

**Department of Defense
Business Enterprise Architecture 10.0
AV-1 Overview and Summary Information**

<p>The AV-1 is an executive-level summary of the purpose, use and content of the Business Mission Area's (BMA) Business Enterprise Architecture (BEA). Initially, the AV-1 is used to focus the BEA development effort and document its scope. The AV-1 also includes findings and recommendations identified as a result of the development effort.</p>	
Architecture Project Identification	
Project	DoD Business Enterprise Architecture (BEA) 10.0
Project Type	Enterprise Architecture
Architect	DoD Office of the Deputy Chief Management Officer (DCMO)
Developed By	Representatives from the DoD BMA Core Business Missions (CBMs), and the DCMO.
Assumptions and Constraints	<p>The BEA 10.0:</p> <ul style="list-style-type: none"> • The Strategic Management Plan (SMP), Functional Strategies as developed by the appropriate DOD Principal Staff Assistants and the Organizational Execution Plans (OEP) as developed by DoD Components are the drivers of BEA release content. • The End-to-End Framework is used in conjunction with the SMP as an additional driver of content. • Continues to improve conformance to Version 2 of the DoD Architecture Framework (DoDAF 2.0) and BPMN 2.0 with Analytic Conformance Class (Primitives). • Continues requirements definition developed by the representatives of the CBMs.
Approval Authority	The Deputy Secretary of Defense, acting through the Defense Business Systems Management Committee (DBSMC).
Date Completed	Architecture content freeze date, January 4, 2013 and final release date February 14, 2013.
LOE and Development Costs	Level of effort and projected and actual costs to develop the BEA Models may be requested from the Office of the Deputy Chief Management Officer (DCMO).
Scope: Architecture View and Models Identification	
Products Developed	BEA 10.0 comprises the following set of integrated architecture products -- AV-1, AV-2, CV-2, CV-6, DIV-1, DIV-2, OV-2, OV-3, OV-5a, OV-5b, OV-6a, OV-6c, SV-1, SV-5a, SV-6, StdV-1, SvcV-1, SvcV-5a, LRP and other reports and visualizations.

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Scope	The scope of the BEA is any function, process, data, rule and LRP that describes enterprise requirements within the Financial Management (FM), Human Resources Management (HRM), Materiel Supply & Service Management (MSSM), Real Property & Installations Lifecycle Management (RPILM) and Weapon Systems Lifecycle Management (WSLM) CBMs. The scope of new content for BEA 10.0 focused on incorporating Standard Line of Accounting (SLOA); restructuring of HRM Capabilities; refinement of enterprise requirements within the Hire-to-Retire and Procure-to-Pay E2Es, the Procurement Data Standard (PDS), and Purchase Request Data Standard (PRDS); addition of Government Furnished Property (GFP) and Government Purchase Card (GPC) standards; and further development of Enterprise Energy Information Management (EEIM) requirements.
Time Frames Addressed	The BEA is the “To Be” business architecture for transformation efforts at the DoD. The current BEA “To Be” state has intermediate time frames for implementation that are addressed in the Enterprise Transition Plan (ETP). The aforementioned “new content” accounts for enterprise requirements defined since the BEA 9.0 release published on March 15, 2012.
Organizations Involved	Development of BEA 10.0 was facilitated by the Office of the DCMO and involved representatives of the DoD BMA CBMs led by the Principal Staff Assistants (PSAs). The PSAs are Comptroller, Personnel & Readiness, and Acquisition Technology & Logistics. BEA development was further supported by the Investment Review Board (IRB), chaired by the DCMO as the architecture lead within the IRB sessions.
Purpose and Viewpoint	
Purpose (Problems, Needs, Gaps)	The purpose of the BEA is to serve as a blueprint for DoD business transformation that helps to ensure that 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 National Defense Authorization Act (NDAA) and guides information technology (IT) investments to align with strategic Business Capabilities as required by NDAA, Clinger-Cohen and supporting Office of Management and Budget (OMB) and Government Accountability Office (GAO) policy. The BEA supports Portfolio Management implementation within the BMA investment review process. Each release of the BEA addresses BMA enterprise gaps or material weaknesses as proposed requirements for new BEA content against which investments must assert compliance.
Questions to be Answered	<ul style="list-style-type: none"> • How are we investing our funds to best enable the warfighting mission? • How are we investing our funds to best address the Business Mission Area strategic priorities? • Who are our people, what are their skills, where are they located? • Who are our industry partners, and what is the state of our relationship with them? • What assets are we providing to support the warfighter, and where are these assets deployed?

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Architecture Viewpoint	BEA 10.0 was developed from an enterprise level using the viewpoint of the Principal Staff Assistants (PSAs). As mentioned in the <i>Organizations Involved</i> section of this AV-1, the PSAs are represented by personnel, aligned to the CBMs, responsible for interpreting PSA requirements and have them reflected as enterprise requirements within the BEA. The CBM representatives are guided by the SMP, the Functional Strategies and the E2E Framework.
Context	
Mission	To be the BEA that “shall be sufficiently defined to effectively guide, constrain and permit implementation of interoperable defense business system solutions”
Vision	The BEA will continue to be driven by the Department’s Strategic Management Plan (SMP) and the Functional Strategies to serve as the enterprise blueprint for defining the Department’s business environment, to capture required enterprise capabilities, metrics aligned to the SMP, and data standards and rules, to permit system and web service interoperability, to be used as a tool for guiding, constraining and certifying business system investments, and for driving Portfolio Management and business process reengineering via the Department’s E2E Framework.
Rules, Conventions, and Criteria	<p>Rules:</p> <ul style="list-style-type: none"> • BEA content is traceable to SMP priorities and goals, to the Functional Strategies developed by the PSAs and to the Organizational Execution Plans developed by the Components. • BEA process models are constrained by the Business Process Modeling Notation (BPMN) 2.0 Analytic Conformance Class (Primitives). • The BEA metamodel must conform to DM2. <p>Conventions: The conventions and methodology (e.g., IDEF0, IDEF1X, BPMN) to be followed are documented in the BEA Development Methodology (BDM) and the Architecture Product Guide (APG).</p> <p>Criteria: Enterprise requirements reflected in the BEA are approved by the PSAs by way of the CBM representatives.</p>
BEA Tasking / Linkages to Other Architectures	<p>Tasking -- The 2005 National Defense Authorization Act (NDAA) requires DoD to build an “an enterprise architecture...which shall be sufficiently defined to effectively guide, constrain and permit implementation of interoperable Defense Business System (DBS) solutions”. Section 901 of the FY2012 NDAA continues to emphasize Business Process Reengineering (BPR), strengthens integration of the BEA and the ETP, and redefines governance roles and responsibilities within the investment management process to provide a cross-functional, enterprise-wide view for evaluating DBS investments for certification.</p> <p>Linkages to Other Architectures – Federal Enterprise Architecture (FEA) Business Reference Model (BRM); DoD Joint Capability Areas (JCAs).</p>
Tools and File Formats to be Used	
IBM Rational System Architect v 11.4, IBM Rational DOORS, Oracle, MS SQL Server, Enterprise Elements, Army Knowledge Online/Defense Knowledge Online	

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AV-1 Findings and Recommendations**

	Findings	Recommendations
1	<p>Authoritative data standards, based on common vocabularies continue to be a key driver for transformation efforts across the DoD BMA. BEA development efforts continue to focus on data standardization in order to implement approved BMA Capabilities and development of interoperable DoD business systems.</p> <p>The evolving central information repositories for decision makers are highly dependent on consistent and universal concepts and related definitions. Improving opportunities for ontology federation and building a common BEA vocabulary continue as key steps enabling the movement forward.</p>	<p>Continue to incorporate and implement authoritative data standards into the BEA. Develop a common BEA vocabulary lexicon, based on DoDAF 2.0 metadata and BPMN / Primitives concepts to establish authoritative data standards and de-conflicted common terms and usages for federating the BEA.</p>
2	<p>Current BEA structure and content needs further alignment to support the BEA’s statutory use of facilitating the implementation of interoperable business system solutions. The BEA should also continue to improve development methodologies, and tools as well as content visualizations to better support federation.</p>	<p>Adopt and implement a methodology to capture and make available BEA content that enables solution developers to “build federation into their solutions” through use of semantic ontologies and open source technologies. Definitions and guidance on establishing, designating, and citing compliance with enterprise systems and/or other mandated systems should be addressed. In addition, the issue of a federated view of the systems in the BEA should be addressed.</p>
3	<p>Elevate the use of the E2E Framework to better integrate the current Capabilities, Operational Activities, LRP and Standards within the BMA and to establish and manage DoD BMA Capabilities across the enterprise. Clear hierarchy and nesting within the E2E Framework will better focus BEA compliance requirements.</p>	<p>In preparation for BEA 11.0, analyze how to better align Capabilities with E2Es. Coordinate with the DoD BMA stakeholders on the purpose and use of BEA Capabilities. The new E2E Framework is the necessary first step towards understanding alignment of BEA Business Capabilities, the Joint Capability Areas (JCAs) and the Joint Information Environment (JIE) to enable Enterprise BMA Capabilities for the DoD.</p>
4	<p>The methodology for representing the E2Es within the BEA needs to be further refined and utilized by all involved stakeholders.</p>	<p>Continue to evolve the BEA Development Methodology and the BEA development environment to support DoDAF 2.0 representation of the evolving E2E Business models.</p>

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5	Further refine integration of BEA artifacts to establish only one level within each DoDAF model at which linkages to other models occur. Need a clearer understanding of how the different levels of BPM will be presented in the BEA Compliance tool and how they align to the levels in the E2E framework. Address issues relating to reuse of Level 1 Process Steps and Level 2 Process Models and how to visualize them in the E2Es.	The BPM Primitives methodology should be finalized to potentially leverage the different levels of BPMs based on the OV-6c methodology adopted. In addition, correlate the End-to-End framework guidance with BPM best practices. Incorporate BEA E2E Compliance requirements into the BEA development process.
6	Stakeholder value could be enhanced by including in a future BEA release a SV-8 product to describe evolution of systems to the target environment. Define use of SV models in the BEA Compliance process. There is a need for a more concise definition or guidance on what constitutes an enterprise system versus a mandatory system. FM had a business need to depict mandatory systems in the BEA, some of which were Component systems.	Work with BEA stakeholders and Federation working group members to analyze requirements and propose solutions.
7	The current E2Es do not cover the requirements for Managing Military Health.	P&R IM recommends creating a new E2E for Manage Military Health.
8	There is a need to support achievement of a clean audit by incorporating business rules to guide/constrain the Services Integrated Personnel and Pay Systems (SIPPS) pay eligibility determinations. Continued coordination with FM is required to support information integration sufficient to achieve a clean audit.	Continue coordination with FM to support information integration sufficient to achieve a clean audit.
9	Operational Activities associated with contingency operations sometimes require exception handling of standard procedures and business rules. Further effort needs to be performed to capture this exception handling.	Recommend development in future releases of the BEA to satisfy SMP goal #7: "Create agile business operations that support contingency missions". Analyze the impact of exceptions associated with contingency operations and incorporate these exceptions as appropriate.
10	Assertion to an LRP or business rule in ACART can be voluntary. The ability to identify mandatory LRP or business rules for a process would make for a better compliance mechanism. Business rules and LRP define system responsibilities, data standards and business processes for systems for accountable property, logistics, contract writing and contract management.	The DCMO has now designated a single BEA compliance tool for preparing OEPs and BCL data for the DBC/IRB. Continuing evolution of BEA Compliance mechanisms will eliminate inconsistency in mandatory compliance elements.