Real Property and Installations Lifecycle Management (RPILM)
Overview and Summary Information (AV-1)
Version 10.0, February 14, 2013

The AV-1 is an executive-level summary of the DoD Real Property and Installations Lifecycle Management (RPILM) Core Business Mission (CBM). Initially, the AV-1 is used to focus the RPILM CBM development effort and document its scope. The final version will include findings and recommendations from the effort.

Architecture Project Identification	
CBM Name	Real Property and Installations Lifecycle Management (RPILM)
CBM Description	The Real Property and Installations Lifecycle Management (RPILM) core business mission (CBM) provides the warfighter and other CBMs with access to secure, accurate and reliable information on real property assets and environment, safety and occupational health sustainability.
Architect	The Office of the Secretary of Defense (Installations & Environment) Business Enterprise Integration (ODUSD (I&E) BEI) Directorate and DoD Office of the Deputy Chief Management Office (DCMO)
Developed By	Lead Core Business Mission Area (CBM): DoD Real Property and Installations Lifecycle Management (RPILM) Representatives from relevant Component and OSD organizations, other CBMs, and DoD Office of the Deputy Chief Management Office (DCMO).
Assumptions and Constraints	The Installations and Environment (I&E) RPILM CBM: • Will make maximum reuse of existing BEA models with changes only made when necessary. • Will address only DoD enterprise-level business and strategic plans, goals, objectives, and strategies, which are the primary drivers for the BEA. • Will collaborate and coordinate initiatives and BEA modifications with other CBMs. • Will improve and enhance the visibility and lifecycle management of real property information and processes.
Approval Authority	The Deputy Secretary of Defense, acting through the Defense Business Council (DBC).
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 CBM Models may be requested from the Office of the Deputy Chief Management Officer (DCMO).
Business Outcome	BEA products that accurately articulate in an integrated manner the functional community's requirements. The BEA alignment will allow accurate IRB assessments of IT system compliance to be made. Integrated architectural products that support the Installations and Environment community and data consumers. The information added to the BEA in version 10 for RPILM will assist the DoD in understanding the requirements for implementing the Enterprise Energy Information Management (EEIM) capability to achieve the following goals: 1) Timely and accurate energy and water use data at the facility level via interfaces with automated processes

	2) Management of energy and water conservation improvements through standardized processes a. Facility benchmarking identified from energy audits and the work of energy managers across the enterprise 3) Identification of potential and monitoring on-site Renewable Energy (RE) generation systems 4) Identification of potential and monitoring off-site RE purchases
Scope: Architecture View and Models Identification	
Models Developed	The following products are being affected by the BEA V.10 development by RPILM: • AV-2 Integrated Dictionary • OV-2 Operational Resource Flow Description • OV-3 Operational Resource Flow Matrix • OV-5a Operational Activity Decomposition Tree • OV-5b Operational Activity Model • OV-6a Operational Rules Model • OV-6c Business Process Model • DIV-2 Logical Data Model • SV-1 System Interface Description
CBM Capabilities	• Hazardous Material Process Controls and Information Management • Environmental Liabilities Identification and Valuation • Enterprise Energy Information Management • Real Property Accountability
Scope	Addition of the Enterprise Energy Information Management (EEIM) capability
Time Frames Addressed	The BEA is the "To Be" architecture for transformation efforts at DoD. The current BEA "To Be" end state has intermediate time frames for implementation.
Organizations Involved	All CBMs
Purpose and Viewpoint	
Purpose **(Problems, Needs, Gaps)**	In order to increase operational and installation energy efficiency, lower risks to our Warfighters, reduce costs and improve energy security, DoD has undertaken the Enterprise Energy Information Management (EEIM) effort, seeking to: • Establish an integrated facility management system capability • Enable interoperability with Component systems for efficient energy data exchange across the Enterprise • Improve scalability of energy investment information to enable the visibility of installation and facility-level management and reporting

Questions to be Answered	Installations and Environment (RPILM CBM) will focus on addressing the following questions: • To which real property assets does DoD have legal interest, and what are their functions and capabilities? • Where are the assets located geographically? • Who has "touched" each asset throughout its life (including its current user)? • What is each asset's condition and status (open, closed, awaiting disposal, etc.)? • Who is/are the steward(s) of the asset? • How much is each asset worth (including liabilities)? • What are the restrictions associated with use of the property or asset? • What is the size of the asset? • How is DoD accounting for and reporting its investments in construction projects? • What is contained in the asset (e.g., installed equipment)? • What is needed to manage/maintain the asset, the spaces that comprise it and the equipment contained within it? • Are accurate and comprehensive hazard data being provided on the products DoD uses? • Is there a needs to purchase non-DoD renewable energy, and if so, how much? • Do we have potential opportunities for a renewable energy project? • Does the facility need an energy review? • What measurements and analyses are needed to achieve the desired understanding about energy consumption?
Architecture Viewpoint	Installations and Environment (RPILM CBM) content is developed in a single integrated approach that enables interoperability and manages data quality for enterprise capabilities across I&E. This includes the development and implementation of associated standards in the Business Enterprise Architecture (BEA) for all real property, installation management, environment, safety and occupational health, and energy management business areas under the purview of the DUSD(I&E).
Context	
Mission	The mission of Installations and Environment (RPILM CBM) is to provide installation assets and services necessary to support our military forces in a cost effective, safe, sustainable and environmentally sound manner.
SMP Goals	Installations and Environment's (RPILM CBM) mission and vision supports the following Strategic Management Plan (SMP) Goals: 1. Strengthen and right-size the DoD total workforce 2. Strengthen DoD Financial Management 3. Build Agile and Secure Information Technology Capabilities 4. Increase Buying Power of the DoD 5. Increase Operational and Installation Energy Efficiency 6. Re-engineer/Use End-to-End Business Processes 7. Create Agile Business Operations that Support Contingency Missions

SMP Key Initiatives	Installations and Environment (RPILM CBM) has developed the following key initiative in support of their mission and goals: • **Real Property Inventory Requirements (RPIR)** -These requirements provide the foundation for achieving real property accountability by standardizing data, systems, and processes. • **Real Property Acceptance Requirements (RPAR)** -This requirement standardizes data, systems, and processes required for the acceptance of real property assets (buildings, structures and linear structures) into the DoD inventory by all Components using any acquisition method • **Real Property Construction in Progress Requirements (RPCIPR)** -This requirement standardizes data, systems, and processes required for the creation, addition, and relief of costs associated with Construction and Capital Improvement activities of real property assets (buildings, structures and linear structures). • **Chemical Management Enterprise Information Integration (CMEII)** -This initiative improves the accuracy and availability of authoritative chemical data and will ultimately reduce chemical-related risks throughout the DoD supply chain. • **Defense Installation Spatial Data Infrastructure (DISDI)** -This initiative is leveraging spatial information across I&E's business mission areas to better manage global installations and bases. Using the Global Information Grid (GIG), DISDI develops standards and policy to enable the sharing and interoperability of high-quality geospatial data at all levels of installation management. • **Enterprise Energy Information Management (EEIM)** -This initiative will lead to a state-of-the-art, mission-driven, enterprise-wide energy information management system that can provide real-time information on energy consumption and cost at various levels of aggregation, including the individual building, the installation, the geographic region, and the Military Department to help the DoD achieve its energy management goals. • **Environmental Liability Recognition, Valuation and Reporting Requirements (ELRV&RR)** – This initiative supports the Environmental Liabilities Identification and Valuation Enterprise capability, which in turn supports the Real Property Accountability BEP. This includes data capture, inventory recording, integration with core financial systems and linkage to asset records. DoD environmental liability estimates are not auditable and have been identified by GAO as a material weakness. DoD efforts have traditionally focused on updating the required inventories, improving data quality and record keeping, and providing clear OSD financial and program guidance. However, the long term solution to achieving a favorable environmental liabilities audit is to re-engineer the environmental liabilities recognition, valuation, and reporting business process and then integrate financial and program IT systems to produce auditable and complete data.

SMP Measures	Following is a subset of the Installations and Environment (RPILM CBM) measures that align to the SMP: • All facility records in real property inventory have valid Quality ratings. (Annually) • All facility records in real property inventory have valid Mission Dependency ratings. (Annually) • All facility records in real property inventory have valid Utilization ratings. (Annually) • 100% of DoD population is served by public water systems meeting all established drinking water requirements each calendar year. (Annually) • 100% of DoD regulated wastewater discharges are in compliance with applicable requirements. (Annually) • 100% of real property inventory records will accurately identify historic properties and their quality. (Annually) • 100% of Installation Restoration Program (IRP) sites have remedy in place (RIP)/response complete (RC) at active installations (Low relative-risk sites by 2014). • Reduce building energy consumption by 3 percent per year from a 2003 baseline. (Annually) • Continue to reduce energy consumption to meet the goal of a 30 percent reduction by 2015.
Rules, Conventions, and Criteria	**Rules:** Installations and Environment (RPILM CBM) adheres to the DoD Architecture Framework (DoDAF). **Conventions:** The conventions and methodology to be followed are documented in the BEA Development Methodology and the Architecture Model Guide. **Criteria:** ODCMO establishes detailed evaluation criteria for the delivery. **Information Assurance Posture:** Installations and Environment (RPILM CBM) information, confidentiality, integrity, and availability must be protected to the extent required by applicable DoD policy.
BEA Tasking / Linkages to Other Architectures	**Tasking --** The 2012 National Defense Authorization Act (NDAA) requires architectures to assess and maintain investments throughout the DoD BMA. **Linkages to Other Architectures** – BEA is linked to the Federal Enterprise Architecture (FEA) Business Reference Model through the DoD EA Reference Models and federated with Component and program architectures through tiered accountability.
Tools and File Formats to be Used	IBM Rational System Architect v 11.4.1, Microsoft SQL Server, Word, Access, and Excel.