



DEFENSE HEALTH AGENCY
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FALLS CHURCH, VIRGINIA 22042-5101

DHA-IPM 18-009
September 19, 2018

MEMORANDUM FOR ASSISTANT SECRETARY OF THE ARMY (MANPOWER AND RESERVE AFFAIRS)
ASSISTANT SECRETARY OF THE NAVY (MANPOWER AND RESERVE AFFAIRS)
ASSISTANT SECRETARY OF THE AIR FORCE (MANPOWER AND RESERVE AFFAIRS)
DIRECTOR OF THE JOINT STAFF
DEPUTY ASSISTANT SECRETARY OF DEFENSE (HEALTH READINESS POLICY AND OVERSIGHT)
DEPUTY ASSISTANT SECRETARY OF DEFENSE (HEALTH SERVICES POLICY AND OVERSIGHT)
DEPUTY ASSISTANT SECRETARY OF DEFENSE (HEALTH RESOURCES MANAGEMENT AND POLICY)

SUBJECT: Interim Procedures Memorandum 18-009, Military Health System (MHS) Enterprise Architecture (EA)

References: See Attachment 1.

Purpose. This Defense Health Agency-Interim Procedures Memorandum (DHA-IPM), based on the authority of References (a) and (b), and in accordance with the guidance of References (c) through (y):

- Establishes the Defense Health Agency's (DHA) procedures to identify the requirements for the execution of an EA, which demonstrates compliance with the DoD EA guidance.
- Implements policy, issues guidance, assigns responsibilities, and assures compliance of EA within the MHS.
- Provides objectives, scope, and structure of the MHS EA.
- Specifies architecture requirements for information technology (IT) investments and programs.
- This DHA-IPM is effective immediately; it will be converted into a DHA-Procedural Instruction. This DHA-IPM will expire effective 12 months from the date of issue.

Applicability. This DHA-IPM applies to the DHA Joint Staff, Special Staff, Office of General Counsel, Defense Healthcare Management Systems (DHMS) Program Executive Office (PEO), all Medical Treatment Facilities (MTFs) within the MHS whether under Service command or DHA administration and management, and all other organizational entities within the MHS/DHA (hereafter referred to as MHS/DHA Organizations); OSD (Health Affairs); and MHS users belonging to the Military Departments, other DoD Components, or MHS/DHA strategic partners.

Policy Implementation. It is DHA's instruction, pursuant to References (a) through (w), to:

- Develop, implement, and maintain the EA that incorporates and integrates descriptions of DHA strategy, missions, operations, organizations, business processes, data, applications, and infrastructure to meet and align with Joint Staff and DoD business requirements.
- Ensure only architecturally conformant IT programs/systems including innovative and/or research projects will be approved for investment. A system or program is considered conformant only if it has developed the required architecture products, received approval from appropriate DHA authority, and complies with laws and established DoD/DHA regulations and policies. IT programs/systems will follow the process established for Portfolio Investment Certification as outlined within DoD Instructions 5000.02 and 5000.75 (References (n) and (o)).
- Develop, implement, and maintain program architectures for DHA IT programs during each phase of the systems lifecycle, including System Change Requests during the operational phase. DHA program architecture product requirements are described in Attachment 3 and are addressed in supporting EA Guidance such as the EA Modeling Guidebook.
- Have a structured approach ensuring that enterprise and program architecture products are developed in conformance with the DoD Architecture Framework (DoDAF) and maintained in the MHS's EA repository, the authoritative source of DHA's architecture information.
- Identify and maintain DHA's mandatory metadata for DHA emerging and contemporary business systems and infrastructure programs for each phase of the systems lifecycle, including System Change Requests during the operational phase. The metadata to be used in the DHA enterprise data dictionary must comply with DHA enterprise naming conventions.
- Enforce architecture conformance throughout the DHA's Component Acquisition Executive, Capital Planning and Investment Control, and Lifecycle Management processes for all system, including technical and periodic EA conformance reviews and major milestones.

Responsibilities. See Attachment 2.

Procedures. See Attachment 3.

Structure and Management of the Enterprise Architecture. See Attachment 4.

Releasability. **Cleared for public release.** This DHA-IPM is available on the Internet from the Health.mil site at: www.health.mil/DHAPublications.



R. C. BONO
VADM, MC, USN
Director

Attachments:

As stated

cc:

Acting Assistant Secretary of Defense for Health Affairs

Surgeon General of the Army

Surgeon General of the Navy

Surgeon General of the Air Force

Medical Officer of the Marine Corps

Joint Staff Surgeon

Director of Health, Safety, and Work-Life, U.S. Coast Guard

Surgeon General of the National Guard Bureau

Director, National Capital Region Medical Directorate

ATTACHMENT 1

REFERENCES

- (a) DoD Directive 5136.01, “Assistant Secretary of Defense for Health Affairs (ASD(HA)),” September 30, 2013, as amended
- (b) DoD Directive 5136.13, “Defense Health Agency (DHA),” September 30, 2013
- (c) DHA-Procedural Instruction 5025.01, “Publication System,” August 21, 2015, as amended
- (d) Office of Management and Budget (OMB) Circular A-130, “Managing Information as a Strategic Resource,” as amended
- (e) DoD Information Enterprise Architecture, Version 2.0
- (f) DoD Architecture Framework (DoDAF), current version
- (g) Chairman of the Joint Chiefs of Staff Instruction 3170.01I, “Joint Capabilities Integration and Development System (JCIDS),” January 23, 2015
- (h) Chairman of the Joint Chiefs of Staff Instruction 5123.01G, “Charter of the Joint Requirements Oversight Council (JROC),” February 12, 2015
- (i) DoD Directive 3000.06, “Combat Support Agencies (CSAs),” July, 8, 2016, as amended
- (j) DoD Directive 5000.01, “The Defense Acquisition System,” May 12, 2003, as amended
- (k) DoD Directive 5105.82, “Deputy Chief Management Officer (DCMO) of the Department of Defense,” October 17, 2008
- (l) DoD Directive 8000.01, “Management of the Department of Defense Information Enterprise (DoD IE),” March 17, 2016, as amended
- (m) DoD Directive 8115.01, “Information Technology Portfolio Management,” October 10, 2005
- (n) DoD Instruction 5000.02, “Operation of the Defense Acquisition System,” January 7, 2015, as amended
- (o) DoD Instruction 5000.75, “Business Systems Requirements and Acquisition,” February 2, 2017
- (p) DoD Instruction 8115.02, “Information Technology Portfolio Management Implementation,” October 30, 2006
- (q) DoD Instruction 8310.01, “Information Technology Standards in the DoD,” February 2, 2015, as amended
- (r) DoD Instruction 8320.02, “Sharing Data, Information, and Information Technology (IT) Services in the Department of Defense,” August 5, 2013
- (s) DoD Instruction 8320.07, “Implementing the Sharing of Data, Information, and Information Technology (IT) Services in the Department of Defense,” August 3, 2015, as amended
- (t) DoD Instruction 8330.01, “Interoperability of Information Technology (IT), Including National Security Systems (NSS),” May 21, 2014, as amended
- (u) DoD Instruction 8440.01, “DoD Information Technology (IT) Service Management (ITSM),” December 24, 2015
- (v) DoD Instruction 8500.01, “Cybersecurity,” March 14, 2014
- (w) Joint Publication 4-02, “Joint Health Services,” December 11, 2017
- (x) Public Law 104-106, Division E, “Clinger Cohen Act of 1996,” February 10, 1996
- (y) Public Law 114-328, National Defense Authorization Act for Fiscal Year 2017

ATTACHMENT 2

RESPONSIBILITIES

The development and maintenance of the MHS EA is a joint effort between the Joint-Directorates and Deputy Assistant Director (DAD) Information Operations (IO)/J-6. Per Reference (x), the overall architecture responsibilities reside with the Director, DHA.

1. DIRECTOR, DHA. Under the authority, direction, and control of the Assistant Secretary of Defense for Health Affairs, the Director, DHA, will:

a. Exercise management responsibility for EA activities in the MHS, including DADIO/J-6, and develop appropriate management models for particular functions and processes.

b. Support the development and validation of architecture products that define their mission and support areas.

2. CHIEF INFORMATION OFFICER (CIO), DEPUTY ASSISTANT DIRECTOR INFORMATION OPERATIONS (DADIO)/J-6. The CIO, DADIO/J-6, will:

a. Be responsible for the development and maintenance of an integrated, aligned and comprehensive EA.

b. Be the approval authority for enterprise and program architectures within the MHS/DHA.

3. CHIEF TECHNOLOGY OFFICER (CTO). The CTO will:

a. Issue procedures, guidance and technical standards associated with EA with a specific focus on the technical architecture

b. Promote alignment and integration of the technical architecture products that are used to describe systems as a condition of successful completion of milestones and system engineering events.

4. CHIEF, ENTERPRISE ARCHITECTURE BRANCH (EAB). On behalf of the CIO and CTO, the Chief, EAB, will:

a. Enable MHS/DHA-wide compliance with the policies referenced in this DHA-IPM.

- b. Develop architecture policy guidance; coordinate and facilitate development and maintenance of the MHS EA.
- c. Oversee that the program architectural information is developed and recorded in a manner consistent with the evolving MHS EA and other governance authorities.
- d. Develop and deliver training necessary for developing, maintaining, and using architecture information.
- e. Maintain the architecture repository.
- f. Review and approve the relevancy, completeness, and consistency of architecture products. The Functional Proponent will review and approve architecture products as representative of the business functional requirements.

5. CHIEF, SOLUTIONS DELIVERY DIVISION (SDD). The Chief, SDD, will:

- a. Develop and support program architectures that derive from the MHS EA.
- b. Attest that all SDD architectures and requirements are traceable to the MHS EA.

6. CHIEF, INFRASTRUCTURE AND OPERATIONS (I&O) DIVISION. The Chief, I&O Division, will:

- a. Develop and support program architectures that derive from the MHS EA.
- b. Attest that all I&O architectures and requirements are traceable to the MHS EA.

7. CHIEF, CYBERSECURITY DIVISION (CSD). The Chief, CSD, will:

- a. Develop and support DHA security architectures that derive from the MHS EA and support program architectures.
- b. Attest that CSD requirements align with and are traceable to the MHS EA.

8. PEO, DHMS. The PEO, DHMS, will:

- a. Ensure that subordinate program architectures derive from the MHS EA.
- b. Attest that all PEO architectures and requirements are traceable to the MHS EA.

9. PROGRAM MANAGERS (PMs)/SUSTAINMENT SYSTEM MANAGERS. PMs and Sustainment System Managers will:

- a. Develop program-level architecture products that describe solutions to meet DHA functional requirements.
- b. Ensure every requirement has traceability to the authoritative EA.
- c. Follow the Development Program Architecture Procedures described in Attachment 3.

10. INTERMEDIATE MANAGEMENT ORGANIZATION (IMO). The IMO will:

- a. Function as the Single Point-of-Accountability for MTF/site architectures within the region.
- b. Ensure that MTF/site architectures derive from the MHS EA and support program architectures.
- c. Attest that MTF/site requirements align with and are traceable to the MHS EA.

ATTACHMENT 3

PROCEDURES

Reference (x) requires agency CIOs to oversee the development and maintenance of integrated agency-wide information architectures; OMB Circular A-130 (Reference (d)), interprets “information architecture” to mean the agency EA. A goal of Reference (e), is to “Provide a traceable line-of-sight from strategic guidance to solution architectures.” The MHS EA requirements incorporate guidance from References (p) through (r).

A comprehensive MHS EA requires complete and accurately developed MHS program-level architecture information. This information will be developed, documented, and updated as a program progresses, not after-the-fact.

The Chief, EAB, determines DoDAF products valuable to DHA IT investments. To promote completeness and accuracy across the MHS program-level architectures, the current authoritative guidance to assist in architecture development includes:

- This MHS EA DHA-IPM
- MHS Architecture Methodology
- MHS EA Modeling Guidebook
- MHS EA Configuration Management Plan
- Organizational Execution Plan Submission Guidance

EA development and maintenance rules and processes are iterative. As procedural and authoritative guidance documents are developed or updated, they will be incorporated into this Attachment, referenced accordingly, and posted on the J-6 EAB SharePoint website (<https://info.health.mil/hit/portfolio/entarch/SitePages/Home.aspx>).

1. DEVELOPMENT OF ARCHITECTURE PRODUCTS

a. The PMs will ensure all architecture development will follow the Architecture Product Development Cycle shown in Figure 1. This cycle begins with identifying the schedule for developing the architecture products for each lifecycle phase. Each lifecycle phase will generally have a corresponding architecture development cycle where products are constructed, validated, approved, published for use, and maintained as configuration controlled items and updated based on changes. The products are developed and maintained using the EA repository.

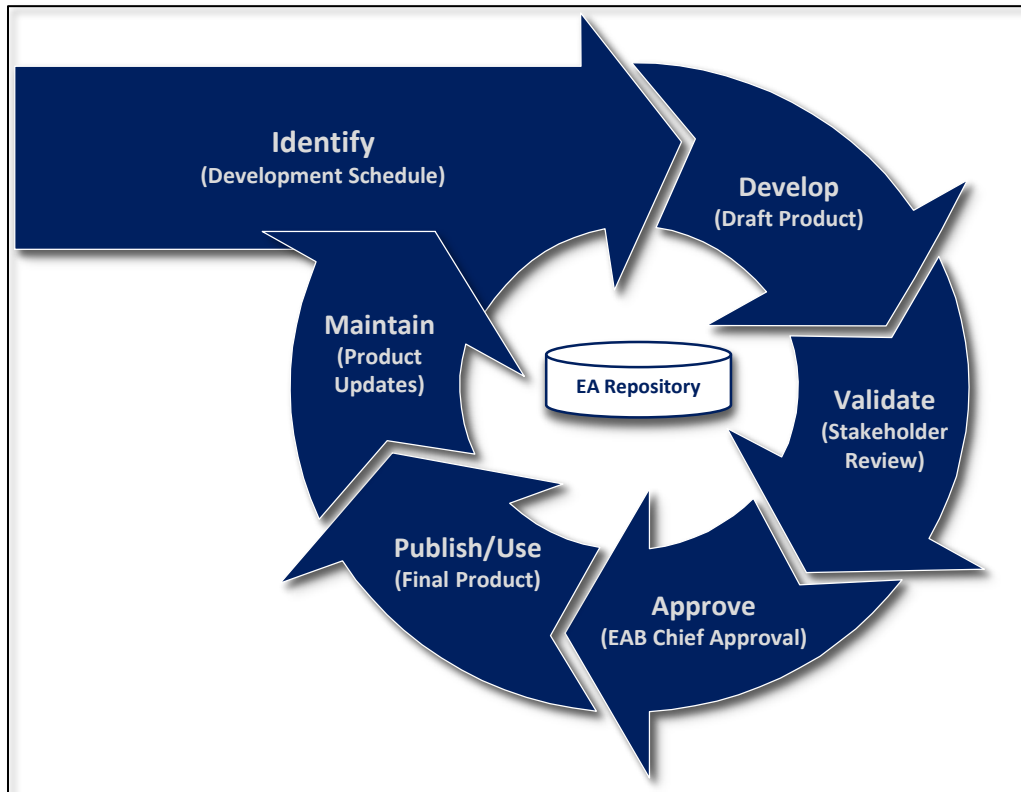


Figure 1: Architecture Product Development Cycle

b. Figure 2 depicts, the DoDAF Products Required During Business Capability Acquisition Cycle (BCAC) Phases, all architecture products required by each BCAC phase and its corresponding authority to proceed (ATP) milestone. In the early lifecycle phase, the problem statement is scoped, “As-Is” and “To-Be” business processes are defined, material solutions are explored, and potential program risks are identified. It is the responsibility of the Functional Proponent for the resulting IT investment to engage EAB to scope the development of architecture products, specifically those that represent business process and information requirements. Early engagement with EAB staff will increase the value of architecture in support of problem analysis, “As-Is” and “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 EAB. Early

involvement of these key stakeholders will increase the benefit of architecture to support prototype/program definition of the preferred material solution.

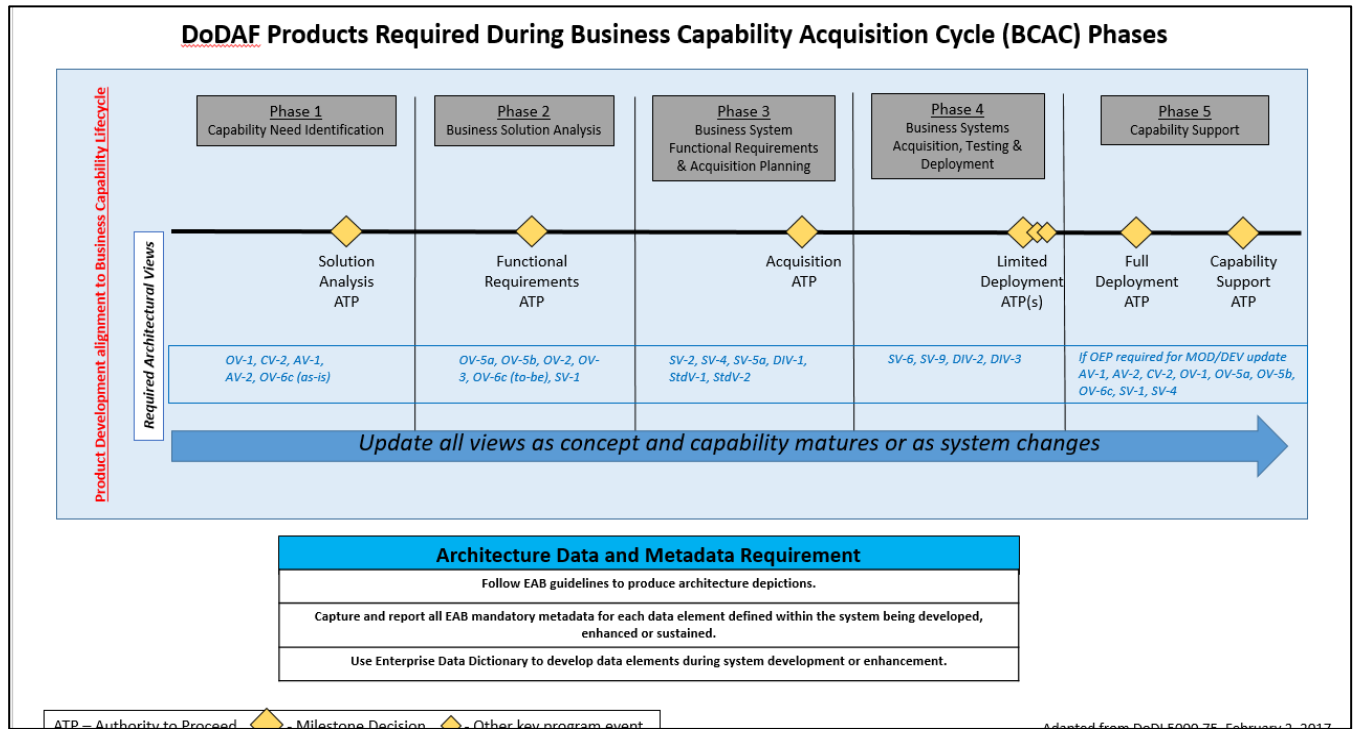


Figure 2: DoDAF Products Required During Business Capability Acquisition Cycle (BCAC) Phases

2. PM. The PM will:

- a. Ensure that the program architecture products are developed using the templates provided in the EA Modeling Guidebook.
- b. Report development effort status to EAB staff through normal reporting processes (e.g., during Monthly Program Reviews).
- c. Elevate issues to EAB regarding the development of architectural products.
- d. Work with the EAB to resolve the issues. Unresolved issues will be elevated to the PEO for resolution.
- e. Incorporate the architecture development as part of the program Work Breakdown Structure (WBS) and integrated master schedule, and collaborate with the Functional Proponent. The architecture development schedule will include cycles for reviews, identification of stakeholders and subject matter expert support, and identify any specialized support required from EAB.

f. Review the proposed WBS and schedule for the program, providing feedback directly to the PM. Upon concurrence, the WBS and integrated master schedule will be the basis for tracking accomplishment regarding product development, and will be incorporated into the DHA Component submission to the DoD enterprise transition plan.

g. Schedule sufficient time for key stakeholders other than EAB to review in a timely manner. Architecture products for a final review by EAB will be submitted no later than 10 business days prior to a formal Acquisition milestone or Systems Engineering event. The 10-day review assumes that EAB has conducted its informal review in advance. EAB will provide a formal review and comment to the EAB Chief, PM and all key stakeholders. Critical comments will be addressed and resolved as a condition of successfully completing the Milestone/System Engineering event.

h. Ensure that architecture products are vetted through program governance authorities, key stakeholders (including the Functional Proponent), and the Chief, EAB.

i. Coordinate the proposed staffing process for vetting architecture products with EAB staff (see paragraph c. above).

j. Upon approval of the architecture products, the MHS EA Architecture Repository Manager will place the products under Configuration Management, and promote the products to “production” status. Production status is defined as readable by any user with public access to the EA repository.

3. PROGRAM ARCHITECT. The Program Architect will initiate an informal review with EAB once architecture products are developed, incorporate subject matter expert input and achieve quality standards per EAB checklists. EAB will review and provide comments to the Program Architect from a consistency perspective, as well as compared to other program architectures and the evolving MHS EA. At this time, the PM will identify key stakeholders to participate in the formal review.

ATTACHMENT 4

STRUCTURE AND MANAGEMENT OF THE ENTERPRISE ARCHITECTURE

EA describes an enterprise's current and target state architecture. It interprets an organization's business strategy, defining the business and IT architectures to support that strategy. EA increases transparency and understanding on how work is undertaken within an enterprise and provides unification of procedures and processes.

The MHS EA is a strategic information asset that will be integrated into key DHA processes to support decision-making across all DHA missions, functions, programs, and capability portfolios. The scope of the MHS's EA includes all DHA missions, business processes, administrative functions, data, systems, and technical infrastructure, as well as external interfaces with DHA customers, suppliers, and DoD partners.

Program architectures derive from and align to the MHS EA. Programs provide solutions that are documented as program architectures. Program architectures represent the detailed business requirements and its associated material solutions. Together, the EA and supporting program architectures constitute the MHS architecture continuum.

1. STRUCTURE OF THE MHS EA

Figure 3 represents the DHA Strategy Map. The MHS's EA is comprised of enterprise-level business, data, application, and infrastructure architectures which provide the means and ways for the DHA to reach its strategic ends. Each architecture is described by a set of DoDAF viewpoints and products, which are specified in the EA All Viewpoint (AV-1), Overview and Summary product. Program architectures derive from and align to the EA. The enterprise level architectures provide architectural direction and facilitate the integration and synchronization of program architectures.

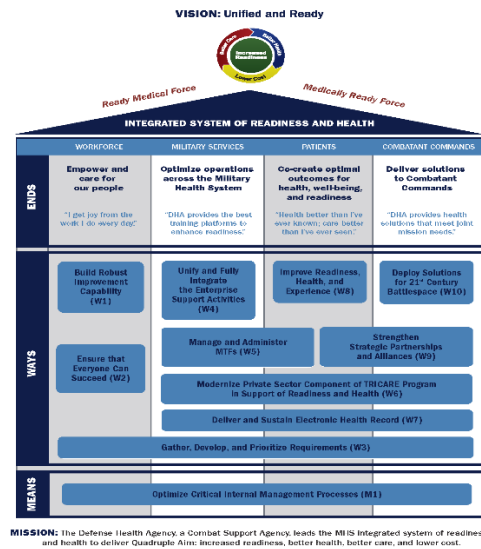


Figure 3: Defense Health Agency Strategy Map

As shown in Figure 4, the DoDAF Viewpoints, each respective layer is described using architecture products. These include documents, products, 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.

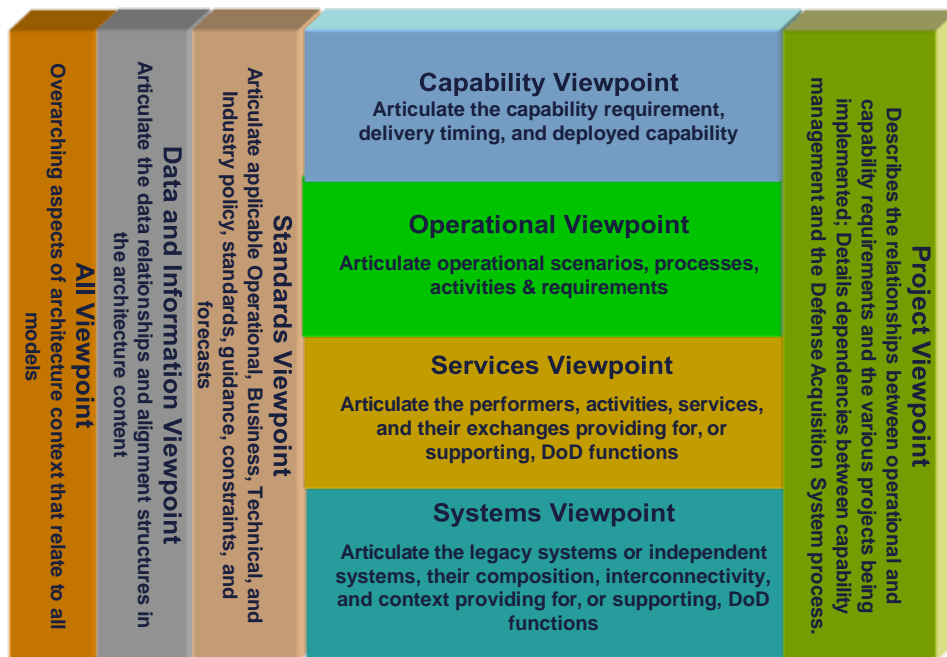


Figure 4: DoD Architecture Framework Viewpoints

The MHS's EA is structured according to the following DoDAF Viewpoints:

- a. AV products describe the overview, purpose, and terminology used throughout the EA.
- b. Operational Viewpoint (OV) products to describe DHA 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.
- c. Data and Information Viewpoint (DIV) products describes the entities, relationships, and attributes of the DHA data architecture that is derived from the functional business information requirements. Data flows and data services are described using selected Systems Viewpoint (SV) and Services Viewpoint (SvcV) products.
- d. SV products primarily use the application architecture to describe business systems organized into portfolios, system functions, application services, and performance requirements supporting business functional requirements.
- e. SvcV products describe capabilities and services of the infrastructure architecture, as well as performance requirements that support the business functional and system technical requirements.
- f. Standards Viewpoint (StdV) captures the doctrinal, operational, business, technical, or industry standards upon which engineering specifications are based, common building blocks are

established, and solutions are developed. There are two Standards Products within the DoDAF StdV: the StdV-1 (Standards Profile) and the StdV-2 (Standards Forecast). As well as identifying technical standards applicable to the architecture being described, the StdV-1 documents the policies and standards that apply to the operational or business context. The StdV-2 contains expected changes in the technology-related standards, operational standards, or business standards and conventions documented in the StdV-1.

g. Fit-for-Purpose Viewpoints are defined by DoDAF as user-defined views of a subset of architecture data created for a specific purpose. It is used to describe an architecture (and its views) that is appropriately focused (i.e., responds to the stated goals and objectives of process owner), is useful in the decision-making process, and responds to internal and external stakeholder concerns. As new Fit-for-Purpose Viewpoints are created and deemed acceptable and useful to the MHS, modeling information will be incorporated into the EA Modeling Guidebook.

h. The MHS's EA includes a sequencing plan, also known as a transition plan, which depicts 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 DHA strategic plans and IT investment portfolios. The sequencing plan will describe funded projects which will be described using the Project View architecture products. The sequencing plans will be consistent with the DHA inputs into the DoD enterprise transition plan.

i. All enterprise-level and program-level architecture products are captured in the MHS's EA repository maintained by the EAB.

j. Additional information on DoDAF can be found at this website:
<https://dodcio.defense.gov/Library/DoD-Architecture-Framework/>

2. MANAGEMENT OF THE MHS EA

a. The DHA is executing directive as applied under Public Law 114-328, (Reference (y)), "Reform of administration and management of the DHA and military medical treatment facilities". This requires that, beginning October 1, 2018, the Director, DHA, will be responsible for the administration and management of each MTF, including with respect to budgetary matters, IT, health care administration and management, administrative policy and procedures, military medical construction and any other matters the Secretary of Defense determines appropriate. Leading the effort, the DHA is to serve as the single point of accountability for the Military Departments in the development and implementation for the administration and management of MTFs.

b. The DADIO/J-6 is the MHS architecture approval authority for enterprise and program-level architectures.

c. EAB is the means by which the DADIO/J-6 ensures that an integrated, aligned, and comprehensive EA is developed, maintained, and implemented.

GLOSSARY

ABBREVIATIONS AND ACRONYMS

AV	All Viewpoint
CIO	Chief Information Officer
CSD	Cybersecurity Division
CTO	Chief Technology Officer
CV	Capability Viewpoint
DAD	Deputy Assistant Director
DADIO	Deputy Assistant Director Information Operations
DHA	Defense Health Agency
DHA-IPM	Defense Health Agency-Interim Procedures Memorandum
DHMS	Defense Healthcare Management Systems
DIV	Data and Information Viewpoint
DoDAF	DoD Architecture Framework
EA	Enterprise Architecture
EAB	Enterprise Architecture Branch
IO	Information Operations
IT	information technology
I&O	Infrastructure and Operations
MHS	Military Health System
MTF	Medical Treatment Facility
OV	Operational Viewpoint
PEO	Program Executive Office
PM	Program Manager
SDD	Solutions Delivery Division
StdV	Standards Viewpoint
SV	Systems Viewpoint
SvcV	Services Viewpoint
WBS	Work Breakdown Structure

PART II. DEFINITIONS

Capital Planning and Investment Control. Integrates the planning, acquisition, and management of assets into the budget decision-making process, and it is intended to assist agencies with improving asset management in compliance with results-oriented requirements.

Model. The term is used interchangeably with product throughout this document; and SV-4 are products that are not models.

Program Architecture. As of October 1, 2018, will be defined as MTF/site level, solution, and/or system architecture. If there is program level architecture developed at the MTF level, this architecture must be submitted to DHA for compliance/conformance review.