

# Defense Logistics Agency Instruction



DLAI 6604  
Effective November 7, 2012  
J632

## Enterprise Architecture

References: Refer to [Enclosure 1](#).

1. PURPOSE This DLA Instruction (DLAI):

- a. Establishes and implements DLA's enterprise architecture policy and procedures necessary to effectively, efficiently, and economically conduct official agency business, and supersedes references (a) and (b).
- b. Provides objectives and scope of the Agency's enterprise architecture. The structure of the enterprise architecture is described in [Enclosure 2](#).
- c. Identifies the requirements for existence of an enterprise architecture, as illustrated in references (c) through (g) and demonstrates of compliance with the Department of Defense (DOD) enterprise architectures, as provided in references (h) and (i).
- d. Focuses on the specification of architecture requirements for information technology (IT) investments and programs.

2. APPLICABILITY This Instruction applies to all Headquarters (HQ) DLA, Primary Level Field Activities (FLFA), and subordinate DLA Field Activities.

3. POLICY It is DLA policy to:

- a. Develop, implement, and maintain an enterprise architecture that incorporates and integrates high-level strategic descriptions of DLA missions, organizations, business processes, data, applications, and infrastructure to meet and align with Joint Staff and DOD Business Enterprise Architecture requirements.
- b. Develop, implement, and maintain program architectures for DLA IT programs during each phase of the systems life cycle, including System Change Requests (SCRs) during the operational phase. DLA program architecture product requirements are described in [Enclosure 3](#).
- c. Identify and maintain DLA mandatory metadata for DLA emerging and contemporary business systems and infrastructure programs for each phase of the systems life cycle, including for SCRs during the operational phase. The metadata to be used in the DLA Enterprise Data

Dictionary is described in reference (s) and must comply with DLA enterprise naming conventions prescribed in reference (t).

d. Have a structured approach ensuring that enterprise and program architecture products are developed and maintained in the Agency's enterprise architecture repository. The Agency's enterprise architecture repository currently resides in the commercial tool, ARIS, implemented at DLA Headquarters. Models in ARIS must be developed in accordance with the standards defined in the reference (j), ARIS User Guide, which is based on the reference (k), DOD Architecture Framework (DODAF). The ARIS models are the authoritative version of DLA's architecture.

e. Ensure that only architecturally-compliant IT programs/systems will be approved for investment. A system or program is considered compliant only if it has developed the required architecture and data products, received approval from Chief Architect, conforms to laws and established DOD/DLA regulations and policies, and is compliant with the Business Enterprise Architecture (BEA) as required by reference (l). IT programs/systems will follow the process established by the designated Milestone Decision Authority (MDA) for demonstrating BEA compliance.

f. In conjunction with reference (m), it is DLA policy to enforce architecture compliance throughout the Agency's Capital Planning and Investment Control process and Life Cycle Management program for each system or program. This includes the various technical reviews, major milestones, and periodic BEA compliance reviews.

4. RESPONSIBILITIES. Refer to [Enclosure 4](#).

5. PROCEDURES. Refer to [Enclosure 5](#).

6. EFFECTIVE DATE. This Instruction is effective immediately.

Director, Strategic Plans and Policy

#### Enclosures

Enclosure 1 – References

Enclosure 2 – Structure of the Enterprise Architecture

Enclosure 3 – DODAF Products Required for DLA Programs

Enclosure 4 – Responsibilities

Enclosure 5 – Procedures

Enclosure 6 – Additional Information

## ENCLOSURE 1

### REFERENCES

- (a) DLA Instruction 6604, "Enterprise Architecture," dated September 6, 2006, modified November 20, 2008 (hereby superseded).
- (b) DLA Instruction 6501, Data Information Management, dated November 5, 2007, modified September 15, 2009 (hereby superseded).
- (c) The "Government Performance and Results Act (GPRA) of 1993," January 1993.
- (d) Clinger Cohen Act of 1996, Title 40, United States Code.
- (e) Federal Information Security Management Act of 2002 (FISMA).
- (f) OMB Circular A-130, "Management of Federal Information Resources," November 2000.
- (g) DOD Directive 8000.1, Management of the Department of Defense Information Enterprise.
- (h) Business Enterprise Architecture, (latest approved version).
- (i) DOD Enterprise Information Architecture, (latest approved version).
- (j) DLA ARIS Users' Guide.
- (k) Policy Memorandum, DOD Chief Information Officer, "Department of Defense Architecture Framework (DODAF) Version 2.0", May 28, 2009.
- (l) Section 2222, Defense Business System: Architecture, Accountability, and Modernization, Title 10, United States Code.
- (m) IT Investment Portfolio Management.
- (n) DLA IT Solutions Document (latest approved version)
- (o) The DOD IT Standards Registry (DISR).
- (p) Directive-Type Memorandum (DTM) 11-009, Acquisition Policy for Defense Business Systems (DBS), June 2011.
- (q) DOD Directive 4630.05, "Interoperability and Supportability of Information Technology (IT) and National Security Systems (NSS)," May 5, 2004.
- (r) CJCSI 6212.01E, "Interoperability and Supportability of Information Technology (IT) and National Security Systems (NSS)," May 5, 2004.
- (s) Policy Memorandum, DLA Chief Information Officer, "Architectural Product Requirements for DLA Emerging and Contemporary Systems," Mar 14, 2011. DOD Net-Centric Services Strategy, DOD CIO, May 4, 2007.
- (t) DLA Enterprise Data Dictionary (EDD) Metadata Attribute Definitions, [https://eworkplace.dla.mil/sites/prg/edsi/Shared%20Documents/DLA\\_EDD\\_MetadataAttributes.docx](https://eworkplace.dla.mil/sites/prg/edsi/Shared%20Documents/DLA_EDD_MetadataAttributes.docx)
- (u) DLA Naming and Design Rules, [https://eworkplace.dla.mil/sites/prg/edsi/Shared%20Documents/DLA\\_EDD\\_Naming\\_and\\_Design\\_Rules.doc](https://eworkplace.dla.mil/sites/prg/edsi/Shared%20Documents/DLA_EDD_Naming_and_Design_Rules.doc)
- (v) DODD 8320.02, "Data Sharing in a Net-Centric Department of Defense," certified current April 2007 (<http://www.dtic.mil/whs/directives/corres/pdf/832002p.pdf>).
- (w) DOD Discovery Metadata Specification (<https://metadata.DOD.mil>).

- (x) DODD 8500.01E, "Information Assurance (IA)," certified current as of April 23, 2007 (<http://www.dtic.mil/whs/directives/corres/pdf/850001p.pdf>).

## ENCLOSURE 2

### STRUCTURE OF THE ENTERPRISE ARCHITECTURE

The DLA Enterprise Architecture (EA) is a strategic information asset that will be integrated into key agency processes to support decisions. The following paragraphs describe the structure of the DLA EA.

a. The scope of the Agency's EA includes all Agency missions, business processes, administrative functions, data, systems, and technical infrastructure, as well as external interfaces with DLA customers, suppliers, and DOD partners.

b. The Agency's EA is a high-level integrating framework supporting decisionmaking across all DLA missions, functions, programs, and capability portfolios. The end state goal for the EA is to provide the overarching blueprint to support investment decisions and to guide the execution of programs.

c. As shown in Figure 1, the Agency's EA is comprised of the business architecture, data architecture, application architecture, and infrastructure architecture layers. Development of the EA drives from Agency strategic goals and objectives and notionally flows through the EA layers beginning with business architecture requirements, followed by data/information needs, and supporting application architecture and infrastructure. Required capabilities are described using a capabilities viewpoint as part of the business architecture layer. Each layer is described by a set of DODAF viewpoints and products, which are specified in the EA AV-1, Overview and Summary, product. Program architectures derive from and align to the EA using DODAF products that describe solutions to required capabilities. The EA layers provide architectural direction and facilitate integration across the program architectures.

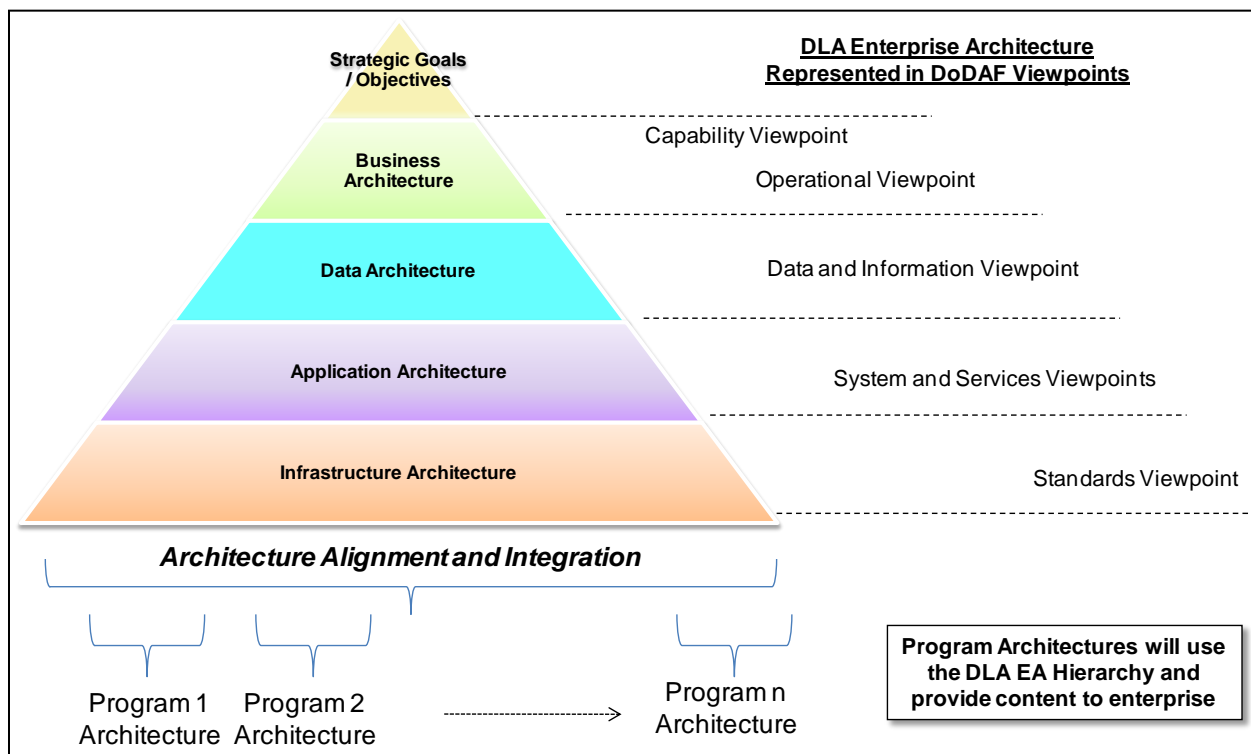


Figure 1: DLA Enterprise Architecture Composition

Per Figure 2, each respective layer is described using architecture products. These include documents, models, spreadsheets, and other information that constitute a single, coherent, and consistent picture of the enterprise based on the integrated views of the DODAF. Generally, for each DODAF product in the EA there is a corresponding DODAF product in the program architecture. The EA models and program architecture models are identified in the EA AV-1, Overview and Summary, product.

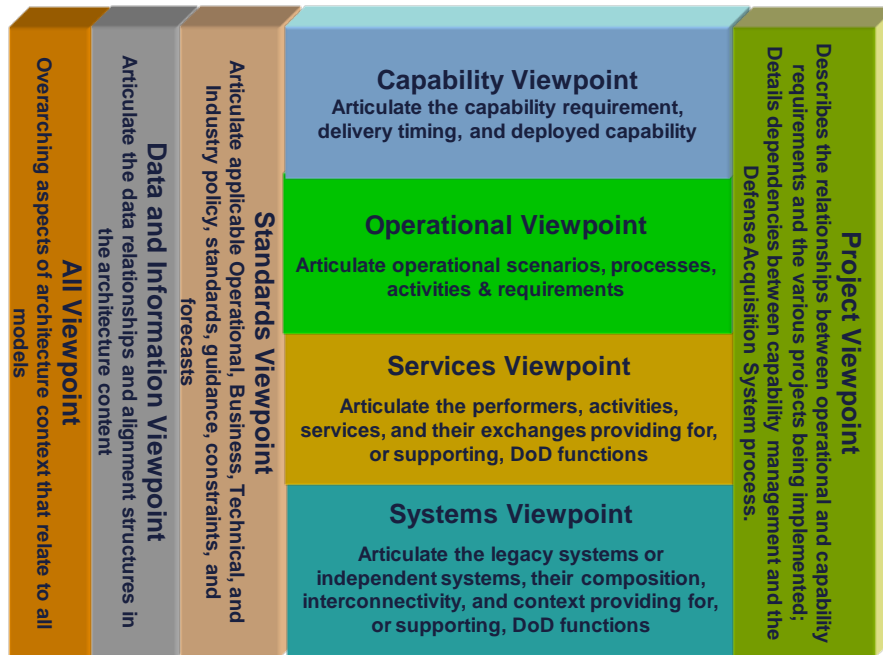


Figure 2: DODAF Viewpoints

d. The Agency’s EA is structured according to the following DODAF Architecture Viewpoints:

e. All Viewpoint (AV) products describe the overview, purpose, and terminology used throughout the enterprise architecture.

f. The business architecture layer primarily uses the Operational Viewpoint (OV) products to describe DLA mission, organization, strategies, business functions (operational activities), business processes, and the information flowing between business functions. In addition, Capability Viewpoint (CV) products describe mission areas and relate missions to organizations and business processes within the OV products.

g. The Data Viewpoint (DV) describes the entities, relationships, and attributes of the DLA data architecture that is derived from the functional business information requirements. Data flows and data services are described using selected Systems Viewpoints and Services Viewpoints (SV and SvcV) products.

h. SV and SvcV products primarily use the application architecture to describe business systems organized into portfolios, system functions, application services, and performance requirements supporting business functional requirements.

i. SV and SvcV products describe capabilities and services of the infrastructure architecture, as well as performance requirements that support the business functional and system technical requirements.

j. Standards Viewpoint (StdV), which includes IT standards and approved hardware, software, and communications technology components (IT products), conform to relevant EA standards and associated layers. Approved standards are documented in the DLA IT Solutions Document (reference (n)) and the DOD IT Standards Registry (DISR) (reference (o)).

k. The Agency's EA includes a sequencing plan, also known as a transition plan, depicting efforts from the current state ("as-is") to the future planned state ("to-be). Each layer of the EA, (business, data, application, and infrastructure) may generate projects that are included in the EA sequencing plan consistent with the current Agency strategic plans and IT investment portfolios. The sequencing plan will describe funded projects which will be described using the Project View (PV) architecture products. The sequencing plans will be consistent with the DLA inputs into the DOD Enterprise Transition Plan (ETP).

l. Programs provide solutions that are documented as program architectures. Program architectures describe detailed business requirements and material solutions to those requirements. Program architectures derive from and align to the EA. Together, the EA and supporting program architectures constitute the DLA architecture continuum.

m. All enterprise-level and program-level architecture products are captured in the Agency's EA repository maintained by J632.

n. DODAF terms "products" and "models" are used interchangeably and mean the same thing in the context of this instruction.

Additional information on DODAF 2.0 can be found at this web site:  
<http://DODcio.defense.gov/DODaf20.aspx>

## ENCLOSURE 3

### DODAF PRODUCTS REQUIRED FOR DLA PROGRAMS

1. This enclosure identifies architecture and data requirements for DLA emerging and contemporary DLA business systems and infrastructure investment activities, commonly referred to as programs, systems, or projects. The DLA program architecture requirements incorporate guidance from references (p) through (r).
2. Table 1 below lists applicable required products according to type of program, i.e., business system or infrastructure program, as the architecture products vary by type of program. Table 2 outlines when the products have to be delivered by the programs.
3. The following definitions apply to program architecture product requirements:
  - a. Emerging DLA Business System - Developmental Automated Information System (AIS) (acquisition (ACAT) and non-acquisition programs) that is a material solution being constructed to satisfy a specific requirement.
  - b. Emerging DLA Infrastructure Program - Developmental AIS (acquisition category (ACAT) and non-acquisition programs) that provides a shared system of computers, communications, data applications, security, people, training, and other support structures serving DLA/DOD local, national, and worldwide information needs.
  - c. Sustainment System (also referred to as a contemporary system) - An AIS program (business or infrastructure) with one or more product increments that have been approved for full deployment and operation and is not yet identified as a system being replaced.
  - d. System Change Request (SCR) - Approved change to a Sustainment System (a system in deployment or operational phases) that constitutes an impact on a current business process or the system technical baseline. The architectural focus is on assessing the impact of proposed changes and ensuring the architecture products are updated.
  - e. Service - DODAF defines a service as “a mechanism to enable access to a set of one or more capabilities, where the access is provided using a prescribed interface and is exercised consistent with constraints and policies as specified by the service description.” Agency and Department goals are to continue movement toward a Service-Oriented Architecture (SOA). Well-designed and implemented services provide shared building blocks that can be used when developing solutions, which reduce overall costs. reference (s) provides guidance for DOD’s Net-Centric Services Strategy.
  - f. AIS Business System or Infrastructure - The “Emerging & SCR” column refers to new investment in the form of a new program or SCR. The “sustainment” column refers to business systems and infrastructure being maintained in a steady state.
  - g. Services Viewpoint (SvcV) - Per DODAF, programs that are developing solutions using services utilize SvcV models for architectural descriptions describing services. SvcV views



include similar information collected for architectural descriptions describing systems except that SvcV separate service provider and service consumer description. In addition, SvcV descriptions should collect additional information concerning subscriptions, directory services, and distribution channels within the organization, and supporting systems/communications Web requirements. Where program solutions use a mix of application systems and services, both the SV and the SvcV models will be used. When a program uses only application systems and no services in the solution, then only the SV will be used.

Table 1: Required DODAF Products By Programs

DLA DoDAF2.0 Required Program Architecture Products		AIS Business System		Infrastructure	
		Emerging & SCR	Sustainment	Emerging & SCR	Sustainment
<b>Project Overview</b>					
AV-1	Overview and Summary Information	X	X	X	X
AV-2	Integrated Dictionary	X	X	X	X
OV-1	High-Level Operational Concept Graphic	X	X	X	
OV-4	Organizational Relationships Chart	X	X	X	X
<b>Data Specifications</b>					
DIV-1	Conceptual Data Model	X	X		
DIV-2	Logical Data Model	X	X		
DIV-3	Physical Data Model	X	X		
<b>Activities, Business Rules and Processes</b>					
OV-2	Operational Resource Flow Description	X	X	X	X
OV-3	Operational Resource Flow Matrix	X			
OV-5a	Operational Activity Decomposition Tree	X	X		
OV-6a	Operational Rules Model	X	X		
OV-6c	Operational Event-Trace Description	X	X		
SV-5a	Operational Activity to Systems Functions Traceability Matrix	X	X		
<b>Project Schedule</b>					
PV-2	Project Timeline	X		X	X
<b>Technical Standards</b>					
StdV-1	Standards Profile	X	X	X	X
StdV-2	Standards Forecast	X	X	X	X
SV-9	Systems Technology & Skills Forecast	X	X	X	X
<b>Systems/Services, Interfaces and Exchanges</b>					
SV/SvcV-1	Systems/Services Interface Description	X	X	X	X
SV/SvcV-2	Systems/Services Resource Flow Description	X	X	X	X
SV/SvcV-4	Systems/Services Functionality Description	X	X	X	X
SV/SvcV-6	Systems/Services Resource Flow Matrix	X	X		
SV/SvcV-7	Systems/Services Measures Matrix	X		X	

4. The first timeline in Table 2 below depicts the milestones at which the initial submissions of architecture products and data/metadata are required. Two perspectives are shown, the Business Capability Lifecycle (BCL) and Systems Engineering perspective.

5. Per the Reference (k), the major phases of the BCL are Business Capability Definition, Investment Management, Prototyping, Engineering Development, Limited Deployment and Full Deployment.

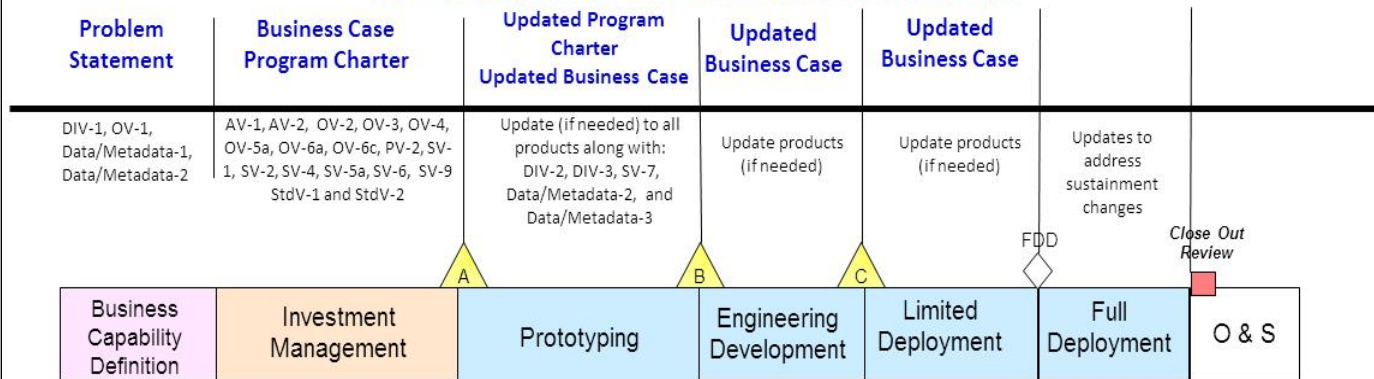
a. The BCL emphasizes early identification of need, adequate definition of “To-Be” business processes, and analyses to describe material solutions to fulfill a functional business requirement. Material solutions are described in terms of solution scope, objectives, business outcomes, outcome-based performance measures, constraints, and dependencies. Architecture products support and result from analyses that are conducted early in the life cycle. Analyses are those efforts leading up to Milestones A and B. The required architecture products must be developed and updated as necessary to reflect changes, and summarized in the BCL Problem Statement and Business Case deliverables.

b. The second timeline in Table 2 depicts Systems Engineering events that occur for each program Increment. The required architecture products must be developed, updated to reflect changes and reviewed/approved by J632 in order to successfully complete the following engineering events - System Requirements Review, Preliminary Design Review, Critical Design Review, Test Readiness Review, and Operational Readiness Review.

# DoDAF Product Required Timeline

## (with alignment to System Engineering events)

### Product Development alignment to Business Capability Lifecycle



### Product Development alignment to System Engineering Events



Data and Metadata Requirements
<b>Data/Metadata-1:</b> Utilize Enterprise Data Dictionary (EDD) to develop data elements during system development or enhancement.
<b>Data/Metadata-2:</b> Follow DLA Enterprise Data Element Naming Conventions and Standards for all data elements within the system being developed or enhanced.
<b>Data/Metadata-3:</b> Capture all DLA mandatory metadata for each data element defined within the system being developed, enhanced or sustained.

Table 2: Milestones and Engineering Events for Initial DODAF Product Submission

## ENCLOSURE 4

### RESPONSIBILITIES

The development and maintenance of the DLA Enterprise Architecture (EA) is a joint effort between the functional J codes and J6, Information Operations. Per the Clinger Cohen Act of 1996, the overall architecture responsibilities reside with the DLA Information Operations (J6) Director. Specifically:

- a. “J Code” Directors and the DLA Field Activity Commanders/Directors: As key stakeholders in the DLA business processes and systems’ capabilities, are responsible for supporting the development and validation of architecture products that define their mission and support areas.
- b. J6, Director/Chief Information Officer (CIO), is ultimately accountable for the development and maintenance of the enterprise architecture. The CIO ensures Agency-wide compliance with the policies contained in this Instruction.
- c. J62, Program Executive Officer (PEO): Ensures alignment and integration of the architecture products that describe the emerging systems as a condition of successful completion of milestones and system engineering events.
- d. J64, Executive Director, Enterprise Solutions. Ensures alignment, development and integration of the architecture products that describe systems developed and maintained by various functions in J64. Additionally, he/she ensures architectural products are updated as part of the systems change and update process.
- e. J632, Chief Architect. The Chief Architect, on behalf of the CIO and Chief Technical Officer, coordinates and facilitates development and maintenance of the DLA enterprise architecture; maintains the architecture repository; develops architecture policy and guidance; develops and delivers architecture training necessary for developing, maintaining, and using architecture information. The Chief Architect ensures that program architectural information is developed and recorded in a manner consistent with the evolving DLA enterprise architecture and other governance authorities.
- f. J6 Program Managers PMs: are responsible for developing program-level architecture models that describe solutions to meet DLA functional requirements. The PMs will ensure resources are in place to develop and maintain required DODAF architectural model. Program Managers and Sustainment System Managers will follow the Development Program Architecture Procedures described in Enclosure 5.

## ENCLOSURE 5

### PROCEDURES

1. This enclosure describes nominal architecture related procedures and serves as a guide. Enterprise architecture is an iterative process; thus, as new procedures are defined or updated they will be incorporated into this Enclosure and referenced accordingly. Also, these are not intended after-the-fact documentation but need to be developed and updated as the program progresses.

2. Development Program Architecture Products (procedure for).

a. Architecture product development is shown in Figure 3. It begins with identifying the schedule for developing the architecture products for each life cycle phase. Each life cycle phase will generally have a corresponding architecture development cycle where products are constructed, validated, approved, and published for use; and maintained as configuration controlled items and updated based on changes. The products are developed and maintained using the ARIS enterprise architecture repository.

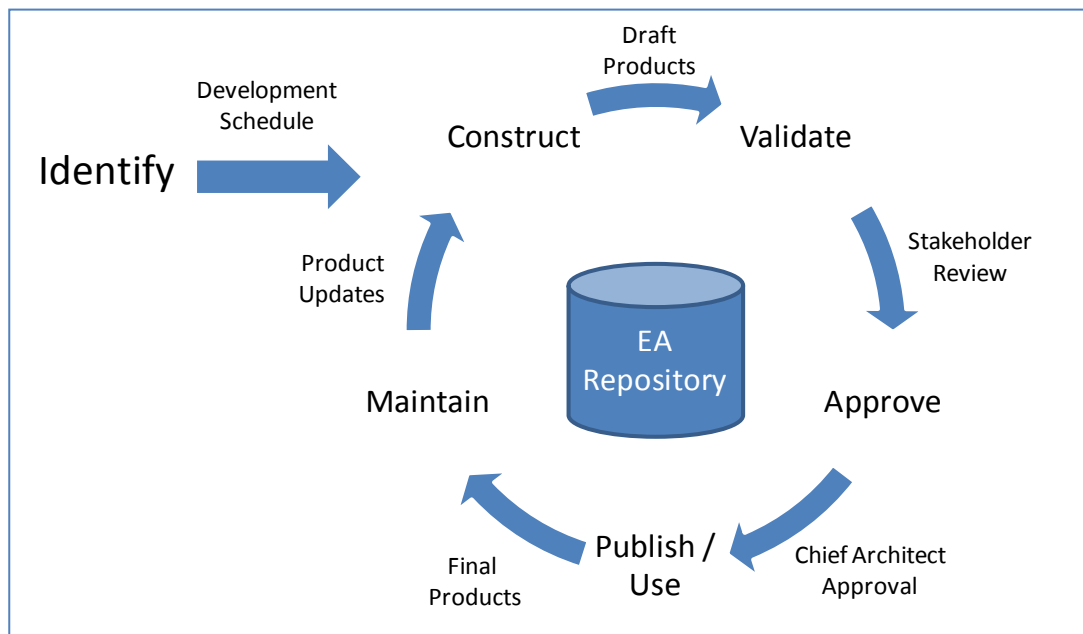


Figure 3: Architecture Product Development Cycle

b. Per the Business Capability Life cycle, in the early life cycle phases the problem statement is scoped, “To-Be” business processes are being defined, material solutions are being explored, and potential program risks are identified. It is the responsibility of the Functional Proponent of the resulting IT investment to engage J632 to scope the development of architecture products, specifically those that represent business process and information requirements. Early engagement with J632 staff will increase the value of architecture in support of problem analysis, to-be process definition, and investment analysis. When a PM is selected/appointed, the PM is subsequently responsible for leading the development of architecture products, and will initiate

further engagement with J632. Early involvement of these key stakeholders will increase the value of architecture to support prototype/program definition of the preferred material solution.

c. The PM shall incorporate the architecture development as part of the program Work Breakdown Structure (WBS) and integrated master schedule (IMS), and shall collaborate with the Functional Proponent. The architecture development schedule will include cycles for reviews, identify stakeholders and subject matter expert (SME) support, and identify any specialized support required from J632. J632 shall review the proposed WBS and schedule for the program, providing feedback directly to the PM. Upon concurrence, the WBS and IMS will be the basis for tracking accomplishment regarding product development, and shall be incorporated into the DLA Component submission to the DOD Enterprise Transition Plan.

d. The PM is responsible for ensuring there are sufficient and qualified resources to complete the product development on time. The PM will ensure that the program architecture products are developed using the templates provided in the ARIS User Guide. The PM shall report development effort status to J632 staff through normal reporting processes, e.g., during monthly Emerging Program Reviews. The PM will elevate issues to J632 regarding the development of architectural products. J632 shall work with the PM to resolve the issues. Unresolved issues will be elevated to the PEO or Milestone Decision Authority (MDA) for resolution.

e. The Program Architect will initiate an informal review with J632 once products are of sufficient quality, such as incorporating SME input and achieving quality standards per check lists. J632 will review and provide comments to the Program Architect from a consistency perspective as well as compared to other program architectures and the evolving Agency EA. At this time, the PM shall identify key stakeholders that will be participating in the formal review.

f. Program milestones and system engineering events will determine the schedule for reviews. The PM shall schedule sufficient time for key stakeholders other than J632 to review in a timely manner. The PM shall submit architecture products for a final review by J632 not later than 10 business days prior to a formal Acquisition milestone or Systems Engineering event. The 10-day review assumes that J632 has conducted its informal review in advance. J632 will provide a formal review and comment to all key stakeholders, including the DLA Chief Architect, PM, as well as the PEO and MDA. Critical comments shall be addressed and resolved as a condition of successfully completing the Milestone/System Engineering event.

g. The key to a successful review is to ensure that architecture products are vetted through program governance authorities, key stakeholders (including the Functional Proponent), and the DLA Chief Architect. The PM shall coordinate the proposed staffing process for vetting architecture products with J632 staff (see paragraph c. above). The PM shall ensure that the architecture is vetted through key stakeholders. The DLA Chief Architect shall review and approve the currency, completeness, and consistency of architecture products. The Functional Proponent shall review approve architecture products as representative of the business functional requirements.

h. Upon approval of the architecture products, the J632 architecture repository manager shall promote the products to “production” status. Production status is defined as readable by any user with public access to the Enterprise Architecture repository.

## ENCLOSURE 6

### ADDITIONAL INFORMATION

1. Rationale for Program Architecture and Data Requirements. Table 3 provides more information on the DODAF products currently required by the DLA CIO.

a. A typical DLA program delivers various technical and life cycle documentation supporting its requirements as required by policies and regulations.

(1) Policy Memorandum, Under Secretary of Defense (Acquisition, Technology and Logistics) “Interim Acquisition Guidance for Defense Business Systems (DBS)”, November 2010.

(2) DOD Directive 4630.05, “Interoperability and Supportability of Information Technology (IT) and National Security Systems (NSS),” May 5, 2004.

(3) CJCSI 6212.01E, “Interoperability and Supportability of Information Technology (IT) and National Security Systems (NSS),” May 5, 2004.

b. DOD Architecture Framework (DODAF) provides a structured format for documenting the business processes, systems/business functions, and technologies required for the development of their required documents. Policy Memorandum, DOD Chief Information Officer, “Department of Defense Architecture Framework (DODAF) Version 2.0”, May 28, 2009.

c. The DLA Chief Architect selected a set of 22 DODAF products as having value to agency IT investments. This list was keyed to the type of IT investment, Business System or Infrastructure. Per DOD regulation 16 of these products were already under development. Three of the additional products are conceptual, logical, and physical data models (DIV-1, DIV-2, and DIV-3) that provide the Agency with insight into the data produced by its IT investments. The SV/SvcV-9, Systems Technology and Skill Forecast provide useful information on the planned technologies for IT investments. The SV/SvcV-7, Systems Measures Matrix provides the performance parameters of the IT investment. Additionally, each IT investment has a Project Timeline, (PV-2).

2. The Agency’s enterprise metadata is comprised of four categories - business, technical and operational, process, and stewardship. Metadata shall be captured from the source, which includes databases, data interfaces, and reports, for each of these applicable categories. Enterprise-level metadata includes metadata from the program-level that is considered core to the agency’s business, focusing on what is used in system-to-system exchanges. Program-level metadata will include all metadata used by the systems at that location.

a. Emerging programs, projects, and sustainment activities will use the DLA Enterprise Data Dictionary as the repository for management and access of enterprise-level metadata. The standards and procedures for metadata capture and management provide context for data elements used throughout the Agency.



b. The Agency's Enterprise Data Element naming conventions provide consistency to the data element names to ensure content and context are readily understood.

3. When executed correctly as part of a requirements engineering and solution analysis, development of an enterprise architecture is considered a best practice providing the following benefits:

a. Promotes sound systems engineering resulting in reduced overall program risk

b. Provides the architect and decision makers the visibility into program dependencies and redundancies

c. Provides sustainment with the basis for change management

d. Saves time and cost in trouble-shooting

e. Acts as source documentation for modernization for site Directors and PMs

f. Allows analysis for savings and opportunities for improvement, facilitates planning and identification of duplication, etc.; and

g. Will endure long after individuals have transitioned onward to other duties

4. Table 3 below illustrates specific benefits for currently required Agency architecture products.

**Table 3: DODAF Product Use, Rationale and specific Guidance**

<b>Model</b>	<b>Model Description</b>	<b>User</b>	<b>Usage</b>	<b>Rationale</b>
AV-1: Overview and Summary Information	Describes a Project's Visions, Goals, Objectives, Plans, Activities, Events, Conditions, Measures, Effects (Outcomes),and Produced Objects.	DOD (DARS); Program Managers; Decision Makers	Context / Compliance	Key to understanding the architecture effort
AV-2: Integrated Dictionary	An architectural data repository with definitions of all terms used throughout the architectural data and presentations.	Architects; Program Managers	Context	Key to ensuring consistency and understanding for architecture objects
DIV-1:Conceptual Data Model	The required high-level data concepts and their relationships.	DOD (BEA); Architects; Program Managers; Financial audits	Process Improvement / Gap Analysis	Identifies scope of data for a set of processes or stored/processed by a system. Needed to map data entities to business process activities and system functions.
DIV-2: Logical Data Model	The documentation of the data requirements and structural business process (activity) rules. In DODAF V1.5, this was the OV-7.	Architects; Program Managers; Financial audits	Systems Engineering / Interoperability	Needed to define the business data requirements, logical relationships among data, and meaning of data (vocabulary) and bridge to implementations. *Scope should be appropriate to the engineering objectives: database design, query/reports definition, interface/services data standardization, etc.

<b>Model</b>	<b>Model Description</b>	<b>User</b>	<b>Usage</b>	<b>Rationale</b>
DIV-3: Physical Data Model	The physical implementation format of the Logical Data Model entities, e.g., message formats, file structures, physical schema. In DODAF V1.5, this was the SV-11.	System Integrators; Architects	Systems Engineering / Interoperability	Needed to define the physical structure of databases and schema and identify authoritative sources, mapped back to the logical data elements. *Scope should be appropriate to the engineering objectives: database design, query/reports definition, systems interface/services data structures and standardization, etc. (Formerly, this was the SV-11)
OV-1: High-Level Operational Concept Graphic	The high-level graphical/textual description of the operational concept.	Program Managers; Decisionmakers	Context	Best used to depict to-be operational concepts and interesting or unique aspects of operations to provide context for a mission or scenario, suitable for executive audience
OV-2: Operational Resource Flow Description	A description of the Resource Flows exchanged between operational activities.	Architects; Program Managers; Functional SMEs	Process Improvement / Concept Development	Used to bound problem space (define who and what) by identifying collaboration required among organizations and dependent resources including funding, information, material, personnel, etc.

<b>Model</b>	<b>Model Description</b>	<b>User</b>	<b>Usage</b>	<b>Rationale</b>
OV-3: Operational Resource Flow Matrix	A description of the resources exchanged and the relevant attributes of the exchanges.	Architects; Program Managers; Functional SMEs; Financial audits	Process Improvement / Interoperability	The OV-3 enumerates the requirements for the exchange of resources among organizations and processes and is best used in combination with the OV-5b or OV-6c for process improvement and to bridge to DIV-2. The SV-6 alone can usually satisfy the interoperability requirement.
OV-4: Organizational Relationships Chart	The organizational context, role or other relationships among organizations.	Architects; Program Managers; Functional SMEs	Process Improvement / Organizational Analysis	Used to depict current and future organizational structure (roles, responsibilities, lines of authority).
OV-5a: Operational Activity Decomposition Tree	The capabilities and activities (operational activities) organized in a hierarchal structure.	Architects; Program Managers; Functional SMEs; Financial audits	Process Improvement / Gap Analysis	Identifies current and future business process and operational activities for the organization. Can be used to identify redundancies and identify those activities that are part of a process improvement effort.
OV-6a: Operational Rules Model	One of three models used to describe activity (operational activity). It identifies business rules that constrain operations.	Architects; Program Managers; Functional SMEs	Process Analysis / Business Rules Definition / Requirements Capture	Link rules (requirements) to constrain business process activities.

Model	Model Description	User	Usage	Rationale
OV-6c: Event-Trace Description	One of three models used to describe activity (operational activity). It traces actions in a scenario or sequence of events.	Architects; Program Managers; Functional SMEs; Financial audits	Process Improvement / Requirements Capture	Provides detail for a set of business processes or operational activities by providing triggers, sequencing, branching, swim lanes (resources) and flow of messages (methodology dependent). <b>For DLA, these models will also include Inputs and Outputs that typically included in an OB-5b.</b>
PV-2: Project Timelines	A timeline perspective on programs or projects, with the key milestones and interdependencies.	Architects; Program Managers; Decision Makers	Portfolio Management / Acquisition Management	Depicts project milestones for programs and portfolios, which is needed to tie architecture products to a specific delivery. Project equates to a named increment or release that provides one or more capabilities.
StdV-1 Standards Profile	The listing of standards that apply to solution elements.	DOD (DISR); Program Managers; System Integrators; Architects	Interoperability / Technology Management / Compliance	Generally focused on application of DOD technical standards (DISR designated as "Mandatory") allocated to solution elements, e.g., system functions, data exchanges, etc. The use of the StdV-1 should extend to constraining the selection of COTS solution components.

<b>Model</b>	<b>Model Description</b>	<b>User</b>	<b>Usage</b>	<b>Rationale</b>
StdV-2 Standards Forecast	The description of emerging standards and potential impact on current solution elements, within a set of time frames.	DOD (DISR); Program Managers; System Integrators; Architects	Interoperability / Technology Management / Compliance	Generally focused on application of DOD technical standards (DISR designated as "Emerging") allocated to solution elements, e.g., system functions, data exchanges, etc. The use of the StdV-1 should extend to constraining the selection of COTS solution components.
SV-1 Systems Interface Description	The identification of systems, system items, and their interconnections.	Architects; Program Managers; Technical SMEs; Decision Makers; Financial audits	Systems Engineering / Interoperability	The System Viewpoint products support development of systems-based solutions versus the Services Viewpoint that supports a services-based solution. *When documenting COTS integration solutions (vice new development) the systems-based modeling set is preferred. The SV-1 supports development of System Concepts and provides basic information to manage Systems Integration, e.g., system/subsystems, locations, owning organization, and high level identification of resources exchanges (usually data/information).

<b>Model</b>	<b>Model Description</b>	<b>User</b>	<b>Usage</b>	<b>Rationale</b>
SV-2 Systems Resource Flow Description	A description of Resource Flows exchanged between systems.	Architects; Program Managers; Technical SMEs; Decision-makers	Systems Engineering / Interoperability	Used to give a precise specification of a connection between Systems (where Systems include networks as systems) to optionally include communication protocols. * A high level SV-2 depicting networks used to connect application systems and users is required. More detailed SV-2 diagrams may be appropriate for capturing detailed communications among COTS applications and network devices.
SV-4 Systems Functionality Description	The functions (activities) performed by systems and the system data flows among system functions (activities).	Architects; Program Managers; Technical SMEs; Decision Makers; Financial audits	Systems Engineering / Gap Analysis	Depicts the functions provided by the system. Minimally, these are a logical decomposition of system functions to support requirements allocation and gap analysis. A separate SV-4 can describe the COTS Software Architecture as a Data Flow Diagram showing component integration points.
SV-5a Operational Activity to Systems Function Traceability Matrix	A mapping of system functions (activities) back to operational activities.	Architects; Program Managers; Functional/Technical SMEs; Decision-makers; Financial	Systems Engineering / Gap Analysis	Maps business process activities to system functions that support them. Supports requirements allocation and gap analysis.

<b>Model</b>	<b>Model Description</b>	<b>User</b>	<b>Usage</b>	<b>Rationale</b>
		audits		
SV-6 Systems Resource Flow Matrix	Provides details of system resource flow elements being exchanged between systems and the attributes of that exchange.	Architects; System Integrators; Program Managers; Technical SMEs; Financial audits	Systems Engineering / Interoperability/ Interface Management	Provides details of resources (data) exchanged between systems including periodicity, timeliness, throughput, size, information assurance, and security characteristics.
SV-7 Systems Measures Matrix	The measures (metrics) of Systems Model elements for the appropriate timeframe(s).	Architects; System Integrators; Program Managers; Technical SMEs; Decision-makers	Acquisition Management / Systems Engineering	The SV-7 is used to capture system performance, i.e., KPP, KPI, MOP, MOEs. It can be used to allocate performance characteristics and measures (metrics) to specific system components to include identification of non-functional requirements, e.g., reliability for a systems hardware component. The SV-7 can assist with decomposing high level requirements to identify performance characteristics at lower levels of the system, leveraging the SV-4, SV-2, and SV-6 products.
SV-9 Systems Technology & Skills Forecast	The emerging technologies, software/hardware	Architects; System Integrators; Program Managers; Technical	Acquisition Management / Systems	Describes future projections of technology, solutions (tools), and skills typically made in



Model	Model Description	User	Usage	Rationale
	products, and skills that are expected to be available in a given set of timeframes and that will affect future system development.	SMEs; Decision-makers	Engineering / Technology Insertion	short, mid and long-term timeframes, such as 12, 18, and 24-month intervals (composite is enterprise SV-9). <b><u>For DLA this model will also include all CURRENT technology, solutions tools and skills.</u></b>