

Department of Defense
Business Enterprise Architecture 4.1 Overview and Summary Information (AV-1)
March 15, 2007

The AV-1 is an executive-level summary of the Department of Defense (DoD) Business Enterprise Architecture (BEA). The initial release of the AV-1 for BEA 4.1 deliverable focused the BEA development effort by documenting its scope. This final release of the AV-1 includes findings and recommendations from the BEA 4.1 development effort. Current planning envisions that the BEA will be released annually.

Architecture Project Identification

Name	Business Enterprise Architecture (BEA) 4.1
Architect	DoD Business Transformation Agency (BTA)
Developed By	Representatives from the DoD Business Mission Area (BMA) Core Business Missions (CBM) and the BTA
Assumptions and Constraints	<p>The BEA 4.1:</p> <ul style="list-style-type: none"> • focuses on addressing architecture gaps identified in the BEA 4.0 AV-1 and additional issues identified during BEA 4.1 planning sessions, to include content and technical changes necessary to bring products into conformance with the DoD Architecture Framework (DoDAF), the BEA Development Methodology, BEA Architecture Product Guide and the Enterprise Transition Plan (ETP). • makes maximum reuse of legacy BEA products with changes made as necessary. • addresses only DoD Enterprise-level business and strategic plans, goals, objectives and strategies.
Approval Authority	The Deputy Secretary of Defense, acting through the Defense Business Systems Management Committee (DBSMC)
Date Completed	March 15, 2007
LOE and Costs	Level of effort and projected and actual costs to develop the BEA may be requested from the Director, BTA.

Scope: Architecture View(s) and Products Identification

Products Developed	BEA 4.1 consists of the integrated architecture products -- AV-1, AV-2, OV-2, OV-3, OV-5, OV-6a, OV-6c, OV-7, SV-1, SV-5, SV-6 and TV-1 -- as necessary to comply with DoDAF and BEA 4.1 requirements. The BEA products resulted from a collaborative effort of the Business Enterprise Priorities (BEPs) teams and represent an integration of individual BEP-specific products. (For example, each BEP has its own AV-1 product which is integrated into this BEA AV-1).
Scope	The major focused bodies of work (a total of 6 areas) for BEA 4.1 involved development of Standard Financial Information Structure (SFIS) Phase III for Financial Management, Laws, Regulations, and Policies updates, Capital Asset Valuation, capabilities for the Synchronized Pre-Deployment and Operations Tracker (SPOT) system, Logistics Federated Touchpoints, and further decomposition of Human Resources Management activities. Further integration work across all products and BEPs was conducted for minor content and technical issues to improve overall integrity and alignment of the architecture. Refer to separate document titled 'BEA 4.1 Summary' for additional details.
Time Frames Addressed	The BEA is the "To Be" architecture for business transformation efforts of the DoD. The current BEA "To Be" end state has intermediate time frames for implementation addressed in the ETP.
Organizations Involved	The BEA involves operations of the DoD BMA CBMs (led by the Principal Staff Assistants (PSAs) at the enterprise level), as follows: Financial Management, Human Resources Management; Materiel Supply & Service Management; Real Property & Installations Lifecycle Management; and Weapon Systems Lifecycle Management. The PSAs determine the BEPs based on the mission needs of the DoD.

Purpose and Viewpoint

Purpose	To provide 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.
Questions to be Answered	<ul style="list-style-type: none"> • 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? • How are we investing our funds to best enable the warfighting mission?
Architecture Viewpoint	The BEA is developed from a DoD BMA, tiered accountability, and business owner perspective focusing on the definition and documentation of processes, data, data standards, business rules, operating requirements, information exchanges, and glossary of terms at a DoD Enterprise level, documenting business transformation as provided by the DoD CBMs. The DoD Enterprise level addresses business capabilities that are both enterprise level and DoD-wide, and includes the systems and initiatives that support those capabilities.

Context	
Mission	The BEA is essential to the mission of the BTA to guide transformation of business operations throughout the Department of Defense and contribute to delivery of enterprise-level business capability improvements that align to warfighter needs.
Goals	<ul style="list-style-type: none"> • Describe DoD enterprise Core Business Mission end-to-end business processes as they relate to the six Business Enterprise Priorities (BEPs) of the DoD. • Establish foundational data standards and business rules. • Support DoD investment management criteria for systems certification. • Comply with evolving DoD Networks and Information Integration (NII) architecture guidance. • Provide the foundation to accelerate outcome based architecture development and implementation. <p>In addition to contributing towards the achievement of the BEA goals, each BEP has its own set of outcome-oriented goals.</p>
Business Enterprise Priorities	<p>The six BEPs contain the highest priority transformation initiatives at the DoD Enterprise level and serve as the focus of the BEA 4.1 development effort. BEP definitions are provided below.</p> <ul style="list-style-type: none"> • Acquisition Visibility – Acquisition Visibility (AV) is defined as achieving timely access to accurate, authoritative, and reliable information supporting acquisition oversight, accountability, and decision-making throughout the Department for effective and efficient delivery of warfighter capabilities. • Common Supplier Engagement – Common Supplier Engagement (CSE) is the alignment and integration of the policies, processes, data, technology and people to provide a consistent experience for suppliers and DoD stakeholders to ensure reliable and accurate delivery of acceptable goods and services to support the warfighter. • Financial Visibility – Financial Visibility (FV) means having immediate access to accurate and reliable financial information (planning, programming, budgeting, accounting, and cost information) in support of financial accountability and efficient and effective decision-making throughout the Department in support of the missions of the warfighter. • Materiel Visibility – Materiel Visibility (MV) is defined as the ability to locate and account for materiel assets throughout their lifecycle and provide transaction visibility across logistics systems in support of the joint Warfighting mission. • Personnel Visibility – Personnel Visibility (PV) is the fusion of accurate human resources (HR) information and secure, interoperable technology. PV is defined as having reliable information that provides visibility of military Service members, civilian employees, military retirees, contractors (in theater), and other U.S. personnel, across the full spectrum - during peacetime and war, through mobilization and demobilization, for deployment and redeployment, while assigned in a theater of operation, at home base, and into retirement. This includes ensuring timely and accurate access to compensation and benefits for DoD personnel and their families and ensuring that Combatant Commanders have access to the timely and accurate data on personnel and their skill sets. • Real Property Accountability - Real Property Accountability (RPA) provides the warfighter and CBMs access to near-real time secure, accurate and reliable information on real property assets, and environment, safety and occupational health sustainability.
Rules, Criteria, and Conventions Followed	<p>Rules -</p> <ul style="list-style-type: none"> • BEP products shall be developed and decomposed only to the level of detail required to adequately portray enterprise “To-Be” business capability improvements. (This has been determined on a BEP-by-BEP basis). • Quality is goal #1. (Quality = Consistent, Accurate, Understandable and Integrated Information). • Integrate and maintain the BEA in one integrated repository, using one methodology and one consistent notation. <p>Criteria – Detailed criteria are developed for each release of the BEA.</p> <p>Methodology and Conventions – Guidance contained in the <i>BEA Development Methodology</i>, the <i>BEA Architecture Product Guide</i>, as well as applicable <i>Decision Memoranda</i>, approved by BEA leadership, provide the methodology and conventions for release development.</p>
Tasking for the BEA and Linkages to Other Architectures	<p>Tasking – The 2005 National Defense Authorization Act (NDAA) requires that architecture be defined and used to assess and maintain investments throughout the BMA.</p> <p>Linkages and Relationships – The BEA is linked to the Federal Enterprise Architecture (FEA) through the DoD EA Reference Models and federated with Component and program architectures through tiered accountability.</p>
Tools and File Formats Used	
Telelogic System Architect v10.3, Merant Version Manager, Merant Tracker, Microsoft SQL Server, Word , Access, and Excel.	

Business Enterprise Architecture 4.1 -- Findings and Recommendations

Findings		Recommendations
1	Foreign Military Sales has been identified as a gap in the BEA for activities, processes and data that affects multiple CBMs.	Foreign Military Sales processes needs to be developed and integrated in the Architecture.
2	The separate Look Ahead Node Tree is not integrated into the BEA, has varying levels of decomposition and only partially supports system assessments and IRB review as it does not cover the full BMA scope.	Provide a single OV-5 Node Tree that comprises the scope of the BMA with integrated activities clearly delineated from activities for future development. The single Node Tree will support estimates of architecture work to complete the BMA, stabilize the BEA structure, allow system owners to link future portions of the Node Tree for system assessments, and leverage the proposed Business Capability Lifecycle IRB/DBSMC governance framework.
3	There is an absence of an Enterprise level Planning Activity in the BEA.	Develop an Enterprise level Planning Activity in the BEA that incorporates the current BEP focused planning activities.
4	Defense Agencies Initiative (DAI) was introduced as an enterprise system into BEA 4.1 but is limited in scope and is not adequately represented for all products.	Develop and integrate DAI in the BEA at the process, systems and data levels across multiple CBMs. Examples of function areas include: <ul style="list-style-type: none"> • Time and attendance • MIPRs • Purchase Request • Grants • Purchase Card
5	There is a need to incorporate touchpoints in the BEA by adding processes and activities to align with Services and Components.	Identify touchpoints in the BEA by adding processes and activities to align with Services and Components. Examples: <ul style="list-style-type: none"> • MV alignment with USTRANSCOM and DLA • MV incorporate planning and maintenance activities • FV alignment of Funds Distribution and Control activities and processes
6	There are multiple uses of Entitlement related objects for personnel and contract pay that need to be clarified.	Align Entitlement related objects for personnel and contract pay between FM, HRM and MSSM.
7	Laws, Regulations and Policies are represented at different levels and are mapped to BEA processes at varying levels.	Updates to the Laws, Regulations and Policies should be incorporated in the BEA at the appropriate level.
8	The BEIS program office is reinvestigating the scope of their requirements that may have an impact on the architecture and cause inconsistencies within the SV-1 products.	The BEA needs to be reviewed and updated to reflect the new or updated requirements of BEIS.
9	There is a need to address integration issues across all products and functional areas of the BEA to make the BEA more useful prior to any new content being added.	Need more complete integration across all products and functional areas of the BEA. For example: <ul style="list-style-type: none"> • HRM – Integrate new Activities with OV-6a, OV-6c, OV-7 and SV products • SPOT requires further development in BEA <ul style="list-style-type: none"> ○ integrate across functional areas, especially with HRM ○ integrate with all products ○ develop processes and requirements in the OV-6a, OV-6c, OV-7
10	Reference Models should be developed. This will have a direct impact on future EA Assessments	In order to align the BEA effectively with the FEA, a development effort is proposed for the following reference models: Performance, Data, and Service Component.

	Findings	Recommendations
11	Information Assurance attributes that are needed for compliance requirements are not adequately represented in the BEA.	Analyze requirements and LRPs related to Information Assurance to develop a methodology to properly assign IA attributes in the BEA.
12	In addition to DAI, CBMs should use the BEA to develop other cross agency initiatives.	A single information source for cross agency initiatives is contained in the Federal Transition Framework (FTF) that is strongly endorsed by OMB. It is proposed the CBMs exploit this opportunity so that system solutions have greater impact.
13	There are gaps between BEA Activities and the Federal Enterprise Architecture Business Reference Model.	Identify and recommend additional Lines of Business and Sub-functions for incorporation in the FEA BRM. Review other FEA reference models for possible linkages to the BEA.

Business Enterprise Architecture 4.0 -- Findings and Recommendations

Findings		Recommendations
1	The current planning cycle for BEA development extends only to the next release. The determination of the scope and content of BEA development work needs to be extended out several release cycles.	Extend the planning cycle to include multiple future releases and align content and scope with an expanded Enterprise Transition Plan planning cycle. <i>Status: Has been addressed with change to annual delivery of the BEA. Planning activities have started earlier in the development cycle.</i>
2	The linkage between the ETP and the BEA needs to be strengthened so that the development work selected for each release is based on prioritized Business Capability Improvements that address critical mission needs.	Use an integrated approach for development of the ETP and the BEA to prioritize gaps and desired outcomes, in order to determine the scope of BEA development efforts for future releases. <i>Status: Entry Criteria, based on BCIs, were used in BEA 4.1 to select and prioritize the planned development work. For BEA 5.0, additional Gaps and integration points between ETP and BEA are being identified and prioritized.</i>
3	The BEA does not provide for the systematic measurement of performance (i.e., the means by which the department can measure the intended mission value to be delivered by the portfolio of programs in the architecture).	Evaluate the efficacy of incorporating those performance measures and standard methods for collection being developed in the ETP into the BEA. <i>Status: The ETP provides Business Capability Improvement Metrics to track the planned improvements to specific Business Capabilities, as well as System Metrics for Enterprise-level systems. These metrics are used to measure progress towards achieving the Business Enterprise Priority objectives associated with a given Business Capability. A broader performance measurement framework is being established, and may include establishing operational metrics for each activity, cycle-time metrics for each process, and additional metrics for each system .</i>
4	In order to fully accomplish the scope of their efforts, several BEP teams should further decompose CBM processes and associated activities.	In conjunction with the ETP, create and develop evaluation criteria to determine the completeness of each business capability. <i>Status: To be addressed in BEA 5.0 Planning</i>
5	Business Rules are at an inconsistent level within the BEA.	Develop and implement an integrated methodology for developing business rules across BEPs that address the current inconsistencies and leveling issues. <i>Status: To be addressed in BEA 5.0 planning.</i>
6	The SV products depict information provided by the Program Managers (PM) and Operational Views on all enterprise-level systems for the BEA. There are gaps in the current suite of enterprise-level systems which do not fully represent the scope of architecture products required for implementation.	Develop an SV improvement plan to standardize and enhance system related objects in order to support system implementation; and also, evaluate the need for additional architecture products to aid in implementation. <i>Status: To be addressed in BEA 5.0 planning.</i>
7	Operational Activities associated with contingency operations sometimes require exception handling of standard procedures and business rules. Further effort needs to be performed to capture and evaluate this exception handling.	In support of “Task Force to Support Improved DoD Contracting and Stability Operations in Iraq”, future analysis is required to analyze task force findings on the BEA. <i>Status: The Task Force Team is beginning to develop architecture to depict contingency operations in theater (As-Is). The results of their effort will be evaluated against the BEA for potential impact and future planning.</i>