

**Department of Defense
Business Enterprise Architecture 8.0
Overview and Summary Information (AV-1)
Version 8.0, March 11, 2011**

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.

Architecture Project Identification

Project	DoD Business Enterprise Architecture (BEA) 8.0
Project Type	Enterprise Architecture
Architect	DoD Business Transformation Agency (BTA) and Deputy Chief Management Officer (DCMO)
Developed By	Representatives from the DoD BMA Core Business Missions (CBMs), BTA and DCMO
Assumptions and Constraints	<p>The BEA 8.0:</p> <ul style="list-style-type: none"> • The Strategic Management Plan (SMP) is a driver of release content • The End-to-End Framework (focusing on Procure-to-Pay and Hire-to-Retire) is used in conjunction with the SMP as an additional driver of content • Comprises content as defined with the BEA 7.1 and 7.2 Informational Releases. • Continues to improve conformance to Version 2 of the DoD Architecture Framework (DoDAF) 2.0 and Business Process Modeling Notation (BPMN) 2.0 with Analytic Conformance Class (Primitives) • Continues with requirements definition being done by the representatives of the Core Business Missions
Approval Authority	The Deputy Secretary of Defense, acting through the Defense Business Systems Management Committee (DBSMC).
Date Completed	Architecture content freeze date, January 13, 2011 and final release date March 11, 2011.
LOE and Development Costs	Level of effort and projected and actual costs to develop the CBM Models may be requested from the Director, Enterprise Planning and Investment (EP&I).
Scope: Architecture View and Models Identification	
Products Developed	BEA 8.0 comprises the following set of integrated architecture products -- AV-1, AV-2, CV-2, CV-6, DIV-1, DIV-2, DIV-3, OV-2, OV-3, OV-5a, OV-5b, OV-6a, OV-6c, SvcV-1, SvcV-5a, SvcV-6, SV-1, SV-5a, SV-6, StdV-1, LRP and other Visualizations/Presentations.

Scope	The scope of the BEA is any function, process, data, rules and LRP that describe enterprise requirements within the Financial Management (FM), Human Resources Management (HRM), Real Property & Installations Lifecycle Management (RPILM), Materiel Supply & Service Management (MSSM) and Weapon Systems Lifecycle Management (WSLM) Core Business Missions. The scope of new content for BEA 8.0 focused on refinement of enterprise requirements within the Hire-to-Retire and Procure-to-Pay E2Es. Additionally, there were refinements made to the following standards: Procurement Data Standard (PDS), Common Human Resources Information Standard (CHRIS) and the Real Property Information Model (RPIM).
Time Frames Addressed	The BEA is the “To Be” business architecture for transformation efforts at 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” or BEA 8.0 accounts for enterprise requirements defined since the BEA 7.0 release published on March 17, 2010.
Organizations Involved	Development of BEA 8.0 was facilitated by the BTA 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 Boards (IRBs). The Deputy Chief Management Office (DCMO) was also involved 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 and to help 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 National Defense Authorization Act (NDAA). It is used to support Portfolio Management by being implemented within the BMA investment review process. Each release of the BEA addresses BMA enterprise gaps or material weaknesses by having them defined as requirements that are reflected as 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?

Architecture Viewpoint	<p>BEA 8.0 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 ensuring they are reflected as enterprise requirements within the BEA. The CBM representatives are guided by the SMP and the E2E framework. The BEA 8.0 and subsequent releases continue to enable the Department to manage its business from an E2E process perspective.</p>
Context	
Mission	<p>To be the BEA that “shall be sufficiently defined to effectively guide, constrain and permit implementation of interoperable defense business system solutions” (Title 10>Subtitle A>Part IV>Chapter 131> 2222).</p>
Vision	<p>To serve as the enterprise blueprint for defining the Department’s business environment. The BEA will continue to be driven by the Department’s Strategic Management Plan (SMP) and 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. To also be used as a tool for driving Portfolio Management and business process reengineering via the Department’s E2E Framework.</p>
Rules, Conventions, and Criteria	<p>Rules:</p> <ul style="list-style-type: none"> • BEA content is traceable to SMP priorities and goals. • BEA process models are constrained by the Business Process Modeling Notation (BPMN) 2.0 Analytic Conformance Class (Primitives). • The BEA metamodel continues to migrate to the DoDAF 2.0 Metamodel (DM2). This will be an ongoing process and has started with the use of the terms as outlined in the DM2. <p>Conventions: The conventions and methodology to be followed are documented in the BEA Development Methodology and the Architecture Product Guide (APG) (e.g., IDEF0, IDEF 1X, BPMN) .</p> <p>Criteria:</p> <ul style="list-style-type: none"> • BEA content is traceable to the SMP priorities and goals. • BEA content is guided by the SMP and the E2E Framework. • Enterprise requirements reflected in the BEA are approved by the PSAs by way of the CBM representatives.
BEA Tasking / Linkages to Other Architectures	<p>Tasking -- The 2005 National Defense Authorization Act (NDAA) requires that the DoD build an “an enterprise architecture...which shall be sufficiently defined to effectively guide, constrain and permit implementation of interoperable defense business system solutions”</p> <p>Linkages to Other Architectures – Federal Enterprise Architecture (FEA) Business Reference Model through the DoD EA Reference Models; The DoD Joint Capability Areas (JCAs).</p>

Tools and File Formats to be Used

IBM Rational System Architect v 10.7, Oracle, MS SQL Server, Enterprise Elements, Army Knowledge Online/Defense Knowledge Online

Business Enterprise Architecture 8.0 -- Findings and Recommendations

Findings		Recommendations
1	Authoritative data standards, based on common vocabularies, is a key driver for transformation efforts across the DoD BMA. Development efforts in BEA 8.0 are focused on data standardization in order to implement approved BMA Business Capabilities through development of integrated DoD business systems.	Continue to incorporate authoritative data standards into the BEA as a development priority. Develop a common vocabulary lexicon based on DoDAF 2.0 metadata and BPMN /Primitives concepts to establish authoritative common terms and usage.
2	DoDAF 2.0 has as its mantra "fit for purpose" and has included a more robust methodology and supporting metamodel (i.e., DM2). This version of the framework continues to have an impact on the future direction of the BEA and the environment within which it is developed and managed.	Continue to evolve the BEA Development Methodology (BDM), Architecture Product Guide (APG) and the BEA development environment to conform to DoDAF 2.0. The changes to the metamodel will impact the representation of architecture content, architecture usage, and the tools used to develop the content and visualization. Additionally, address how to support the DoDAF 2.0 Physical Exchange Specification (PES) in BEA 9.0
3	Current BEA structure and content does not fully support the BEA's statutory use of permitting implementation of interoperable business system solutions. It also needs to be improved from methodology, tool and content perspectives to better support federation.	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.
4	The addition of DIV-3 products into the BEA raises the need to clarify their intended use to the larger BEA audience. From a RPILM perspective, the DIV-3 products can either be rigid, based standards or more flexibly derived standards. The latter position meaning that while the DIV-3 is based on standards, it only represents one of many possible implementation schemas that can be derived from those standards.	Recommend further development of DIV-3 guidance in the next iteration of the Architecture Product Guide (APG) to cover topics such as usage.

Findings		Recommendations
4	There continues to be unresolved issues with multiple instances of the same terms and descriptions used generically across the different functional communities. The evolving central information repositories for decision makers are highly dependent on consistent and universal concepts and related definitions. Issues arising from conflicting terminology impacts efforts toward architecture federation and building a common business vocabulary.	BTA will lead the BEA 8.1 workshop efforts to address the remaining inconsistencies and ambiguities in procurement related data attributes and descriptions in order to advance the concepts of a common business vocabulary.
5	Synchronized Predeployment and Operational Tracker (SPOT) functionality within the HRM models have been represented at a macro level within BEA 8.0. The content still requires further decomposition to document detailed functional requirements in the architecture.	Additional workshop discussions need to be conducted within BEA 8.1 to explore how more details of contractor theater oversight can be integrated within the BEA while also displaying similar levels of detail for the oversight of other human resources.
6	The Planning, Programming and Budgeting portions of the architecture requires additional work. After the Quadrennial Defense Review (QDR) is completed, extensive work is required to ensure that PPB is represented at level that is sufficient to show how Department-wide execution is linked to plans and programs.	Following the completion of the Quadrennial Defense Review, an extensive business process reengineering effort should be scheduled in a future BEA release.
7	BEA does not include processes, activities, or data objects related to the commercial sales process.	A joint Financial Management/Acquisition Technology and Logistics (AT&L) business process reengineering effort of the sales process should be scheduled for a future BEA release.
8	To ensure consistency and alignment of E2E and BEA processes, gaps identified between these products should be addressed. Additionally, the mappings of the E2E process flows to the BEA are inconsistent.	A standard approach on how to align these two products is critical to support the development of enterprise standard requirements and to have an implementable BEA.

Findings		Recommendations
9	Define gaps between E2E processes and the BEA.	<p>The E2E development and refinement efforts in BEA 8.0 helped identify additional gaps between previous release's of the E2E content and current release. These additional areas for refinement resulted from the identification of E2E flows that were previously part of, but no longer fit in the revised H2R and P2P models. The gaps are referred to in this document as Orphan Process steps and are identified as follows:</p> <p>H2R:</p> <ul style="list-style-type: none"> • Military Health Services • Manage Travel • Law Enforcement • Physical Security • Safety • Interagency Support • Policy and Guidance <p>P2P:</p> <ul style="list-style-type: none"> • Manage Travel <p>Gaps should be addressed in near term releases of the BEA.</p>
10	BEA staff recommends a review of Capabilities in the End to End Framework to determine how best to establish and manage an enterprise set of DoD Capabilities.	Further coordination with the DCMO and Joint Staff is required to determine the purpose and use of Capabilities within the E2E Framework. Also efforts need to be identified to incorporate the BEA Business Capabilities into the Joint Capability Areas (JCAs) enabling the creation of a set of Enterprise Capabilities across the DoD.