



Office of the
**DEPUTY CHIEF
MANAGEMENT OFFICER**

BEA 9.0 Summary

March 15, 2012

Version History

Version	Publication Date	Author	Summary of Changes
1.0	March 15, 2012	BEA Development Team	Created for BEA 9.0

Table of Contents

1. Introduction	4
1.1 Structural Changes and Visualization Enhancements	4
1.1.1 Structural Changes.....	4
1.1.2 Visualization Enhancements	5
1.2 Content Update.....	5
1.2.1 Enterprise Wide.....	6
1.2.1.1 Financial Management	6
1.2.1.2 Human Resources Management (HRM).....	7
1.2.1.3 Materiel Supply and Service Management (MSSM)	7
1.2.1.4 Real Property and Installations Management (RPILM)	8
1.2.1.5 Weapons System Lifecycle Management (WSLM).....	8
1.2.2 Laws, Regulations and Policies.....	8
1.3 BEA Site Update	9
Appendix A: Acronyms and Abbreviations	10

1. Introduction

The Office of the Deputy Chief Management Officer (ODCMO) 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 9.0 was officially delivered March 15, 2012.

Per the FY2011 Enterprise Transition Plan (ETP), the Department will focus its efforts to improve overall management of its business system investments in four areas.

- Improved interoperability through End-to-End (E2E) processes
- Streamlined acquisition processes
- Reengineered processes
- More cost effective infrastructures

The Department's focus will impact the BEA in the following areas:

- End-to-End (E2E) Processes
- Data Interoperability

Further refining the concept of E2E process flows and improving data standards and interoperability within the BEA will enable the Department to better develop its target system environment and rationalize its portfolio of business systems.

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 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 9.0 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 Analytic Conformance Class (Primitives). The content improvements enrich the quality of the enterprise requirements captured as part of the E2E Framework.

1.1 Structural Changes and Visualization Enhancements

1.1.1 Structural Changes

Structural changes to BEA for release 9.0 fall into two categories; tools upgrade and metamodel changes. The tools upgrade focused on upgrade of the primary modeling tool used to build the BEA, Rational System Architect (SA). The SA tool was upgraded from the current 10.7 version to version 11.4. SA 11.4 provides expanded modeling capabilities as well as improved web-based editing functions.

The BEA Meta-Model is the heart of the architecture. The Meta-Model enforces the proper structures and relationships between architecture concepts (e.g., Operational Activities and the SMP). The BEA Meta-Model

is also the mechanism that supports expanded usability of the BEA. The Meta-Model changes made for BEA 9.0 were made to enable both traceability of enterprise requirements and content to the SMP and continue conformance to the DoDAF 2.0 metamodel (DM2). The following Meta-Model changes were made for BEA 9.0:

- Initiative – This is an SMP term that is implemented in the BEA as the DM2 term “Project”.
- Measure – This term is the same in the SMP term and DM2.
- Material Weakness – This is an SMP term that is implemented in the BEA as the DM2 term “Condition”.
- Goal – This is an SMP term that is implemented in the BEA as the DM2 term “Desired Effect”.

1.1.2 Visualization Enhancements

The ODCMO recognizes that the ability to “see” the content of the BEA is just as important as capturing the content. Therefore, BEA releases continue to provide enhanced visualization of the existing content as well as the new content necessitated by the BMA lines of business. The following items outline the latest visualization enhancements that improve the BEA user experience.

- Graphical improvements for BEA 9.0
 - E2E Visualization (Procure to Pay [P2P], Hire to Retire [H2R] and Budget to Report [B2R])
 - Visuals for Material Weakness
 - Procurement Data Standard (PDS) / Purchase Request Data Standard (PRDS)
 - OV-6c clickable link of Message Flows
 - BEA Mapping to SMP

The following reports were also added to improve visualization of BEA content.

- Portfolio Management Reports
 - Portfolio by E2E
 - Portfolio by OV-6c Message Flows

The BPMN 2.0/Primitives specification was enforced on all P2P, H2R and B2R process models. 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 this website. If you have any questions or require further training in this area, please contact AskBEA@osd.mil.

1.2 Content Update

The majority of the content changes made in BEA 9.0 are a result of addressing the capability gaps and improvements that originated from previous BEA releases. In this section content changes relative to the BEA 9.0 release are organized by:

- Enterprise Wide
- Core Business Missions (CBM)

- Laws, Regulations and Policies (LRP).

1.2.1 Enterprise Wide

The Enterprise Wide changes comprise addition of content linkages (enabled by the Metamodel changes) to BMA Goals, Initiatives and Measures and OV-6c Process Model changes. These changes were necessitated by integration of the SMP, which lists the BMA Business Goals, Initiatives and Measures, and BPMN Primitives guidance respectively.

These Metamodel changes in the BEA enable traceability of enterprise requirements to the overarching strategy of the Department as outlined in the SMP. For BEA 9.0, the SMP Initiatives and Measures were mapped to the E2E Processes and the Operational Activities. It is important to note that not all SMP Initiatives and Measures “map cleanly” to an Operational Activity or an E2E Business Flow. That said, when using the SMP report there may be anomalies that will be addressed in future BEA releases. Please use the AskBEA@osd.mil link to report these anomalies so that they may be tracked and addressed.

Per April 4, 2011 Memo – Use of End-to-End (E2E) Business Models and Ontology in DoD Business Architectures, the BPMN Primitives are used to guide the representation of the BEA process models. The memo prescribes the use of BPMN Primitives to enable better description of the BEA. Each of E2E Business Flows contains OV-6c Process Models described at a lower level of detail beneath the E2E Level1 process steps. It is at this lower level of detail where the Primitives guidance was applied for the P2P, H2R and B2R E2Es. The intent and benefits of conformance to BPMN 2.0 / Primitives is described below.

- To enforce correct method syntax in order to:
 - Be able to validate models
 - Be able to implement models
 - Be able to query models using Semantic Technology
- To ensure consistent look and feel in order to:
 - Ease model comprehension
 - Encourage model re-use
 - Clarify interface points
- To create architectures that are people readable, machine readable, executable, and support reuse of authoritative data

1.2.1.1 Financial Management

The following bullets outline the content changes made within the Financial Management (FM) CBM.

- 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.

- Refinement and extension of the baseline repository of Defense Financial Management Improvement Guidance (DFMIG)/Federal Financial Management Improvement Act (FFMIA) guidance and LRPs by adding new and changing existing rules and LRPs as identified by the DoD DFMIG/FFMIA requirements steward (DFAS).
- Updates to FM LRP based upon changes made to laws, regulations, or policies since the last BEA release.
- Revision of Standard Financial Information Structure (SFIS) based on changes made to authoritative guidance such as the Treasury Financial Manual and Office of Management and Budget (OMB) Circulars since the last BEA release. Also, SFIS was updated based on needed adjustments identified by the SFIS validation pilot. An SFIS self-assessment matrix will display business rules for FM Core and Feeder System Categories to help FM system improvements implement SFIS-compliant constructs.

1.2.1.2 Human Resources Management (HRM)

The following bullets outline the content changes made within the HRM CBM.

- ID Credentials Management – Added to OV-6c Process model for future interaction with DoD CIO architecture for system access credentials.
- Casualty Assistance – Integrated within Account for Personnel OV-5b Operational Activity and added OV-6c Process model (details).
- Manage Personnel Promotion – Added OV-5b Operational Activity details and related OV-6c Process models.
- Manage Compensation – Added expanded set of OV-6c Process models.
- Common Human Resources Information Standards (CHRIS) – Updated to include compensation related details and initial DoD Military Health CHRIS.
- Personnel Visibility OV-6c process model - revamped to comply with Primitives methodology.

1.2.1.3 Materiel Supply and Service Management (MSSM)

The following bullets outline the content changes made within the MSSM CBM.

- Focused on P2P content to incorporate data requirements and Business Rules for:
 - Procurement Data Standards (PDS)
 - Purchase Request Data Standard (PRDS)
- Aligned P2P E2E Process Models and Activities to conform to BPMN 2.0 Primitives. Updates included:
 - Manage Contract process
 - Receipt and Acceptance process
 - Process Invoice and Match process

1.2.1.4 Real Property and Installations Management (RPILM)

The following bullet outlines the content changes made within the RPILM CBM.

- Updates of business process models and related products in order to (1) conform to the Analytic Conformance Class (Primitives) modeling standard, and (2) and integrate with the H2R and P2P E2E lifecycle models.

1.2.1.5 Weapons System Lifecycle Management (WSLM)

The following bullet outlines the content changes made within the WSLM CBM.

- The WSLM provided support and collaboration with stakeholders and other CBMs for refinement of the enterprise requirements within Procure-to-Pay and Acquire-to-Retire End-to-End Business Models through DPAP and PP&E.

1.2.2 Laws, Regulations and Policies

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 IBM Rational Dynamic Object Oriented Requirements System (DOORS). This tool allows the specific Laws, Regulations, and Policies to be linked directly to the BEA OV-5b Operational Activities, OV-6a Operational Rules, and OV-6c Processes 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 294 Laws, Regulations, and Policies contained in the Repository for BEA 9.0. The products and reports relevant to BEA 9.0 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 9.0 HTML website.

BEA 9.0 includes the maintenance of DFMIG rules which include FFMI requirements. The DFMIG rules include links between specific Laws, Regulations, and Policies and BPM processes.

LRP Improvements completed in BEA 9.0

- Updated 60 Laws, Regulations, and Policies.
- Added 15 Laws, Regulations, and Policies.
- Compiled and added 15 new Laws, Regulations, and Policies into the LRP Repository.
- Created 174 links between the Laws, Regulations, and Policies and the DFMIG rules.
- Created 816 DFMIG links to BPM processes.

Seventy five (75) source documents which constrain the activities and processes in the BEA have been added or revised within the LRP Repository. These LRP source documents were deemed relevant to the architecture by the individual CBMs and have been appropriately mapped at their respective levels to show their linkage with the OV-6c BPM which map directly to the 15 E2E Business Flows.

1.3 BEA Site Update

With the disestablishment of the Business Transformation Agency in 2011, the BEA Web Page was incorporated into the DCMO site. <http://dcmo.defense.gov/>. Documents were reformatted to DCMO templates.

Links to external sites previously on the BEA site were aligned with the DCMO page structures.

For more information or other inquires about the BEA, please forward to AskBEA@osd.mil.

Appendix A: Acronyms and Abbreviations

Acronym	Definition
AFR	Agency Financial Report
B2R	Budget to Report
BEA	Business Enterprise Architecture
BMA	Business Mission Area
BPM	Business Process Model
BPMN	Business Process Modeling Notation
BPR	Business Process Reengineering
CBM	Core Business Mission
CHRIS	Common Human Resources Information Standards
CIO	Chief Information Officer
DFAS	Defense Finance and Accounting Service
DFMIG	Defense Financial Management Improvement Guidance
DM2	DODAF 2.0 Metamodel
DoD	Department of Defense
DOORS	Dynamic Object Oriented Requirements System
E2E	End to End
ETP	Enterprise Transition Plan
FM	Financial Management
H2R	Hire to Retire
HRM	Human Resources Management
HTML	Hypertext Markup Language
IRB	Investment Review Board

LRP	Laws, Regulations and Policies
MSSM	Materiel Supply and Service Management
ODCMO	Office of Deputy Chief Management Officer
OMB	Office of Management and Budget
P2P	Procure to Pay
PAR	Performance and Accountability Report
PDS	Procurement Data Standard
PRDS	Purchase Request Data Standard
RPILM	Real Property and Installation Lifecycle Management
SA	System Architect
SFIS	Standard Financial Information Structure
SMP	Strategic Management Plan
WSLM	Weapons System Lifecycle Management