



Office of the
**DEPUTY CHIEF
MANAGEMENT OFFICER**

Department of Defense

End-to-End Business Process Integration Framework

May 17, 2013

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1 Overview

1.1 Background and Statutory Requirements

The Office of the Deputy Chief Management Officer's (DCMO) mission is to "lead and enable end-to-end (E2E) integration and improve business operations in support of national security." The intent of the E2E framework is to serve as the foundation for business process reengineering (BPR), which drives business improvement by optimizing Operational Activities (OAs), and encouraging interoperability, ensuring defense business systems support and enabling cross functional Business Mission Area processes. Further, the E2E framework provides the basis for assessing audit readiness, financial compliance and earned value benefit realization.

The E2E business processes¹ represent both commercial and government leading practices for integrating common business processes to support all functions of the Business Mission Area. Each E2E provides a customer centric view of how a strategic capability is delivered as a set of integrated business functions that fulfill a need identified by the organization. E2Es are primarily transactional in nature, comprising the key human resource management, logistics, acquisition, materiel, installations and financial management functions that support the Defense Department's goals of materiel and financial auditability. They provide the management structure that can be used for assessing compliance to Law, Regulations and Policies (LRPs), establishing performance measures, becoming audit ready and identifying opportunities for BPR.

An objective of the E2E framework is to drive alignment to the goals stated in Department of Defense (DoD) Directive (DoDD) 8115.01² and DoD Instruction 8115.02³ Information Technology (IT) Portfolio Management policy. The DoD 8115.01 Policy indicates IT investments are managed as portfolios to: ensure IT investments support the Department's vision, mission, and goals; ensure efficient and effective delivery of capabilities to the warfighter; and maximize return on investment to the enterprise. Portfolios are nested and integrated at the enterprise, mission area, and component levels. The enterprise portfolios are divided into Mission Area portfolios, which are defined as Warfighting, Business, DoD portion of Intelligence, and Enterprise Information Environment (EIE). Mission Area and Component portfolios may be divided into sub-portfolios (e.g., domains) or capability areas that represent common collections of related, or highly dependent, information capabilities and services. The purpose of the management process is to 1) link portfolio objectives to enterprise vision, mission, goals, objectives, and priorities, 2) standardize acquisition, real property, material and financial management transactions to support auditability, 3) develop quantifiable outcome-based performance measures, 4) identify capability gaps, opportunities, and redundancies, 5) identify risks, and 6) conduct BPR.

¹ DoD E2E Business Flow Reference Model v10, May 17, 2010

² DoD Directive number 8115.01, October 10, 2005

³ DoD Instruction number 8115.02, October 30, 2006

DoD 8115.02 establishes a reference model and describes procedures for managing DoD IT investments as portfolios (PfM). The instruction states that DoD use four continuous integrated activities to manage its portfolios -- analysis, selection, control, and evaluation. The overall process is iterative, with results fed back into the system to guide future decisions. Analysis is the activity in which Mission Areas and Sub portfolios, in collaboration with Components, establish performance goals; identify gaps and opportunities; assess risks; provide for continuous improvement; and explore functional and technical options as documented in current capabilities and future integrated architectures. There are many ways to categorize IT investments during analysis (and selection). Traditional practices focus on individual programs. However, the capability focus of portfolio management rises above the constraints of specific solutions and existing programs to focus on “what” is needed rather than the “how” it is delivered. For example, IT may be grouped into categories such as Net-Centric; needing modification to become Net-Centric; legacy assets that must be maintained until phase-out; and systems to be terminated. Such groupings enable senior leaders to exercise strategic management over many investments without having to review each one separately and help them organize multiple systems into needed capabilities.

DoDD 8115.01 and 8115.02 require assessment of portfolios, internal and external to DoD, regardless of whether investments are DoD Agency/Military Department systems, Enterprise Resource Planning (ERP) systems or distributed services. The E2E framework provides a holistic picture of how IT investments are mapped to capabilities in order to provide a repeatable, systematic, and analytic framework for review and assessment of their fit to the overall architecture. Using the end-to-end framework provides the structure for the DoD’s business system environment to make better informed enterprise-wide decisions within the DoD Agency/Military Department and as part of the Investment Review Board (IRB) process.

In support of portfolio management, the Business Capability Lifecycle (BCL)⁴ is an end-to-end process that aligns the requirements, investment, and acquisition processes for the business capability under a single governance framework. BCL is founded on the principle of tiered accountability and delegated authority and accountability for program outcomes and compliance down to the lowest appropriate levels. Section 901 of the FY2012 National Defense Authorization Act, which amended Title 10 United States Code Section 2222⁵, calls for the Department of Defense (DoD) to establish a framework to analyze defense business system investments by portfolios. Section 2222 also states that the portfolio of “defense business systems is in compliance with the enterprise architecture developed under subsection (c) and appropriate business process re-engineering efforts have been undertaken to ensure that the need to tailor commercial-off the-shelf systems to meet unique requirements or incorporate unique requirements or incorporate unique interfaces has been eliminated or reduced to the maximum extent practicable.”

The end-to-end business process integration framework (E2E framework) is the management structure by which content in the DoD Business Enterprise Architecture (BEA) will be organized. The BEA assists with the analysis and alignment of defense business system to drive business

⁴ <https://www.milsuite.mil/book/groups/business-capability-lifecycle-bcl>

⁵ Public Law 112-81

improvement by optimizing functional capabilities and interoperability between processes. This framework provides the business operations structure for the Defense Business Mission Area to support development of Functional Strategies and Organizational Execution Plans, alignment of requirements, operational activities and laws, regulations, and policies, and identifying outcome-based performance measures. DoD Military Departments and Defense Agencies shall align their business portfolios to these E2E business processes to provide a comprehensive and consistent approach to improving business operations.

1.2 Purpose, Scope and Audience

The April 4, 2011, Use of End-to-End Business Model and Ontology for DoD Business Architecture Memorandum⁶, issued by the DCMO, calls for leveraging the E2Es, defined within the BEA, to provide the clarification necessary to achieve improved business process management and interoperability of business systems required by statute. E2E processes leverage common key data objects specified within the information exchanges which support interoperability between transactions and provides organizations a complete picture of E2E business event triggers (i.e. a need) and support process integration within and between systems. The BEA captures the required information exchanges between processes and rules to permit systems and web service interoperability and align operational capability metrics to the DoD Strategic Management Plan (SMP).

The purpose of this document is to provide a DoD standard E2E framework to all appropriate stakeholders including, but not limited to, Functional Process Owners, Functional Sponsors, non-Military Departments Pre-Certification Authorities (PCAs), Military Departments, Chief Management Officers (CMOs), Principal Staff Assistants (PSAs), and the Defense Business Council (DBC). The goal is to provide a common framework that can be used to improve business processes and IT support by defining and describing the E2E business processes and identifying how they decompose to support standard and unique operational activities. The E2E framework is used to assess fit/gap of ERP and Enterprise solutions, register and depict the contribution of core systems and assist with driving business integration between business processes and defense business systems.

The E2E framework will assist with organizing and updating the content within the DoD BEA, as well as acting as a mechanism against which strategic alignment of systems can be evaluated. The E2E framework provides a management methodology to enable the Department to strategically align its defense business systems, in order to achieve standardization, simplify business rules across the enterprise, streamline business processes and identify redundancies in system capabilities, in order to optimize the E2E business processes. The E2E processes identify the OAs required to support the capabilities needed to meet the business requirements. Capabilities are defined by OAs and are used interchangeably within the document. The DoD Agencies and Military Departments align their standard capabilities described in their portfolio to the E2E business capabilities providing a holistic picture of the compliance to these Business Mission Area requirements and laws,

⁶ Use of End-to-End Business Model and Ontology for DoD Business Architecture, April 4, 2011

regulations and policies, and used them to assess audit readiness and performance and progress towards meeting DoD goals.

The E2E framework provides a foundation for assessing the BPR effort, normalizing the BEA content and, encouraging business integration within the analysis of the IRB process. The expected outcomes are to simplify business rules across the enterprise, establish performance measures at the strategic, operational and tactical levels of the organization, and identify redundancies in system capabilities in order to optimize E2E business processes. The framework focuses on transactions and provides a comprehensive view of improvement opportunities within the business enterprise.

The DBC validates the DoD Agency, Military Department and Enterprise Organization Execution Plans to determine if: 1) they have a clear strategy and depict a uniform alignment around the combined Business Mission Area requirements; 2) they comply with the LRPs defined in the BEA; 3) they identify BPR opportunities to simplify business rules and streamline processes from an E2E perspective; and 4) the portfolio of systems optimizes the E2E business operations. The E2E framework provides the ability to manage the transition from today's individual Business Mission Area functional area requirements and individual defense business system to a portfolio-based environment that supports optimized decision making across the enterprise. The attainment of this goal is determined by evaluating investment portfolios against the requirements and business processes, capabilities and measures of the combined Business Mission Area Functional Strategies within the E2E Business Process Integration Framework.

Detailed analysis is necessary for the DBC and Military Department Chief Management Officer (CMO)/Deputy CMOs (DCMOs) to ensure that supporting processes and system capabilities are continually optimized as changes take place in the business environment.

1.3 Effective Date

The document is effective immediately and will be reviewed annually.

2 End-to-End Business Processes

Currently, the DoD E2E Business process reference model⁷ comprises 15 E2E business processes. Leveraged from commercial/industry standards, each E2E business process represents a set of integrated business functions that fulfill a need identified by the DoD and are expected to evolve as DoD's business environment changes. The E2E framework provides the DoD with a guidepost, or management structure, to identify opportunities for streamlining business processes by examining their inter-related operational activities and by identifying gaps or redundancies. The E2E Business Flows represent the life-cycle of business processes and their associated capabilities executed to fulfill a business requirement throughout the DoD. To achieve business process optimization, specific DoD organizations need to identify and compose the E2E Business Flows across the functional silos of the organization, recognizing they are cross-functional within each business

⁷ Department of Defense E2E v10 – May 2010

process and cut across multiple business mission areas. In accordance with BEA 9.0, the current E2E Business Processes (Level 0) and their Level 1 Major Process Areas decompositions are as follows:

End-to-End Business Processes



Updated: April 2012

The E2E framework and processes may be modified by the approval of the DBC to better align with DoD business operations. The Business Mission Area leverages the E2E process Level 0 and Level 1 decompositions and identifies changes necessary to the E2Es using the BEA update process outlined in Section 4 of this document. Due to the different levels of maturity of the E2Es, changes based on future BEA releases should be expected. Further, in concert with the PSAs and Military Departments/Agencies, the number of and value of each E2E will be assessed against DoD priorities and be managed in alignment with this framework.

2.1 End-to-End Levels of Federation - Definitions

The E2E Levels of Federation is a five-level hierarchy, depicting how E2Es are defined and used at varying levels (See Appendix A). The current 15 high-level integrated business processes within the DoD (Level 0) represent a combination of commercial/industry leading practices, as defined by vendor implementations with the Fortune 500 Companies and DoD specific functions. Each E2E is assign to a primary PSA owner who sets milestone dates for maturing each process. The PSA defines the Level 0, 1, and 2 for an E2E with the concurrence of other Business Mission Area, DoD Agencies, Military Departments and the DCMO staff. Once agreement is reached, the PSA submits the requirements and Operational Activities (OAs) for approval to the DBC. This process is

described in Section 4 of this document. DoD Agencies and Military Departments align the defense business system Levels 3 and 4 OAs to the higher level E2E Level 2 constructs. Examples of the E2E Levels of Federation are provided in Appendix B.

Each Level 0 E2E business process represents a set of integrated business capabilities that fulfill the needs identified by the Business Mission Area, or enterprise, and are highly integrated with other E2E Level 0s business processes. Strategic performance measures are established for each Level 0 E2E business process in order to meet the Strategic Management Plan (SMP) goals. These strategic measures create a holistic view of the Business Mission Area's ability to meet the SMP goals based on each PSA functional requirements and laws, regulations and policies. The Business Mission Area reviews the E2E process Level 0 and Level 1 decompositions and identifies changes necessary to the E2Es.

The major process areas, or Level 1s, represent the major E2E processes used to realize the integration, standardization and normalization necessary to enable interoperability between PSA functions. The Level 1 major process areas identify the range of the primary lifecycle activities that take place for each particular E2E business process. Performance measures evaluate the interoperability of the Level 1 major process areas for efficiency and effectiveness.

The E2E framework's definition of OAs is based on the definition used in the DoD Architecture Framework (DoDAF) version 2.0⁸. Level 1 major process areas are decomposed into Level 2 process area segment OAs [represented as DoDAF OV-5a/b operational viewpoints (Appendix A)]. The OAs provide the ability to identify inputs and outputs to each activity and their associated process procedures, information exchanges and data objects which are shared between transactions, laws, regulations and policies and/or tactical and operational performance measures. The PSA's Functional Strategies define the OAs that support the goals and objectives of the Business Mission Area. OAs are governed by only one PSA, and the PSA is responsible for establishing or validating all BEA elements associated with their OAs. The OAs define how functional areas (i.e. logistics, acquisition, property, financial management, and human resource management) are used with other OAs to support achieving the desired SMP goal outcomes (e.g., material visibility, HRM efficiency, and financial compliance) and adherence to the laws, regulations and policies, which constrain and control the enterprise. Additional performance measures may be established at the Level 2 process area segment OAs to evaluate the tactical and operational effectiveness (capacity, quality levels, non-value added activities and time) between OAs. When operational activities are performed in a standard sequence within a Level 0 E2E business process or Level 1 major business area, an Event Trace Description or DoDAF OV-6C process model should exist to describe the scenario or critical sequence of events. PSAs may also create an enterprise OV-6C process flow to support an LRP assertion. An example is the standard process model (OV-6C) created for the debt management process.

⁸ DoD Architecture Framework Version 2.02, August 2010

⁹ Defense Business System Investment Management Process Guidance of June 29, 2012

The DoD Agency/Military Department aligns its Level 3 organizational specific processes OA (OV-5a/b) to the BEA's Level 2 business process area OAs to identify the functional capabilities supporting a DoD Agency/Military Department portfolio of defense business system. Additionally, the DoD Agency/Military Department portfolio must support the performance measures to evaluate the tactical and operational effectiveness (capacity, quality levels, non-value added activities and time) between operational activities.

The E2E framework does not require that all DoD Agencies/Military Department's align to all Level 3 organizational specific OAs to Level 2 process area segment OAs in the BEA, as certain Level 3 organizational specific OAs do not apply across the organization. Only the Level 2 process area segments identified by the PSA Functional Strategies require the Level 3 organizational specific OAs to be mapped within the Architecture Compliance and Requirements Traceability (ACART) tool, which is described in Section 4. A notional example of how the E2Es decompose at all levels is provided in Appendix C.

The Level 4 business system specific processes and procedures are documented by the DoD Agency or Military Departments to support their capabilities, system functions and business objects. At Level 4, specific business system processes and functional design specifications are captured for each Report, Interface, Conversion and Extension (RICE) object. The functional design specification describes the interface designed requirements and manual versus automated activities within their defense business systems.

The Department recognizes that each E2E business process is at a different level of maturity, and therefore; the Level 0 to Level 4 definitions outlined within this E2E framework should be used only as a guide to assist the process owners with bringing the E2E process to full maturity. The PSAs have the responsibility to work with the DCMO, Business Mission Area and the Military Departments to mature the E2E using the BEA guidelines outlined in Section 4 of this document.

3 Applying the End-to-End Framework to the DoD IRB Process

The E2E framework enables the evaluation of system portfolios in accordance with the DCMO's April 4, 2011, memorandum, which directs defense business system owners to (1) use E2E as the framework to drive and organize BEA content; and (2) synchronize future releases of the BEA with DoD's highest priority system acquisition and modernization efforts related to critical activities within the BCL models. The E2E framework supports the DoD Directive (DoDD) 8115.01[1] and DoD Instruction 8115.02[2] Information Technology Portfolio Management policy portfolio perspective and the Department's defense business system investment management process⁹, which requires the alignment of defense business system within an Organizational Execution Plan to a Functional Strategy's strategic goals.

⁹ Defense Business System Investment Management Process Guidance of June 29, 2012

At least annually, and in accomplishing its IRB responsibilities, the DBC assesses each Defense Agency and Military Department's defense business system portfolio funding request¹⁰. The IRB provides cross-functional expertise to the Milestone Decision Authority (MDA) (for MAIS acquisitions) to support investment and portfolio management oversight for all defense business system requirements. The BCL integrates the requirements, investment, and acquisition processes for defense business system under a single Investment Review Board (IRB) governance framework. This integrated framework, as noted in Figure 1, is a critical element to the successful implementation of BCL throughout the defense business system's lifecycle. The DBC process evaluates each DoD Agency and Military Departments' portfolio to assess its alignment to the E2E Level 1 major process area and Level 2 process area segment OAs and to identify gaps or redundancies in each portfolio. The E2E portfolio view is based on the strategic alignment to the department's SMP goals, PSA/Military Department goals, as well as evaluating the defense business system functional capabilities across the E2E business processes. It also provides the basis for BEA compliance to BPR, performance metrics, and Federal Financial Management Improvement Act¹¹ (FFMIA) compliance.

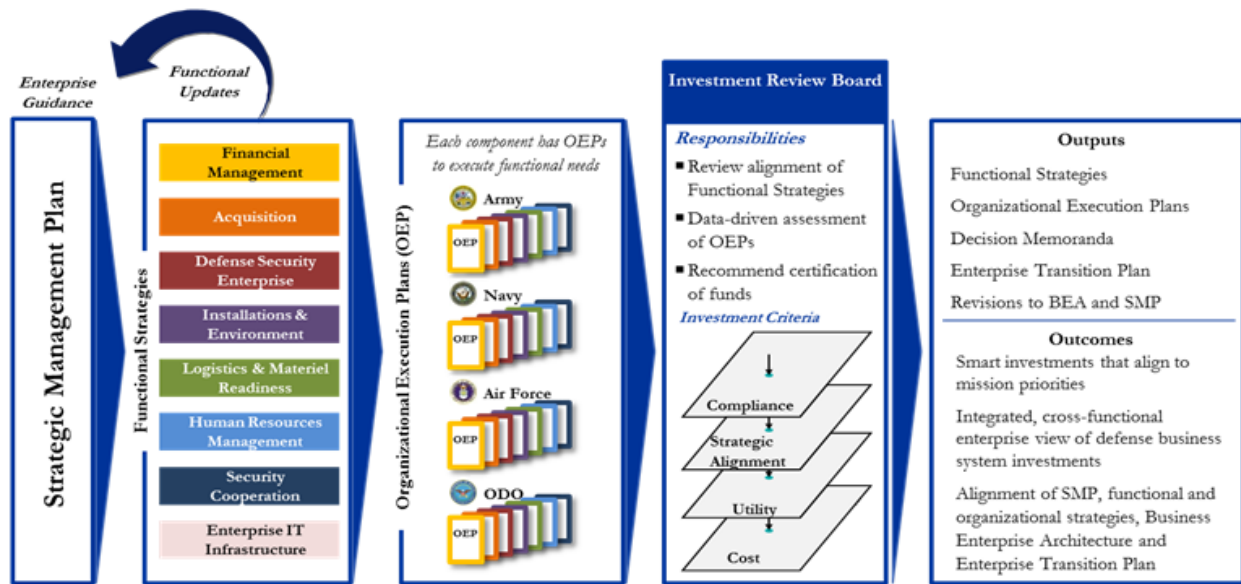


Figure 1 – Integrated Business Plan Framework

In examining defense business system portfolios, from an E2E integration perspective, organizations assert that their operational activities (OV-5) and operational events (OV-6C) align with the Level 2 operational activities in sequence and timing that traces the actions in a scenario or critical sequence of event and the related performance measures to meet the SMP goals.

¹⁰ Defense Business System Investment Management Process Guidance of June 29, 2012

¹¹ Federal Financial Management Improvement Act of 1996. (Public Law 104-208). Sec. 801.

3.1 Responsibilities

The PSAs are responsible for identifying the OAs (OV-5) that relate to their business functional area and applicable E2E at Level 0 business process, and Level 1 major process area. The PSA E2E process owner is responsible for coordinating with the Military Department, Defense Agencies and the DCMO to ensure within the BEA the proper decomposition of Level 1 major process areas, as well as Level 2 process area segment OAs for each E2E Level 1 major process area. For example:

- Information exchanges standardized for interoperability and compliance
- Laws, Regulations and Policies to guide and constrain via implementable business rules
- Constraints within the environment
- SMP Goals and PSA Initiatives
- Enterprise, Strategic, Operational and Tactical performance measures

The other Military Departments, Defense Agencies and DCMO staff analyzes the OAs for a given process to ensure they support E2E interoperability and cross functional integration between Business Mission Area functions.

The Pre-Certification Authority (PCA) is responsible for ensuring their portfolio of defense business systems asserts to the PSAs E2E L2 process area segment OAs in the BEA using the DoD Agency /Military Department's system level processes, functional capabilities and OAs (OV-5s). Requiring the DoD Agency/Military Department to assert their portfolio of defense business systems Level 3 organizational specific OAs, which map to Level 2 process area segment OAs, provides the information needed to analyze a DoD Agency/Military Department's coverage of key OAs and standard informational data exchanges within their portfolio. This assertion also establishes the defense business system compliance with the OAs, laws, regulations and policies and performance measures within the BEA. The PCA assertion provides the ability to analyze the BPR within the DoD Agency/Military Department's portfolio and identify gaps, redundancies and performance measures within each E2E major process area and process area segment.

The ODCMO is responsible for the business integration analysis of the PSA Functional Strategies and PCA Organization Execution Plans. The ODCMO review analyzes the integration and alignment of business operations (end-to-end processes) and business systems' functional capabilities from an enterprise perspective across Agencies and Military Department's. The primary goal of the analysis is to identify overlaps and gaps in capabilities within the DoD Enterprise and the DoD Agency/Military Department's portfolio. This review is intended to identify gaps, redundancies, efficiency and effectiveness of processes and alignment to strategic, operational and tactical performance measures within each E2E major process area and process area segment. As part of the assessment, the ODCMO identifies issues between the Functional Strategy and Organizational Execution Plan and provides a critical oversight of the investment in the portfolios and opportunities for improvement within the DBC process. This analysis is a key input to the DBC annual IRB process, as well as during the BCL process when reviewing a program's milestone decision authority.

The DoD Enterprise and DoD Agency/Military Department Portfolio Organizational Execution Plans are reviewed through five sets of parameters for completeness. The Portfolio Organizational Execution Plan is evaluated for alignment to the Functional Strategy; compliance to BPR; value of the portfolio to deliver capabilities based on their prescribe performance measures within the E2Es; budget/cost projections; and system migration path. The analysis includes a review of all the

Business Mission Area functional strategies to the organizational execution plans through a “business integration” lens with the goal of assessing the E2E business process efficiency and interoperability and financial compliance across the DoD business system investment portfolios. The goal of this analysis is to align outcomes with the SMP goals, normalize the shared transactional data objects, and evaluate operational program measures of the combined Federated Portfolio.

4 End-to-End Framework and the BEA

The BEA is the enterprise architecture for the DoD Business Mission Area and reflects the DoD business transformation priorities, the business capabilities required to support those priorities, and the combination of enterprise systems and initiatives that enable those capabilities. It also uses the E2E framework to evolve the above information within the context of the DoD Information Enterprise Architecture. The purpose of the BEA is to provide direction and compliance requirements for DoD business transformation that helps ensure the right capabilities, resources and materiel are rapidly delivered to our warfighters – what they need, where they need it, when they need it, anywhere in the world. The BEA guides and constrains implementation of interoperable defense business system solutions as required by the NDAA. It also guides IT investment management to align investments with strategic business capabilities as required by the Clinger-Cohen Act¹², and supports Office of Management and Budget (OMB) and Government Accountability Office (GAO) policies.

The Functional Strategies and Organizational Execution Plans serve as the primary mechanisms to incorporate new and updated content into the BEA. The PSAs and PCAs submit new requirements or changes to business requirements using the Business Mission Area requirements document. These documents are developed by the PSA when reviewing content captured in the Functional Strategy/Organizational Execution Plan documents. They also present the business case for new business requirements for the DBC to quickly review and assess the proposed business requirements and validate their alignment to business priorities. Once approved, the Business Mission Area requirements document feeds the development of the BEA requirements document that scopes the need, relevancy, feasibility, level of effort (LOE), and projected costs (both BEA and change to the system) required to ensure that the BEA is designed, developed, and delivered to effectively address Business Mission Area needs. The BEA Configuration Control Board (BEA CCB) reviews all proposed changes and makes recommendations to the DBC for approval.

Once a BEA requirements document is approved by the DBC, the DCMO updates and enhances the BEA with the content and publishes them in the next version of the BEA to define and present the major process areas (Level 1) and process area segments (Level 2) beneath the high-level E2Es using the ACART toolset. It displays a series of OAs (Level 2) that comprises a major process area (Level 1), and includes their associated LRP, information exchanges, enterprise data standards, and performance measures. In some cases, an OV-6c is required for a process area (Level 1) and associated process area segment (Level 2) because the PSA requires the compliance to a specific

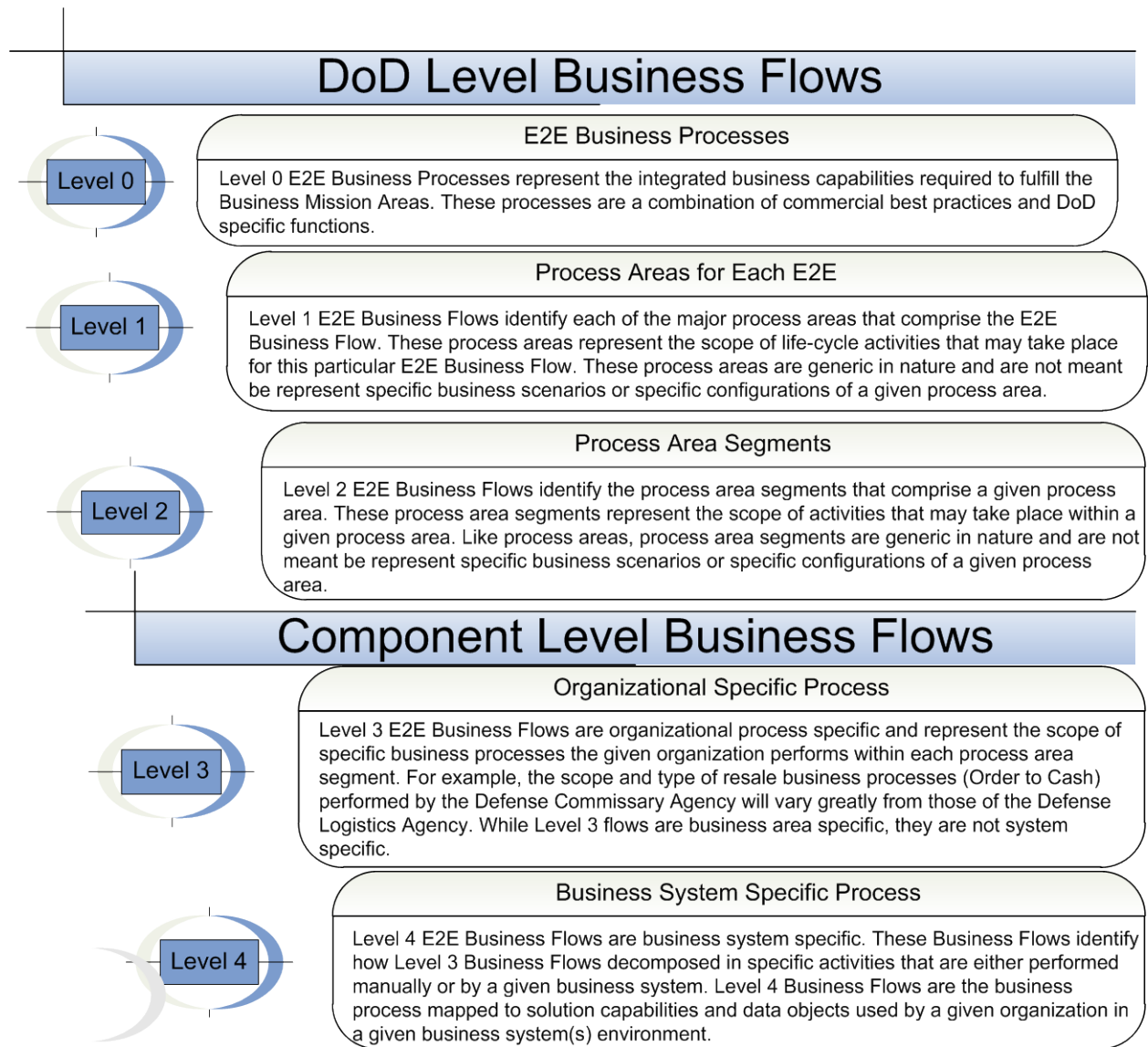
¹² Clinger Cohen Act of 1996

sequence and timing within the enterprise process model. This visualization within ACART makes the Level 1 major process areas and Level 2 process area segments consumable and usable by executive management and functional SMEs. In this way, the E2E framework becomes the cross-functional view representing the “To-Be”, line of sight operational view across all businesses process and operational activities of the Business Mission Area. The linkage from the SMP Goals/Key Initiatives to the E2E operational activities and their supporting process models, business measures, mandatory systems and laws, regulations and policies is described in Appendix D.

During the Investment Review process, the DCMO and DBC evaluate the PCA’s Organizational Execution Plan System Portfolio to ensure BEA compliance using assertions made in ACART to Level 2 OAs. This enables rationalization of and identifies overlaps in capabilities across the DoD Enterprise and DoD Agency/Military Department’s defense business system portfolio and within each E2E major process area and process area segment. This review also assesses compliance to key portfolio requirements of BPR compliance, use of shared data object standards and alignment to enterprise, strategic, tactical and operational performance measures identified in the Functional Strategy. Finally, it supports the evaluation of the combined Business Mission Area system migration plan to strategic goals over the Future Years Development Plan (FYDP). This information is provided to the DBC for consideration in preparing their Investment Decision Memorandum for the PCA.

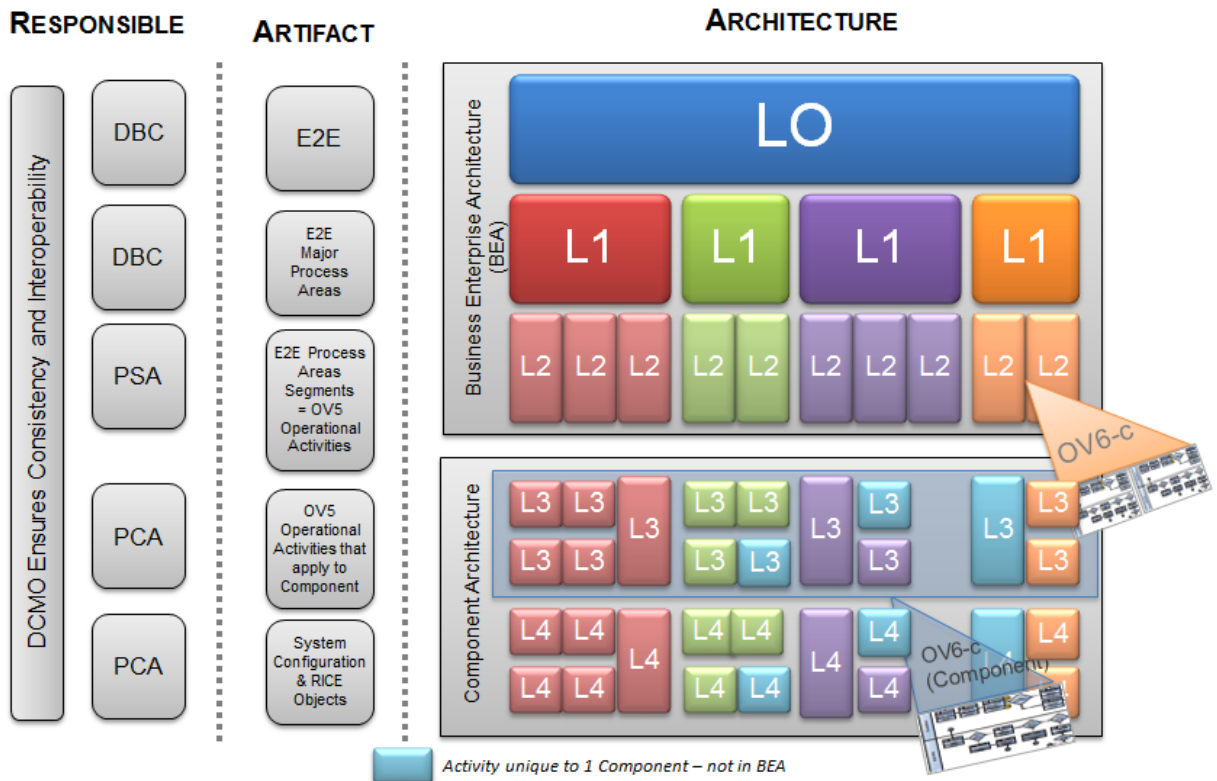
Appendix A: Reference Model Hierarchy

The DoD E2E Levels of Federation Reference Model has five levels. Levels 0, 1 and 2 are generic to all organizations within the DoD. Levels 3 and 4 are organization specific, where Level 3 represents the specific type of business activity being performed by a given organization and Level 4 represents how that organization performs those business activities in a given business system environment.



Appendix B: Example of E2E Levels of Federation

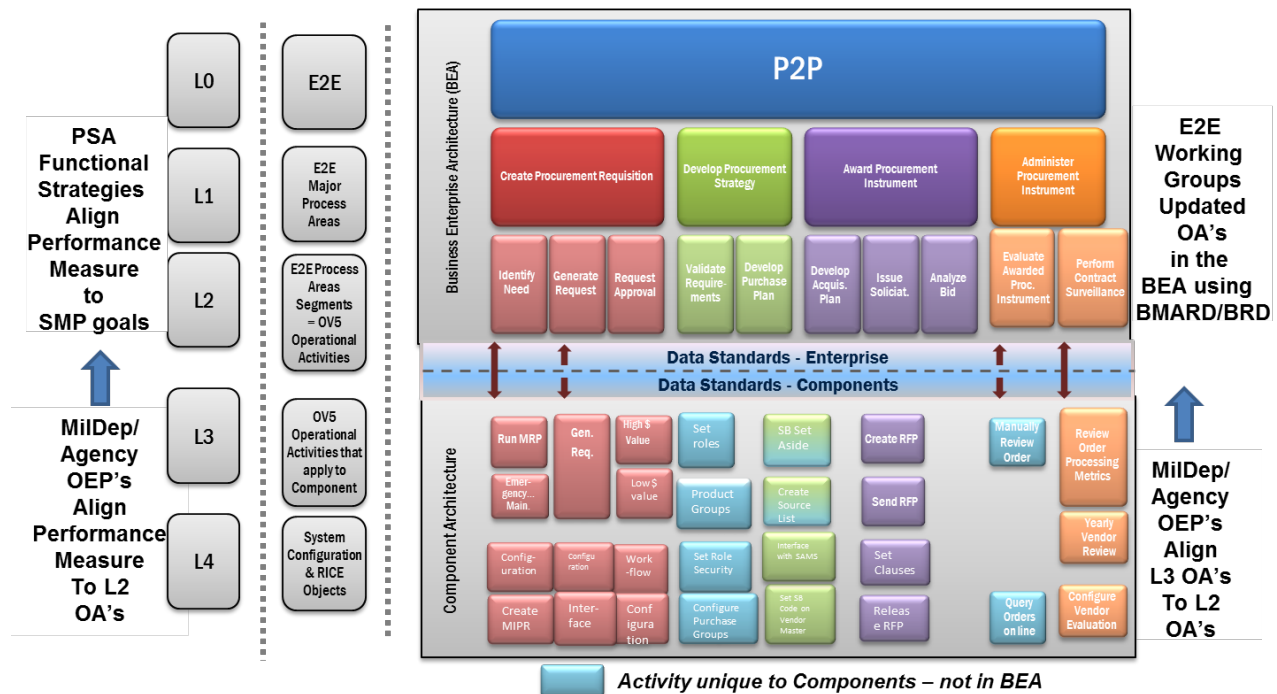
E2E LEVELS OF FEDERATION



The E2E Levels of Federation Reference Model has five levels.

- Level 0 described the 15 E2E in the DoD E2E v10.
- Level 1 described the Major Process Areas defined by the PSA in the Functional Strategy and annual updates to the BEA updates to specific E2E agreed to by the DBC.
- Level 2 describes the Operation Activities associate with the process are segments defined by the PSA in the Functional Strategy and annual updates to the BEA updates to specific E2E agreed to by the DBC
- Level 3 describes the DoD Agency/Military Department organizational specific OAs capabilities within their Portfolio of defense business system. The Level 3 OA's describes how a PSA required BEA Level 2 OA is performed within the DoD Agency/Military Department System. The DoD Agency/Military Department will have other organizational specific OA's which the PSA have not defined a Level 2 OA's and will not require assert their alignment within the BEA
- Levels 4 describes the DoD Agency/Military Department organization specific business activity being performed by a given organization documented in procedures, scripts and scenarios for those business activities in a given business system environment.

Federation Example using Procure-to-Pay (P2P)



Definitions

OA: Operational Activities defined by the PSA within the E2E Working Groups

BMARD: Business Mission Area Requirement Document – defined by the PSA

BRD: BEA Requirements Document – defined by the BEA Architects

The Notional Example of the E2E Levels of Federation Reference Model

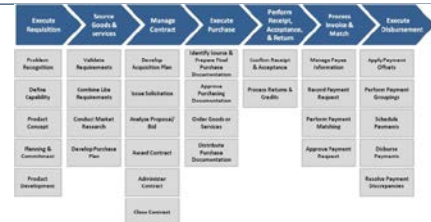
- Level 0 described Procure to Pay End to End
- Level 1 described some of the P2P Major Process Areas defined by the PSA in the Functional Strategy and annual updates to the BEA updates to specific E2E agreed to by the DBC.
- Level 2 describes some of the P2P Operation Activities associate with the process are segments defined by the PSA (shaded in the same color as the L1 major process area)
- Level 3 describes the P2P DoD Agency/Military Department organizational specific OAs capabilities within their Portfolio of defense business system (shaded in the same color as the L2) if there is alignment and if it is a unique capability shaded in a different color
- Level 4 describes the P2P DoD Agency/Military Department organization specific business activities being performed by a given organization supported by a process procedures, scripts, scenarios, configuration, RICEFW objects for those business activities (shaded in the same color as the L2 if there is alignment and if it is a unique capability shaded in a different color)

Appendix C: Process Area Segments (Level 2)



Level 2 Processes

- Done = Mapped down to **Level 2** (Defined as the Decomposition of the Level 1 Processes)



- Identifies the “What” activities and processes for a given segment of Level 1
- The Model represents the “To Be” Line of Sight Operational View of a Business Process, displaying a series of business steps (Operational Activities OV-5) in response to business events, to produce a specific business result
- OAs are owned by a PSA and they are responsible for establishing share data objects, business rules, LRP.
- Effectively visualizes the Level 2 Processes so it is understandable, useable and consumable by Executive Leaders
- The E2E Level 2 Process Segments:
 - Represents the scope of Operational Activities (OV-5) that take place within a given process area
 - Generic enough to establish Enterprise visibility of DoD Policies, Procedures, Enterprise Data Standards, and Performance Measures
 - Where necessary, in order to drive Compliance to DoD Laws, Regulations and Policies sub-Processes will be defined and mapped below Level 2
- Includes the complete process for cross-functional nature of the E2E
- Depicts intersection with other relevant E2Es

D

Appendix D: Example Functional Strategic Initiative / SMP Goals Mapped to E2E Levels



Functional Strategic Initiative / Small Business Participation SMP Goal / Strengthen DoD Acq. Process



NOTE: Identify and map the E2E Business Processes and required Business Capabilities to the Level 1 Major Process Areas, Level 2 Process Area Segment (Operational Activities OV-5) and Process Model (OV6-C). Also identify applicable business measures and mandatory systems related to the Operational Activity and Process Model.

Appendix E: Acronyms & Abbreviations

Acronym	Definition
BEA	Business Enterprise Architecture
BMA	Business Mission Area
BPR	Business Process Reengineering
CMO	Chief Management Officer
DBC	Defense Business Council
DBS	Defense Business System
DCMO	Deputy Chief Management Officer
DITPR	Defense Information Technology Portfolio Repository
DoD	Department of Defense
DoDD	Department of Defense Directive
E2E	End-to-End
ERP	Enterprise Resource Planning
FFMIA	Federal Financial Management Improvement Act
HRM	Human Resource Management
GAO	Government Accountability Office
IRB	Investment Review Board
IT	Information Technology
LRP	Laws, Regulations and Policies
NDAA	National Defense Authorization Act

O2C	Order to Cash
OA	Operational Activities
OEP	Organizational Execution Plan
OMB	Office of Management and Budget
OSD	Office of the Secretary of Defense
P2P	Procure to Pay
PCA	Pre-certification Authority
PSA	Principal Staff Assistant
RICE	Report, Interface, Conversion, Extension
SCOR	Supply Chain Operational Reference
SMP	Strategic Management Plan

Appendix F: Definitions

Term	Definition
Operational Activities	An action performed in conducting the business of an enterprise. It is a general term that does not imply the placement in a hierarchy (for example, it could be a process or a task as defined in other documents and it could be at any level of the hierarchy of the Operational Activity Model). It is used to portray operational actions, not hardware or software system functions.
Capability	Capabilities are typically expressed in general and high-level terms and typically require a combination of organization, people, processes, and technology to achieve. The ability to achieve a desired effect under specified (performance) standards and conditions through combinations of ways and means (activities and resources) to perform a set of activities. The ability that an organization person, or system possesses.
Federated Architecture	The term Federated Architecture used in this document represents the concept that architecture artifacts are related in a meaningful way. Federated Architectures conform to common or shared architecture standards across individual Program, DoD Agencies, Military Department, Mission Area enabling developing/owning entities to maintain diversity and uniqueness, while providing opportunity for implementing interoperability.
RICE Objects	The reports, interfaces, conversion and extension define to support the business capability identified and defined within the scope of the system. The RICE Object define the functional and technical design specification for each capability identified within the scope of the system
System Configuration	The Business Process Procedures and setting which define the functions, process steps, process flows, data requirements, laws, polices and regulations which manages a defined activity.
Operational View	Operational view (OV) products provide descriptions of the tasks and activities, operational elements, and information exchanges required to accomplish DoD missions. The OV provides textual and graphical representations of operational nodes and elements, assigned tasks and activities, and information flows between nodes. It defines the type of information exchanged, the frequency of exchanges, the tasks and activities supported by these exchanges and the nature of the exchanges.
OV-5C	Activities, relationships among activities, inputs and outputs. In addition, overlays can show cost, performing nodes, or other pertinent information

OV-6C	One of the three products used to describe operational activity sequence and timing that traces the actions in a scenario or critical sequence of events
Performance Measurement	the process of developing measurable indicators that can be systematically tracked to assess progress made in achieving predetermined goals and using such indicators to assess progress in achieving these goals.
IT Portfolio.	A grouping of IT investments by capability to accomplish a specific functional goal, objective, or mission outcome.
Portfolio Management	A grouping of IT investments by capability to accomplish a specific functional goal, objective, or mission outcome. E.2.1.8. Portfolio Management. Portfolio Management
Subportfolio	A subdivision of a portfolio that represents a common collection of related or highly dependent information capabilities and Services.