, and System Functions

In addition to the previous mapping to support BEA Compliance this scoping is performed to support the comparability of DBS. The information that must be updated includes: End to End Business Flows, Business Capabilities, and System Functions.

4.3.1. Review End-to-End Suggestions

End-to-End Business Flows (End-to-Ends) provide a cross-functional picture of BMA operations in relationship to all or part of the life cycle of an asset (e.g. equipment) or resource (e.g. Government employee or contractor). For example, the Hire-to-Retire End-to-End begins with acquisition of a human resource and ends when the resource is no longer associated with the Department. The End-to-Ends currently in the BEA are listed in the table below.

Table 2. End To End Business Flows

Budget-to-Report	Cost Management	Plan-to-Stock-Inventory Management
Hire-to-Retire	Deployment-to-Redeployment/Retrograde	Proposal-to-Reward
Procure-to-Pay	Environmental Liabilities	Prospect-to-Order
Acquire-to-Retire	Market-to-Prospect	Service Request-to-Resolution
Concept-to-Product	Order-to-Cash	Service-to-Satisfaction

As a result of mapping Operational Activities and Business Processes, lists of suggested relationships of the End-to-Ends with high-level End-to-End processes are generated. Retrieve these lists from the End-to-End Relationships by Operational Activity and End-to-End Relationships by Business Process. In preparation for mapping End-to-Ends, review the suggested End-to-Ends and determine if the functionality required by the End-to-End and one or more End-to-End high-level processes is relevant to the DBS. For example, the Assessor would examine *Hire-to-Retire* to determine if the business flow includes *Account for Time, Absence and Labor*.

4.3.2. Mapping End-to-Ends and End-to-Ends L1 (High Level Processes)

Based on familiarity with the DBS and insight gained from the review of the suggested End-to-End relationships, the Assessor identifies one or more End-to-Ends and selects each End-to-End that is within scope of the DBS. If the End-to-End name and description are not adequate to make the decision, select the End-to-End from the table above and review the End-to-End high-level processes. The following illustration shows a segment of the *Hire-to-Retire* End-to-End with the *Account for Personnel* high level process.

Hire-To-Retire

Hire to Retire encompasses all business functions necessary to plan for, hire, classify, develop, assign, track, account for, compensate, retain and separate the persons (i.e., military members, civilian employees, contractors, noncombatant evacuees, volunteers) needed to accomplish aspects of the DoD mission.

List of Level 1, Level 2 and Processes

Level 1	Level 1 Description	Level 2	Level 2 Description	Process	Process Description
Account for Personnel	This activity is associated with accounting for time, absence, and labor, managing absence request, managing leave sell-back, managing an unauthorized absence, accounting for personnel casualty, tracking personnel location and managing visibility of the availability of Human Resources (HR). The visibility of HR does not include documenting the information related to a persons availability, but merely allows for the visibility of this information in a meaningful context.				
		Account for Time, Absence, and Labor	This activity is associated with recording, adjusting and certifying time worked, absence, and labor information and managing leave balance. Note: For Military personnel on active duty, exception reporting is normally used (i.e., time worked is not recorded, absences and labor (as appropriate) are recorded).		
				Adjust Time, Absence, and Labor Information	This activity is associated with adjusting time, absence, and labor information based on errors or modifications of proposed events (e.g., canceling leave that has yet to be executed). These adjustments can be for future leave periods already documented and current or past periods of time.
				Certify Time, Absence, and Labor Information	This activity is associated with certifying and/or re-certifying (for adjustments) of time, absence, and labor information by the certifying authority, enabling payroll labor costs to be distributed and charged to appropriate cost centers, and ensuring that leave and retirement point information are updated.

Figure 5. Hire-to-Retire E2E

After identifying the End-to-Ends business flows that are relevant to the DBS, review the End-to-End high-level processes and identify those that are within scope. For example, the *Account for Personnel* high level process would be in scope as it includes *Account for Time, Absence and Labor.*

4.3.3. Rationalize the End-to-Ends

After mapping of End-to-Ends and End-to-End high level processes is complete, review the Operational Activity and Business Process mapping in the context of the completed End-to-Ends. Additional Operational Activities and Business Processes may have been revealed that are relevant to the DBS. Identify any inconsistencies. Eliminate inconsistencies by revising the mapping of the End-to-Ends, Operational Activities or Business Processes.
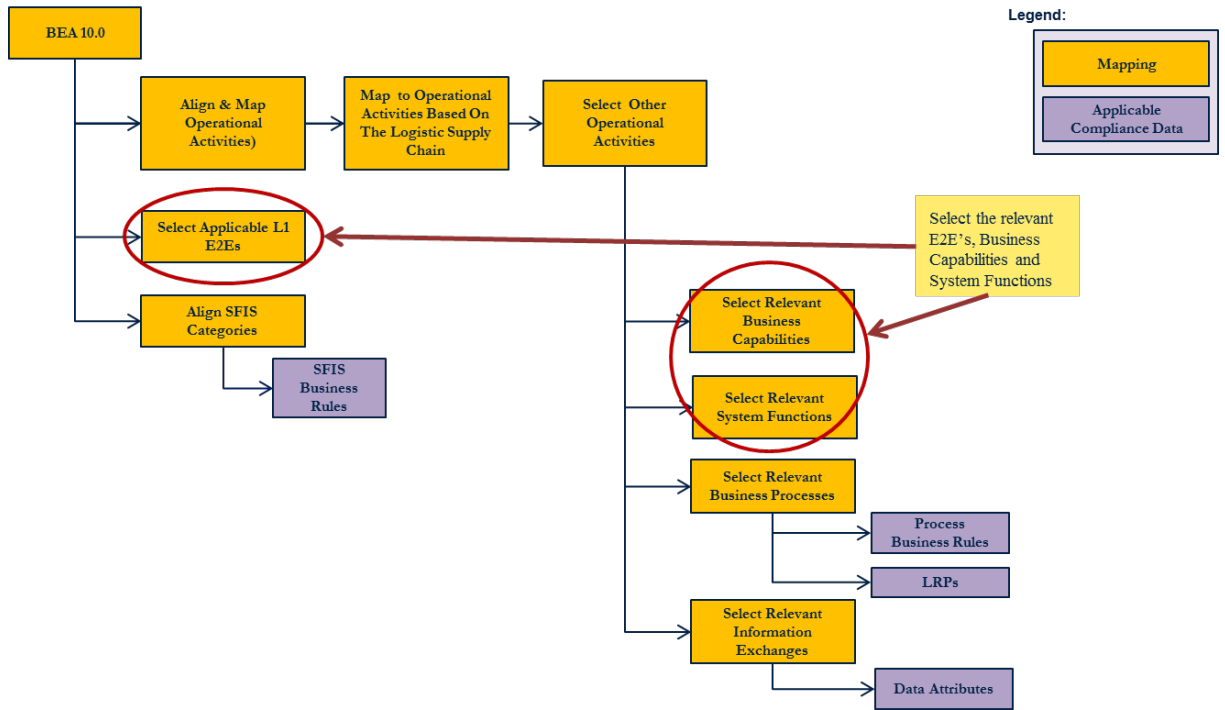
Figure 6. Mapping E2Es Business Capabilities and System Functions

4.3.4. Mapping Business Capabilities

A Business Capability is the ability to execute a specific course of action. It can be a single business enabler or a combination of business enablers (e.g., Business Processes, policies, people, tools, or systems information) that assist an organization in delivering value to its customer. Based on the Operational Activities selected during scoping, applicable Business Capabilities will be filtered. The Assessor will identify those Business Capabilities that are within scope for the DBS. Assessors may find the Business Capability – Operational Activity Map helpful when determining if the Business Capability in relevant to the DBS. The illustration below is an example of the map.

Capability	Description	CBM	Activity Number	Activity	Activity Description
Account for Personnel	This capability is associated with accounting for time, absence, and labor, performing leave and absence administration, and managing personnel casualty and Line of Duty (LoD) determination process.	HRM	62341	Account for Time, Absence, and Labor	This activity is associated with recording, adjusting and certifying time worked, and absence information. Time, absence, and labor is used for exception reporting of Military personnel on active duty (i.e., time worked and labor are not recorded and absences (as appropriate) are recorded) and is used for positive reporting and certifying time of reserve personnel serving on inactive duty. Note: For Military personnel, labor hours are used to account for hours worked against a job code, not to determine wages. This activity is also associated with scheduling employees, attesting attendance data, managing usage of leave and paid time off, and certifying employee attendance data.
Account for Personnel	This capability is associated with accounting for time, absence, and labor, performing leave and absence administration, and managing personnel casualty and Line of Duty (LoD) determination process.	HRM	623413	Adjust Time, Absence, and Labor Information	This activity is associated with adjusting time, absence, and labor information based on errors or modifications of proposed events (e.g., canceling leave that has yet to be executed). These adjustments can be for future leave periods already documented and current or past periods of time.
Account for Personnel	This capability is associated with accounting for time, absence, and labor, performing leave and absence administration, and managing personnel casualty and Line of Duty (LoD) determination process.	HRM	6234421	Categorize Unauthorized Absence	This activity is associated with making a decision categorizing a Member into one or more categories of unauthorized absence and disseminating unauthorized absence information to all appropriate parties (e.g., adverse actions, police assistance). Categories of unauthorized absence may include (but not be limited to) Unauthorized Absence (UA) and Deserter. This also includes coordinating the necessary categorization follow up actions with the appropriate parties that need to be taken regarding a Member who has been categorized as an unauthorized absence or desertion offender.

Figure 10. Business Capability to OA Map

For example the *Account for Time, Absence, and Labor* Operational Activity is associated with the *Account for Personnel* Business Capability so the Business Capability would be in scope.

4.3.5. Mapping System Functions

System Functions are functions performed by a DBS. Based on the Operational Activities selected during scoping, applicable System Functions are filtered. The Assessor will identify those System Functions that are within scope of the DBS. Assessors may find the Operational Activity to System Function Traceability Matrix useful to determine if the System Function is within scope. The illustration below is a segment of the matrix.

SV-5a Operational Activity to Systems Function Traceability Matrix

Operational Activity	System Functions
Account for Time, Absence, and Labor	Collect Time, Absence, and Labor Data from External Source
	Maintain Time, Absence, and Labor Data via User Interface
	Process Time, Absence, and Labor Data
	Produce Time, Absence, and Labor Data Report
	Provide Time, Absence, and Labor Workflow
	Send Time, Absence, and Labor Data to External Destination
Account for Workforce	Collect Manpower Data from External Source
	Produce Manpower Report
	Provide Manpower Workflow

Figure 71. OA to System Function Matrix

Clicking on an Operational Activity on the left provides detailed information about the Operational Activity. Clicking on a System Functions on the right provides details about the System Functions. For example the *Account for Time, Absence, and Labor* Operational Activity includes a Systems Function to *Collect Time, Absence, and Labor Data* which upon examination is consistent with scope of the Defense Agencies Initiative system.

4.3.6. Mapping Business Processes

After Operational Activities are mapped, Business Processes within the scope of the DBS are filtered. The Assessor maps BEA Business Processes to DBS functionality. Mapping Business Processes is very similar to mapping Operational Activities. To determine whether or not a Business Process is within scope of the DBS, examine the process name as it may help identify in scope processes. Examine the description and the context of the process. If the Assessor cannot determine if the process is within the scope of the DBS, the BEA BPM Process List may be useful in this effort.

BPM Process List

BPM Processes

Name	Description	OV-6c Business Process Diagram(s)
Certify Time, Absence, and Labor Information	This activity is associated with certifying and/or re-certifying (for adjustments) of time, absence, and labor information by the certifying authority, enabling payroll labor costs to be distributed and charged to appropriate cost centers, and ensuring that leave and retirement point information are updated.	HL Account for Time, Absence, and Labor
Characterize Data	This process captures the attributes of the selected data that will be used in the model. This is the final step in the process of producing the data model associated with the model.	Define Cost Performance Model
Clarify Labor Bargaining Unit and Representation	This activity is associated with clarifying organization and employees that should be included in the appropriate defined bargaining unit. This activity also includes resolving recognition issues.	HL Manage Labor Relations

Figure 12. BPM Process List

The Process List includes BEA Business Processes, with process names, descriptions, and BEA process diagrams related to the process. Selecting the name of the process from the list will provide additional information about the process properties and data. If the process appears on a diagram, selecting the diagram will provide a depiction of the Business Process as it relates to other processes.

For example the *Certify Time, Absence, and Labor Information* Business Process would be in scope for the Defense Agencies Initiative system.
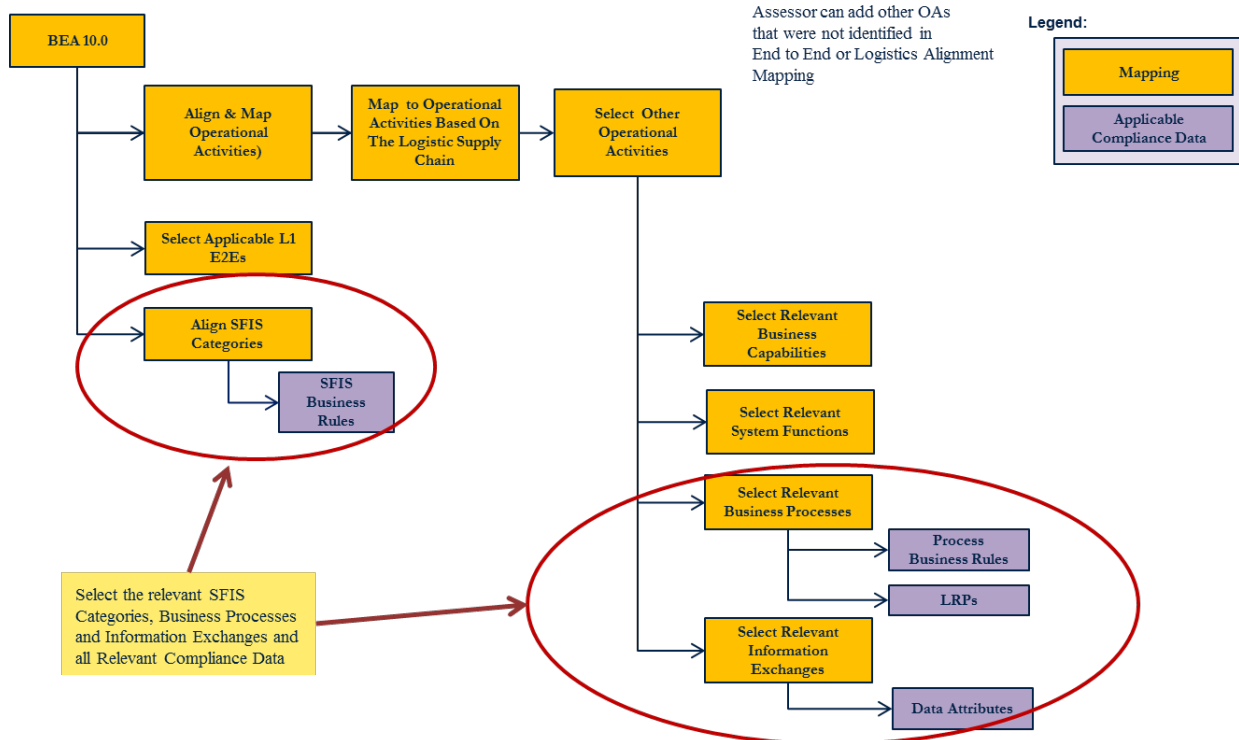
Figure 13. Mapping Processes and Information Exchanges

4.4. Mapping Information Exchanges

Based on the Operational Activities selected, in scope Information Exchanges are filtered. Similarly, the scoping of Information Exchanges reveals related Data Attributes as shown below.

Selecting the in-scope Operational Activity from the Operational Activities used in DBS Alignment and Compliance Report and then the outputs from the Operational Activity Definitions provides Information Exchanges that may be relevant. The Assessor examines each Information Exchange and determines if the Information Exchange is within scope. The Assessor examines the Information Exchange name as it may be helpful in determining if the Information Exchange is relevant. The Assessor will also evaluate the Information Exchange description and functionality to determine if they are consistent with DBS functionality and if the DBS exchanges all or part of the data in the Information Exchange. Assessors may find the Information Exchanges Available for BEA Compliance spreadsheet useful to determine if Information Exchanges are within scope. The illustration below is a segment of the spreadsheet.

Information Exchange	Attribute	Attribute Description	Data Type	Permitted Value	Enterprise Standard(s)
Evidence of Goods Tendered and Services Rendered from External	Unit Of Measure Code	The Unit of Measure Code indicates the count, measurement, container or form of an item.		Hours	
Evidence of Goods Tendered and Services Rendered from External	Unit Of Measure Code	The Unit of Measure Code indicates the count, measurement, container or form of an item.		HP (Horsepower)	
Evidence of Goods Tendered and Services Rendered from External	Unit Of Measure Code	The Unit of Measure Code indicates the count, measurement, container or form of an item.		Hundred	

Figure 8. IEs Available for BEA Compliance Spreadsheet

For example upon examination of the *Account for Time, Absence and Labor* Operational Activity there are no Information Exchanges for compliance so none are in scope. The higher level Operation

Activity of *Account for Personnel* does contain the *Evidence of Goods and Tendered and Services Rendered* Information Exchange functionality and should be evaluated to determine if it is in scope for the DBS.

Information Exchanges reveal Data Attributes. Data Attributes are used to scope the BEA because they filter Data Business Rules. They are also used for compliance assertion.

In addition, the number of interfaces to other systems and associated systems are identified in DITPR.

4.5. Identify Gaps in Processes, System Functions, Business Capabilities, End-to-Ends, Information Exchanges, Data Attributes, Laws, Regulations & Policies, or Business Rules

As previously noted, if the Assessor cannot identify any relevant operational activities and has provided a gap for the Operational Activity, then there is no requirement to continue and map to Processes, System Functions, Business Capabilities, End-to-Ends, Information Exchanges, Data Attributes, Laws, Regulations & Policies, Business Rules, DFMIG, and/or SFIS.

However, if the Assessor does not find any Processes, System Functions, Business Capabilities, End-to-Ends, Information Exchanges, Data Attributes, Laws, Regulations & Policies, or Business Rules relevant to the DBS, it is possible that the content that relates to the DBS is not included in the BEA, and the assessor can provide input to improve the BEA. To do this, the assessor enters a
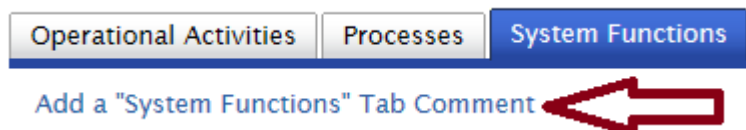
Figure 9 : Add a compliance note

comment at the relevant screen (e.g., click to add a "System Functions" Tab Comment as shown below for no relevant System Functions). Enter the comment in the IBF-DAP remark information in the format of "COMPLIANCENOTE [___]", providing a description of the element gap relevant to compliance within the brackets. See figure 9 as an example.

4.6. Select Applicable Compliance Data

Compliance indicates that the DBS meets an applicable requirement of the BEA. In BEA, compliance timing is used to determine when a DBS must be compliant with data attributes and data business rules as specified by the applicable DOD Functional Area Principal Staff Assistant (PSA). In addition, entry in DITPR as a procedural requirement addressed in section 3.2 must be met.

BEA compliance is based on the lifecycle of the DBS and the timing of the compliance requirement. The following table identifies the valid compliance timing based on the lifecycle of the DBS and the coincidence of the BEA requirement with respect to DBS achievement of its limited deployment. At a particular point in time, some requirements, such as entry in DITPR, may be met while other requirements, such as meeting a standard, might be planned to be met.

Table 3. DBS Lifecycle and Compliance Timing Requirement

		DBS/DBS Increment Lifecycle	
		Beyond Limited Deployment[18]	**Before Limited Deployment**
Compliance Timing	BEA content has a future compliance required date	Planned Compliant	Planned Compliant
	BEA content has a past or unspecified compliance required date	Compliant Not Compliant	Planned Compliant
	BEA content future compliance required date recognized by the DBC as Component or DBS specific	Planned Compliant Compliant	Planned Compliant

Planned Compliant indicates that the DBS has not yet reached limited deployment or the compliance required date is in the future. The date for planned compliance is entered in the DoD IT Investment Portal (DITIP), as discussed in section 5.4.

Compliant indicates that the DBS Increment has reached limited deployment and has implemented the applicable requirement(s) as required by the BEA.

Not Compliant indicates that the DBS has reached limited deployment and does not meet the applicable BEA compliance requirement.

Compliance data elements include Data Attributes, LRP, Process Business Rules, and SFIS Business Rules. With respect to each of the in-scope items within these elements, assert a DBS as compliant, not compliant or planned compliant with the BEA.

As the Assessor selects relevant compliance elements that may be relevant to the DBS they are filtered and presented for evaluation. If no compliance elements are presented for evaluation and a BEA Gap was identified for the DBS Operational Activities, no other action is needed. There is no requirement to continue and map to Processes, System Functions, Business Capabilities, End-to-Ends, Information Exchanges, Data Attributes, Laws, Regulations & Policies, Business Rules, DFMIG, and/or SFIS. That being said, if there are any of these that apply and can be identified by scanning the lists, please select the relevant ones, because it will help in further refining the architecture. Section 4.5 provides more information on how to do this.

To records the missing Operational Activity as a gap, the assessor selects the "more" link for the compliance element and including a comment in the IBF-DAP remark information with

---

[18] Includes full deployment and sustainment

COMPLIANCENOTE [ ], providing a description of the compliance element gap within the brackets.

4.6.1. Assert Data Attributes Compliance

Based on the Information Exchanges scoped earlier, Data Attributes that may be applicable to the DBS are filtered. Review each Data Attribute and determine if it is within the scope of the DBS. If the DBS implements the data concept identified by the data attribute name and description, the data attribute is within scope even though the name and description may not be identical.

If the data attribute is within scope, indicate compliance to the data attribute in accordance with data attribute compliance timing and DBS/DBS Increment lifecycle. If none of data attributes in the filtered list is not within scope, document a General Comment to state that the assessor completed the review of all filtered data attributes and none apply. This will allow reviewers to be certain that this facet was reviewed by the assessor.

To be compliant, DBS that use Data Attributes identified in the Procurement Data Standards, Purchase Data Requisition Standards, Delinquent Debt Management, Standard Lines of Accounting (SLOA) data standards, and Standard Financial Information Structure (SFIS) standards must implement them as specified in the BEA data attribute, including the data attribute name.

The BEA compliance of other data implemented by the DBS is determined as follows. The name of the data implemented by the DBS does not have to be identical to the BEA data attribute name. The description of the data implemented by the DBS must be materially the same as the description of the BEA data attribute. The data type implemented by the DBS must be compatible with the BEA data attribute data type. With the exception of text data attributes, the length of the data implemented by the DBS must be at least the length of the BEA data attribute. The data implemented by the DBS must not conflict with the permitted values characteristic of the BEA data attribute.

Assessors may find the Information Exchanges tab on the Information Exchanges Available for BEA Compliance spreadsheet useful in determining if a data attribute is within scope and compliant. The following illustration is an example of the spreadsheet. The spreadsheet identifies Information Exchanges for compliance and the Data Attributes included in the Information Exchange.

Information Exchange	Attribute	Attribute Description	Data Type	Permitted Value	Enterprise Standard(s)
Evidence of Goods Tendered and Services Rendered from External	Unit Of Measure Code	The Unit of Measure Code indicates the count, measurement, container or form of an item.		Hours	
Evidence of Goods Tendered and Services Rendered from External	Unit Of Measure Code	The Unit of Measure Code indicates the count, measurement, container or form of an item.		HP (Horsepower)	
Evidence of Goods Tendered and Services Rendered from External	Unit Of Measure Code	The Unit of Measure Code indicates the count, measurement, container or form of an item.		Hundred	

Figure 10. IEs Available for BEA Compliance Spreadsheet – Data Attribute

The Data Attribute can be used in the Information Exchange and SFIS checklist. The compliance assertion should relate to requirements in the Enterprise Standard referenced on the Attribute.

4.6.2. Assert LRP Compliance

Based on the Business Processes scoped earlier, Laws Regulations and Policies (LRP) that may be applicable to the DBS are filtered. Evaluate each LRP and determine if it is applicable to the DBS and therefore within scope. Assert compliance to the LRP in accordance with the DBS lifecycle.

The LRP Traceability reports may be useful in determining which LRP are applicable to the DBS. The following illustration is an example of the Traceability Tab that provides a mapping of Business Processes to LRP.

OV-6c Business Process - BEA LRP Traceability										
CBM - Human Resources Management (HRM) OV-6c Business Processes => Laws, Regulations and Policies	Acquire Human Resources	Assemble and Marshal Forces	Assign Human Resources	Develop Human Resources	Manage Benefits	Manage Human Resources Compensation and Reimbursements	Manage Organization	Manage Patient Visibility	Manage Travel	Record Time and Attendance
Public Law 099-603	X					X				
Public Law 103-356	X		X	X	X	X			X	X
Public Law 104-191					X	X				
Public Law 105-264	X		X	X	X	X		X	X	X
Public Law 107-296	X		X	X	X	X	X	X	X	X
Public Law 107-347	X		X	X	X	X	X	X	X	X
USC Title 5	X		X	X	X	X	X	X	X	X
USC Title 10	X		X	X	X	X	X	X	X	X
USC Title 29	X		X	X	X	X			X	X
USC Title 31	X		X	X	X	X	X		X	X
USC Title 32	X		X	X	X	X	X	X	X	X
USC Title 37	X		X	X	X	X	X	X	X	X
USC Title 38	X		X	X	X	X		X	X	X
USC Title 42	X		X	X	X	X				X
Intergovernmental Personnel Act			X		X	X				
SFFAS 1	X		X	X	X	X			X	X
SFFAS 2	X		X	X	X	X		X	X	X
SFFAS 4	X		X	X	X	X				

Figure 16. LRP Traceability Report

If it is known that the LRP is non-applicable, do not select it. If none of the LRPs filtered apply, document a General Comment to state that the assessor completed the review of all filtered LRPs and none apply. This will allow reviewers to be certain that this facet was reviewed by the assessor.

Otherwise, some research may need to be done to determine if the LRP is applicable to the DBS. The LRP Narrative Summary and the LRP Repository Source List may provide reference points to help direct research.

4.6.3. Assert Process Business Rules Compliance

Based on the Business Processes scoped earlier, Process Business Rules that are may be applicable to the DBS are filtered. Review each Process Business Rule and determine if it is within the scope of

the DBS. If the Process Business Rule is within scope, assert compliance to the Process Business Rule in accordance with compliance timing and DBS lifecycle. If none of the business rules filtered apply, document a General Comment to state that the assessor completed the review of all filtered business and none apply. This will allow reviewers to be certain that this facet was reviewed by the assessor.

The Operational Activity to Process to Business Rule Report or the Operational Rules Model may be helpful in researching Business Rules.

Operational Activity ▾	BPM Process ▾	Business Rule ▾	Business Rule Description ▾
Account for Time, Absence, and Labor	Record Time and Attendance		
Account for Workforce	Manage Organization		
Activate Unit	Activate Unit		
Adjust Manpower Requirements Based on Priority List	Adjust Manpower Requirements Based on Priority List		
Adjust Time, Absence, and Labor Information	Adjust Time, Absence, and Labor Information	IDT_Additional_Training_Periods_Approval	A Reserve member must not participate in additional Inactive Duty Training (IDT) periods when the member has completed the maximum number of IDT periods for a fiscal year unless the training is approved by the Secretary concerned.

Figure 17. OA to Process Business Rules Report

In the example above, the *Adjust Time, Absence, and Labor Information* Business Process has Process Business Rules including *IDT_Additional_Training_Materials_Approval*. There are no Process Business Rules for the *Record Time and Attendance* Business Process so this step would be bypassed.

4.7. Scope and Assert SFIS Alignment and Compliance

All DBS with financial management functionality must comply with the Standard Financial Information Structure (SFIS).

SFIS is a comprehensive data structure that supports requirements for budgeting, financial accounting, cost/performance, and external reporting needs across the Department of Defense (DoD) enterprise. The SFIS standardizes financial reporting across the DoD and allows revenues and expenses to be reported by programs that align with major goals, rather than basing reporting primarily on appropriation categories. It also enables decision-makers to efficiently compare programs and their associated activities and costs across DoD and provides a basis for common valuation of DoD programs, assets, and liabilities. The 19 SFIS categories listed below will be provided.

Funds Distribution	Commitment Function	Obligating Function	Entitlement Function
Outlay/Disbursement	Job/Work Order	Billing	Collection and Offset
Property, Plant, and Equipment (PP&E)	Inventory	Delinquent Debt Management	Payroll
Travel	Cash Management	Financial Reporting	Cost Management
Ad Hoc Reporting	Budget Formulation	Core Financials	

Figure 18. SFIS Categories

The latest guidance for updating SFIS checklist can be found at SFIS resources below, and until BEA content is updated to the next version, the checklist at the website can be more current than the rendering in the IBF-DAP. Components should complete the relevant SFIS information at the IBF-DAP. If you reviewed and used a more recent SFIS checklist, add a "SFIS" tab comment documenting this.

The SFIS Category Definitions may be helpful in determining if they are relevant to the DBS. Based on the SFIS Categories scoped, SFIS Business Rules that are applicable to the DBS are filtered. Review each SFIS Business Rule and determine if it is within the scope of the DBS. If the SFIS Rule is within scope, assert compliance to the Rule in accordance with SFIS instructions. The Compliance Assessment must provide a response to all SFIS rules associated with the scoped SFIS categories even if they are not applicable. This is accomplished by beginning the business rule comment with NA [ ], providing a description of why the business rule is not applicable in the brackets. Do not provide a compliance assertion (Compliant/Non-Compliant/Planned Compliance). Here are SFIS resources that may be useful.

SFIS Resources

Office of the CMO SFIS Website
How To Use the Checklist

Compliance Checklist for SFIS – BEA 10.0

In this example the *Account for Time, Absence and Labor* does not perform a financial management so relevant SFIS Business Rules would have been included.

5. Compliance Determination

Completed assessments go through a review process where corrections are made. When the assessment is complete and accurate, it should be locked in IBF-DAP to prevent additional changes. An overall determination on the compliance of the DBS is made. The determination is a technical ruling and may be used by the DBC in making the business decision on whether or not to certify the DBS.

5.1.   Review Compliance

Once the Assessor completes the compliance assessment, inform the reviewers. There are several IBF-DAP reports that may be helpful for reviewing the assessment. The Comprehensive Assessment Report is a spreadsheet containing every element that was scoped for the DBS.

5.2.   Determine Compliance

Once the assessment is locked, it is examined for a final determination of the overall compliance state of the DBS. [19] The process for making the determination is left to the program and the component. The final determination should be compliant or not compliant if the system is operational. Before the system is achieves Initial Operating Capability (IOC) the determination should be planned compliant. [20]

5.3.   Assess Completion

Completed assessments go through a review process where corrections are made. When the assessment is complete and accurate, it should be locked in IBF-DAP to prevent additional changes and to indicate that the assessment is complete. An overall determination on the compliance of the DBS is made. The determination is a technical ruling and may be used by the DBC in making the business decision on whether or not to fund the DBS.

Compliance assessments must be completed in IBF-DAP and must be locked at least once to be considered complete.

Note that it is not adequate for the PCA to make a compliance determination entry in DITIP without having a supporting detailed compliance assessment completed in IBF-DAP.

5.4.   Record Assessment Determinations

Assessment determinations are entered into the DITIP with BEA version number (10.0 for FY 2018 and 11.1 for FY 2019) and as:

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[19] When a system has both compliant and planned compliant elements associated to its assertion, one planned compliant element would make it all planned compliant, not fully compliant.

[20] Note: BEA assessment data for any system can also be viewed using https://bea-etools.osd.mil/ee/request/classAction?id=6984. This view works for those without access to the assessment for each system.

Y-Assessed-Compliant
P - Assessed-Planned Compliant *
N-Assessed-Not Compliant
X-Assessment Not Completed
L-Legacy (Not Required)

* For all Planned Compliant, enter planned compliance date. There is also a comment field available if any brief explanations are needed. These entries

Appendix A   Acronyms and Abbreviations

AV	All Viewpoint
BEA	Business Enterprise Architecture
BMA	Business Mission Area
BPM	Business Process Model
CIO	Chief Information Officer
CMO	Chief Management Officer
CV	Capability Viewpoint
DAI	Defense Agencies Initiative
DBC	Defense Business Council
DBS	Defense Business System
DFMIG	Defense Financial Management Improvement Guidance
DITIP	DoD Information Technology Investment Portal
DITPR	DoD Information Technology Portfolio Repository
DIV	Data & Information Viewpoint
DoDAF	Department of Defense Architecture Framework
DTM	Directive-Type Memorandum
E2E	End-to-End
FFMIA	Federal Financial Management Improvement Act
FYDP	Fiscal Years Defense Program
IBF-DAP	Integrated Business Framework Data Alignment Portal
IE	Information Exchange
IOC	Initial Operating Capability

IRB	Investment Review Board
L1	Level 1
LRP	Laws, Regulations, and Policies
LSC	Logistics Supply Chain
MDA	Milestone Decision Authority
OA	Operational Activity
OEP	Organization Execution Plan
OSD	Office of the Secretary of Defense
OV	Operational Viewpoint
PCA	Pre-Certification Authority
PEO	Program Executive Officer
PM	Program Manager
POA	Planned Operational Activity
PSA	Principal Staff Assistant
SFIS	Standard Financial Information Structure
SLOA	Standard Line of Accounting
StdV	Standards Viewpoint
SV	Systems Viewpoint
SvcV	Services Viewpoint
USC	United States Code

Appendix B   Terminology and Definitions

Business Enterprise Architecture	The blueprint to guide the development of integrated business processes within the DoD, guide implementation of interoperable defense business system solutions and otherwise guide and constrain investments by DoD Components as they relate to or impact business operations.
Business Rules	The set of operational rules which define or constrain some aspect of the business.. They constrain an enterprise, a mission, operation, business, or architecture.
Certification Authority	The Certification Authorities are Approval Authorities as defined in section 2222 of reference (a).
Compliance	A compliance indication, made by a user and an authority against a requirement (e.g., compliant, not compliant or planned compliant).
Compliance Determination	A declaration by the defense business system Pre-Certification Authority (PCA) or approval authority as to whether or not the specified DBS is in compliance with the BEA (e.g. the DBS meets requirements identified in the BEA). It is a 'functional' business decision. One of the factors on which the PCA or approval authority bases this declaration of compliance, is a formal assessment of the DBS, or a report or objective evidence of this assessment, using the BEA as the compliance baseline.
Component	Military Department or agency of the Department of Defense that includes: the Office of the Secretary of Defense, the Military Departments, the Chairman of the Joint Chiefs of Staff, the combatant commands, the Office of the Inspector General of the Department of Defense, the Defense agencies, DoD field activities, and all other organizational entities within the Department of Defense.
Core Defense Business System	An enduring business system with a sunset date greater than 36 months.
Data Attributes	Attributes are characteristics that either identify or describe Entities. Attributes are associated with only one Entity.

Defense Business System	An information system that is operated by, for, or on behalf of the Department of Defense, including any of the following: (i) A financial system. (ii) A financial data feeder system. (iii) A contracting system. (iv) A logistics system. (v) A planning and budgeting system. (vi) An installations management system. (vii) A human resources management system. (viii) A training and readiness system. '(B) The term does not include— (i) a national security system; or '(ii) an information system used exclusively by and within the defense commissary system or the exchange system or other instrumentality of the Department of Defense conducted for the morale, welfare, and recreation.
Legacy Defense Business System	Systems with an operations and support life cycle end date of less than 36 months.

Appendix C   Scoping and Asserting Defense Logistics Management Standards (DLMS) Compliance

Pursuant to DoD Directive (DoDD) 8190.01E, all DBS with functionality supporting the Logistics and Material Readiness functional strategy business area[21] must comply with the Defense Logistics Management Standards (DLMS). The DLMS are a mandatory enterprise standard as identified in DoDD 8190.01E and the Acquisition & Logistics Functional Business Strategy.

The DLMS are a comprehensive set of standards that include standard business rules, standard information exchange message formats and standard data. The DLMS standards are maintained and syndicated on the Defense Logistics Management Standards Program Office Website. Implementation of the DLMS is essential to audit readiness. The DLMS information exchange messaging formats carry the standard line of accounting data (SLOA) from the initiation of a customer order on the global supply chain and in subsequent transactions regarding each order

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[21] The now legacy term "Materiel Supply & Service Management (MSSM)" DITPR business domain used to describe this

through the billing. The DLMS are also essential to audit readiness by providing visibility and controls on Government property in the custody of contractors. The DLMS are, in most cases, the evidentiary matter that supports financial statement entries originating from business events within the MSSM business domain.

The relevance of the DLMS to a DBS can determined by answering the question; does the DBS perform any of the processes/activities/operations delineated in DLM 4000.25, Volumes 2 through 6? If the answer is yes then the DLMS business rules, transactions and data standards for the processes/activities/operations supported are relevant and the DBS must be compliant with the DLMS. These DLMS business rules, transactions and data standards are not part of BEA 10.0 content, and therefore cannot be selected in the IBF-DAP at this time, but DoDD 8190.01E can be selected as a Law, Regulation and Policy attribute for a BEA 10 compliance assertion.

DLMS Resources

DLMS Website: http://www.dlmso.dla.mil/dlmso.asp

DLMS Implementation products: http://www.dlmso.dla.mil/programs/dlms/dlms-Implementation.asp

DLMS Training: http: http://www.dlmso.dla.mil/eApplications/Training/training.asp

DLMS Manual: http://www.dlmso.dla.mil/elibrary/manuals/dlm/dlm_pubs.asp

DLMS Implementation Conventions:
http://www.dlmso.dla.mil/elibrary/TransFormats/140_997.asp