

## What's New in BEA 8.0

### Introduction

The Business Transformation Agency (BTA) annually releases the Business Enterprise Architecture (BEA) for the Department of Defense (DoD) Business Mission Area (BMA) to help defense business system owners and program managers make informed decisions in support of the Department. BEA 8.0 was officially delivered March 11, 2010.

Starting in July 2009, the BTA introduced informational releases. The informational releases reflect ongoing BEA content updates allowing stakeholders to accelerate the coordination and implementation of requirements to be part of the next major release. Starting with BEA 6.0 and continuing through 8.0 and subsequent releases, these informational releases and the requirements contained therein, are focused on improving the Department's ability to manage business operations from an End-To-End (E2E) perspective.

E2Es are integrated Business Flows which span both functions and organizations. The development, refinement and implementation of these E2E Business Flows work in concert with the Strategic Management Plan (SMP), the Enterprise Transition Plan (ETP), and the Investment Review Board (IRB) processes. These E2E Business Flows advance the Department's business operations to better support enterprise priorities.

The BEA 8.0 release contains improvements to both help the user experience and improve the enterprise requirements contained therein. The structural and visualization enhancements enable users to more effectively and efficiently use the E2E Business Flows to support architecture re-use and portfolio management. They also continue to improve the BEA's conformance to DoDAF 2.0 and other standards such as the Business Process Modeling Notation (BPMN 2.0) Analytics Conformance Class (Primitives). The content improvements enrich the quality of the CBM requirements captured as part of the E2E Framework.

### Structural Changes and Visualization Enhancements

#### Structural Changes

The major focus for BEA 8.0 was the continued evolution and refinement of the Hire to Retire (H2R) and Procure to Pay (P2P) E2E Business Flows. The first improvement consisted of consolidating the OV-6c process models within the P2P purview. This established a lower-level set of diagrams that further defines the enterprise requirements associated with the P2P E2E. It also decreased the total number of P2P OV-6c models from 25 to 7. The H2R development effort consisted of content and structural changes at the Level 1. The Human Resources Management (HRM) Core Business Mission (CBM) viewed the scope of the H2R E2E as too broad. Therefore, the scope was streamlined to make the H2R E2E more exemplary of its true scope. It should be noted that the E2E refinement and development efforts in BEA 8.0 resulted in the identification of additional areas for refinement, or gaps between previous release's E2E content and the current release. These additional areas for refinement resulted from the identification of E2E flows that were previously part of, but no longer fit into the revised H2R and P2P models. The gaps are referred to in this document as Orphan Process steps and they are identified as follows:

**H2R:**

- Military Health Services
- Manage Travel
- Law Enforcement
- Physical Security
- Safety
- Interagency Support
- Policy and Guidance

**P2P:**

- Manage Travel

The BEA development process continues to focus on defining and capturing enterprise data requirements. The process also continues to apply the DoDAF 2.0 metamodel and BPMN 2.0 Primitives. Definition of enterprise data requirements began with gaining concurrence by the Business Enterprise Common Core Metadata (BECCM) Community of Interest (COI) on what constitutes an enterprise data standard. Concurrence on requisite BEA content to support compliance to an enterprise data standard was also gained from the BECCM. As a result, the following information must be captured for all BEA data standards: entities, attributes, data elements, data-related business rules, data type, field length, and domain permitted values.

DoDAF 2.0 conformance continues in BEA 8.0 by implementing the terminology of the DM2. Also, as new business terms are added, a crosswalk of DM2 terms will be provided to help make BEA content more understandable and easier to use. The BEA to DM2 cross-walk is highlighted below:

Table 1: BEA Business Term to DM2 Crosswalk

BEA Business Term	DoDAF 2.0 Term
Business Capability, JCA	Capability
Operational Activity, BPM Process, System Function, Gateway, Event	Activity
Input, Outputs, Message Flow,	Resource Flow
Mechanism, Pool, Swim Lane, Operational Node, System Node, System Entity	Performers
Material Weakness	Condition
Performance Measure	Measure
Desired Effect	Desired Effect
Control, LRP, DFMIR/FFMIA, Business Rule	Rules
Services	Services
Entity, Attribute, Data Domain, Entity Relationship, Data Object	Information

The BPMN 2.0/Primitives specification was enforced on all P2P and H2R process modeling. As the diagrams are updated, the process of educating the users of the BEA must be an on-going effort. Training materials on Primitives used in the BEA development process will be posted on

the BEA website at [http://www.bta.mil/products/BEA\\_8\\_0/index.htm](http://www.bta.mil/products/BEA_8_0/index.htm). If you have any questions or require further training in this area, please contact ASKBEA@BTA.mil.

Extensive work was completed to streamline the visualization of the requirements related to the E2Es and to support Portfolio Management. This work enabled simple discovery of meaningful enterprise requirements. The subsequent paragraphs outline the details of the visualization enhancements.

## Visualization Enhancements

- **E2E Visualization (P2P & H2R):** This visualization was created to provide the end-user a way to discover E2E content in a more user-friendly manner. The BEA is leveraged for numerous architecture development efforts, the visualizations make BEA E2E-related content more easily viewable and accessible for reuse.
- **Re-designed DIV-1, DIV-2 and DIV-3 web pages:** The DIV-1, DIV-2 and DIV-3 products move the BEA forward in its drive toward DoDAF 2.0 conformance. DIV-1 products were created to support several enterprise standards such as the Common Human Resource Information Standard (CHRIS) and Procurement Data Standards (PDS). A DIV-1 was also created to identify data requirements associated to Delinquent Debt. DIV-2 products have been created to support data requirements for all of the CBMs, to include enterprise data standards and data-related business rules. DIV-3 products were created to support OmniClass and the Real Property Information Model (RPIM), both of which are Real Property and Installations Lifecycle Management (RPILM) data requirements.
- **Common Human Resource Information Standard (CHRIS):** This visualization was enhanced for BEA 7.2 to provide more value-added information to the end-user. It now provides the user a more efficient way to discover not only the overall CHRIS but also the sub-sets functional groupings of standards the CHRIS comprises
- **Procurement Data Standards (PDS):** This visualization was added to provide the end-user an efficient way to discover the minimum set of data elements and business rules for contract data output needed by enterprise DoD Standardization Program (DSP) systems and emerging ERPs for end-to-end contract development, management, and reporting.
- **Core Business Mission (CBM) Pages:** In addition to the visualization enhancements outlined above, CBM pages were added to provide the end-user a quick way to discover content based upon a CBM area. For example, the Human Resources Management page highlights the scope of HRM including key initiatives, enterprise standards and systems, and BEA content updates related to HRM. CBM pages were also created for Financial Management (FM), Material Supply and Services Management (MSSM), Real Property and Installations Lifecycle Management (RPILM) and Weapon Systems Lifecycle Management (WSLM).

## Portfolio Management Reports

- **Portfolio Management by E2E:** As the Department moves towards developing and managing from an End to End perspective, visualizing the department's portfolio across organizations becomes more critical. Since the focus of 7.2 continues to be P2P and H2R, visualizations were created to support those areas. Because of the significant E2E work completed in these areas, some gaps may exist from the previous release. The visualization was developed to help understand the usefulness of the E2Es and how to better improve the management of those systems from an E2E perspective. A summary of those gaps can be found in this document in section 3 "BEA 8.0 Content Changes".
- **Portfolio by Joint Capability Areas (JCA):** Because the Department has multiple architectures and other constructs that are used to report and manage portfolios, flexibility in reporting accurate information according to these mechanisms is paramount. The BMA has actively collaborated with the Warfighter Community to align the BEA Business Capabilities and the JCAs. This alignment has been captured within and viewable through the BEA thus supporting visibility of the Department's business portfolio by JCA. This visualization allows the warfighter and business communities to discover gaps and redundancies in delivering capabilities to the Warfighter.

## Content Update

The majority of the content changes made in BEA 8.0 are a result of addressing the capability gaps and improvements that originated from previous BEA releases. Content changes relative to the BEA 8.0 release are documented herein and are organized by the stewarding CBM, or the primary BTA directorate. The changes are described from a value added perspective as it relates to business transformation efforts. A description is given that defines architecture improvement needs while also providing details on how BEA 8.0 addresses those needs.

## Financial Management (FM)

- Enhancement of the financial management content in the BEA related to Material Weaknesses in support of audit readiness and Business Process Reengineering (BPR). This effort focused on the current financial reporting material weaknesses documented in the Performance and Accountability Report (PAR) for the DoD Agency Financial Reports (AFR). These material weaknesses were linked to the business processes that have a material impact towards improving audit readiness across DoD and to performance metrics that could be used to measure the performance improvement from BPR.
- Update of Delinquent Debt information in the BEA to satisfy requirements developed by the Enterprise Delinquent Debt Management working group and approved by DoD senior leadership.
- Refinement and extension of the baseline repository of DFMIG/FFMIA guidance and LRP established in BEA 7.0 by adding new and changing existing rules and LRP as identified by the DoD DFMIG/FFMIA requirements steward (DFAS). In addition, FM requirements associated with pay systems were incorporated to support on-going pay system development efforts in the HRM CBM.

- Addition of two new transaction types to the US Standard General Ledger posting logic: 1) Reduction of Unfilled Customer Order from Prior-Year and 2) Write-off-Refund of a Prior Year Receipt.
- Revision of SFIS based on changes made to authoritative guidance such as the Treasury Financial Manual and OMB Circulars since the last BEA release. Also, SFIS was updated based on needed adjustments identified by the SFIS validation pilot.

### **Human Resources Management (HRM)**

- Doubled the number of HRM BEA OV-5a Node Tree activities so that all current HRM OV-5 activities are shown for HRM IRB review preparations by systems.
- Further developed the Common Human Resources Information Standards (CHRIS) and added military retirement process business rules to guide system owners to a better understanding of the HRM Enterprise Standards (HRM ES).
- Expanded Quality of Life models to support Wounded Warrior and Recovery Coordination Program initiatives.
- Decomposed the “Manage Human Resources Policy and Guidance” activity to more accurately depict the interaction of policy and standards formulation with HRM functions.
- Restructured the Hire to Retire (H2R) E2E model to better support the BMA’s move from a function-centered approach to one that looks at DoD business functions across the enterprise from an End-To-End perspective. Additional work will be needed to address all of the HRM functions within E2Es.
- Replaced DIMHRS mechanism with citation of the appropriate HRM Family of Systems.

### **Materiel Supply and Service Management (MSSM)**

- Addition of Electronic Document Access (EDA) functionality as a mechanism to facilitate transfer of information between contracting systems.
- Enhancement of the set of data elements needed from Procurement Data Standards (PDS) that defines the data structures and business rules for contract data output needed by enterprise DoD Standardization Program (DSP) systems and emerging ERPs for end-to-end contract development, management, and reporting.
- Further development of the Synchronized Pre-deployment & Operational Tracker (SPOT) content, aligning it with applicable enterprise standards to help reduce waste, improve ability to audit costs, improve budgetary planning.
- Implementation of an approach to streamline BEA P2P process models. These models encompass all business functions necessary to obtain goods and services. This includes such functions as requirements identification, sourcing, contract management, purchasing, payment management, and receipt/debt management.

### **Real Property and Installations Management (RPILM)**

- Introduction of the OmniClass Construction Classification System (OCSS) in support of standardized information exchanges, building information modeling, and real property asset management.

- Integration of business processes and related models for Product Hazard Data (PHD) stewardship to guide and constrain investments and to assess architectural compliance of new development efforts, modernizations, and IRB systems and programs.
- Definition and execution of a process to extract current metadata from the Real Property Information Model (RPIM) version 4.0. This improvement enables identification of Real Property Inventory Requirements (RPIR), Real Property Acceptance Requirements (RPAR) and Real Property Construction-in-Progress Requirements (RPCIPR) as enterprise data standards, in accordance with the Business Enterprise Common Core Metadata (BECCM) Community of Interest (COI) guidance. Addition of requisite content to improve understanding and use of Real Property Space, Real Property Asset Accountability, and Installation, Site and Real Property Networks. This was done to facilitate reporting DoD's annual real property inventory to the Federal Real Property Council (FRPC).
- Addressed gaps in the consistent understanding and use of Real Property Space, Real Property Asset Accountability, and Installation, Site and Real Property Networks.

### **Weapons System Lifecycle Management (WSLM)**

- Identification and documentation of additional data elements required for the Weapons System Lifecycle Management (WSLM) family of services. This family of services provides the data for decision-makers of Major Defense Acquisition Program (MDAP) programs to allow them to see status and provide budget recommendations. BEA 8.0 WSLM enhancements support periodic, ad hoc and analytic reporting and are constantly being supplemented to support emerging needs.
- Removal of the internal Services not relevant to the BEA. Definition of WSLM service data requirements to improve user understanding of the data needed to call a web service and what data, with definitions, would be returned.

### **Enterprise Integration (EI)**

Enterprise Integration (EI) collaborated with the CBM representatives to support alignment of BEA content enhancement with the E2E framework. E2E content enhancements for BEA 8.0 focused on P2P and H2R in the areas of:

- Business rules
- Minimum data requirements
- Relevant performance metrics
- Material weaknesses

### **Laws, Regulations, and Policies (LRP)**

The BEA Laws, Regulations and Policies (LRP) Repository is the single, authoritative reference source of all requirements that constrain the Department's business operations. The Repository is maintained in the Dynamic Object Oriented Requirements System (DOORS). This tool allows the specific Laws, Regulations, and Policies to be linked directly to the BEA OV-5b Activity Model, OV-6a Business Rules, and OV-6c Process Models as appropriate. It also serves as the benchmark against which all proposed architectural and systems changes are checked for integration into the enterprise. The LRP Repository provides more user-friendly data for assistance in determining BEA compliance.

There are 284 Laws, Regulations, and Policies contained in the Repository for BEA8.0. The products and reports relevant to BEA 8.0 including updates or changes to any Laws, Regulations, or Policies are outlined in the BEA LRP Repository narrative, accessible through the home page of the BEA 8.0 HTML website.

BEA 8.0 includes the maintenance of Defense Financial Management Improvement Guidance (DFMIG) rules which include Federal Financial Management Improvement Act (FFMIA) requirements. The DFMIG rules include links between specific Laws, Regulations, and Policies and Business Process Model (BPM) processes.

### **Improvements completed in BEA 8.0**

Updated 50 Laws, Regulations, and Policies.

Compiled and added 39 new Laws, Regulations, and Policies into the LRP Repository.

Created 198 links between the Laws, Regulations, and Policies and the DFMIG rules.

Created 1259 DFMIG links to BPM processes.

Eighty nine (89) source documents which constrain the BEA have been added or revised within the LRP Repository. These LRP source documents were deemed relevant to the architecture by each CBM and have been appropriately mapped to process steps at their respective levels of the OV-6c Business Process Models (BPM).

### **BEA Site Update**

The BEA Web Page offers a more streamlined and informative user experience. A vertically scrolling News section informs users of the latest BEA events and development activities. This feature enables BEA users to locate areas of interest and link to information regarding scheduled BEA development workshops and meetings. The News section continuously updates to provide near real-time visibility into ongoing efforts related to BEA and stakeholders engagements.

Additionally, the web site provides improved access to BEA content and other information via a standard drop-down list. This feature enables users to quickly reach key BEA products, documents, and other useful DoD and architecture resources.

The new page also features BEA contact information and external links to partnering DoD organization websites. The BEA Web Page can be accessed at the following link.

[BEA Web Site](#)

For more information or other inquires about the BEA, please contact the BEA.

[Contact BEA](#)