Descriptions of DoDAF Models

AV-1 Overview and Summary Information
Describes a project's visions, goals, objectives, plans, activities, events, conditions, measures, effects (outcomes) and produced objects.

AV-2 Integrated Dictionary
An architectural data repository with definitions of all terms used throughout the architectural data and presentations.

CV-1 Vision
The overall vision for transformational endeavors, which provides a strategic context for the capabilities described and a high-level scope.

CV-2 Capability Taxonomy
A hierarchy of capabilities which specifies all the capabilities that are referenced throughout one or more architectural descriptions.

CV-3 Capability Phasing
The planned achievement of a capability at different points in time or during specific periods of time. The CV-3 shows the capability phasing in terms of the activities, conditions, desired effects, rules complied with, resource consumption and production, and measures, without regard to the performer and location solutions.

CV-4 Capability Dependencies
The dependencies between planned capabilities and the definition of logical groupings of capabilities.

CV-5 Capability to Organizational Development Mapping
The fulfillment of capability requirements shows the planned capability deployment and interconnection for a particular capability phase. The CV-5 shows the planned solution for the phase in terms of performers and locations and their associated concepts.

CV-6 Capability to Operational Activities Mapping
A mapping between the capabilities required and the operational activities that those capabilities support.

CV-7 Capability to Services Mapping
A mapping between the capabilities and the services that these capabilities enable.

DIV-1 Conceptual Data Model
The required high-level data concepts and their relationships.

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.

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.

OV-1 High-Level Operational Concept Graphic
The high-level graphical/textual description of the operational concept.

OV-2 Operational Resource Flow Description
A description of the resource flows exchanged between operational activities.

OV-3 Operational Resource Flow Matrix
A description of the resources exchanged and the relevant attributes of the exchanges.

OV-4 Operational Relationships Chart
The organizational context, role or other relationships among organizations.

OV-5a Operational Activity Decomposition Tree
The capabilities and activities (operational activities) organized in a hierarchal structure.

OV-5b Operational Activity Model
The context of capabilities and activities (operational activities) and their relationships among activities, inputs, and outputs. Additional data can show cost, performers or other pertinent information.

OV-6a Operational Rules Model
One of three models to describe activity (operational activity). It identifies business rules that constrain operations.

OV-6b State Transition Description
One of three models to describe operational activity (activity). It identifies business process (activity) responses to events (usually, very short activities).

OV-6c Event-Trace Description
One of three models to describe activity (operational activity). It traces actions in a scenario or sequence of events.

PV-1 Project Portfolio Relationships
Describes the dependency relationships between the organizations and projects and the organizational structures needed to manage a portfolio of projects.

PV-2 Project Timelines
A timeline perspective on programs or projects, with the key milestones and interdependencies.

PV-3 Project to Capability Mapping
A mapping of programs and projects to capabilities to show how the specific projects and program elements help to achieve a capability.

StdV-1 Standards Profile
The listing of standards that apply to solution elements.

StdV-2 Standards Forecast
The description of emerging standards and potential impact on current solution elements, within a set of time frames.

SV-1 Systems Interface Description
The identification of systems, system items, and their interconnections.

SV-2 Systems Resource Flow Description
A description of resource flows exchanged between systems.

SV-3 Systems-Systems Matrix
The relationships among systems in a given architectural description. It can be designed to show relationships of interest (e.g., system-type interfaces, planned vs. existing interfaces).

SV-4 Systems Functionality Description
The functions (activities) performed by systems and the system data flows among system functions (activities).

SV-5a Operational Activity to Systems Function Traceability Matrix
A mapping of system functions (activities) back to operational activities (activities).

SV-5b Operational Activity to Systems Traceability Matrix
A mapping of systems back to capabilities or operational activities (activities).

SV-6 Systems Resource Flow Matrix
Provides details of system resource flow elements being exchanged between systems and the attributes of that exchange.

SV-7 Systems Measures Matrix
The measures (metrics) of systems model elements for the appropriate timeframe(s).

SV-8 Systems Evolution Description
The planned incremental steps toward migrating a suite of systems to a more efficient suite, or toward evolving a current system to a future implementation.

SV-9 Systems Technology & Skills Forecast
The emerging technologies, software/hardware products, and skills that are expected to be available in a given set of time frames and that will affect future system development.

SV-10a Systems Rules Model
One of three models used to describe system functionality. It identifies constraints that are imposed on systems functionality due to some aspect of system design or implementation.

SV-10b Systems State Transition Description
One of three models used to describe system functionality. It identifies responses of systems to events.

SV-10c Systems Event-Trace Description
One of three models to describe system functionality. It identifies system-specific refinements of critical sequences of events described in the operational viewpoint.

SvcV-1 Services Context Description
The identification of services, service items, and their interconnections.

SvcV-2 Services Resource Flow Description
A description of resource flows exchanged between services.

SvcV-3a Systems-Services Matrix
The relationships among or between systems and services in a given architectural description.

SvcV-3b Services-Services Matrix
The relationships among services in a given architectural description. It can be designed to show relationships of interest (e.g., service-type interfaces, planned vs. existing interfaces).

SvcV-4 Services Functionality Description
The functions performed by services and the service data flows among service functions (activities).

SvcV-5 Operational Activity to Services Traceability Matrix
A mapping of services (activities) back to operational activities (activities).

SvcV-6 Services Resource Flow Matrix
Provides details of service resource flow elements being exchanged between services and the attributes of that exchange.

SvcV-7 Services Measures Matrix
The measures (metrics) of services model elements for the appropriate time frame(s).

SvcV-8 Services Evolution Description
The planned incremental steps toward migrating a suite of services to a more efficient suite or toward evolving current services to a future implementation.

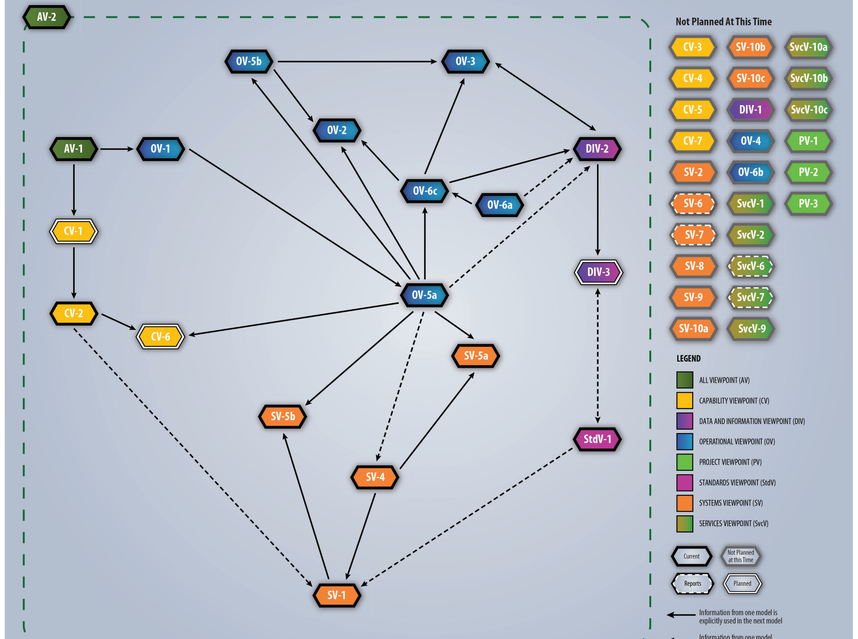
SvcV-9 Services Technology & Skills Forecast
The emerging technologies, software/hardware products, and skills that are expected to be available in a given set of time frames and that will affect future service development.

SvcV-10a Services Rules Model
One of three models used to describe service functionality. It identifies constraints that are imposed on systems functionality due to some aspect of system design or implementation.

SvcV-10b Services State Transition Description
One of three models used to describe service functionality. It identifies responses of services to events.

SvcV-10c Services Event-Trace Description
One of three models used to describe service functionality. It identifies service-specific refinements of critical sequences of events described in the operational viewpoint.

HRM Enterprise Architecture Models and Framework Guide



All architecture views are dynamic and subject to revisions. This diagram is based on the HRM architecture development methodology.

Usages of DoDAF Models

AV-1 Overview and Summary Information
Includes assumptions, constraints, and limitations that may affect high-level decisions relating to an architecture-based work program. In the initial phases of architecture development, it serves as a planning guide and later provides a summary of the what, when, why, and how of the plan as well as a navigation aid to the models that have been created.

AV-2 Integrated Dictionary
Facilitates architectural development, validation, maintenance, and re-use by providing consistency across populated views and across architectural descriptions. Also can help trace architectural data to authoritative sources.

CV-1 Vision
Shows the overall vision for transformational endeavors by linking strategic goals to planned or existing capabilities, providing a strategic context for the capabilities described and defining high-level scope.

CV-2 Capability Taxonomy
Captures and organizes the capability functions that are required for the vision as described in the CV-1 by identifying capability requirements to support capability planning, audit, and gap analysis.

CV-3 Capability Phasing
Assists in the identification of capability gaps/shortfalls or capability duplication/overlap by providing a representation of capabilities at different points in time or during specific periods of time (phases).

CV-4 Capability Dependencies
Describes the relationships between capabilities and defines logical groupings of capabilities, based on the need for those capabilities to be integrated and is used for impact analysis.

CV-5 Capability to Organizational Development Mapping
Displays the deployment of capabilities to specific organizations by phase to support the planning of capability fielding and integration, as well as capability redundancy/gap analysis.

CV-6 Capability to Operational Activities Mapping
Aligns organizational capabilities to operational activities to show which elements of a capability may be used in support of specific operational activities.

CV-7 Capability to Services Mapping
Aligns organizational capabilities to services to indicate whether the services fully meet the requirements of a capability for a particular phase.

DIV-1 Conceptual Data Model
Describes an architecture's information requirements and the structure and hierarchy for that information, as well as the structural business process rules to capture data that is important to the business (usually defined in doctrine, SOPs, etc.).

DIV-2 Logical Data Model
Provides analysis of an architecture's data definitions without taking specific implementations into consideration. Provides a common dictionary of data definitions to consistently express models wherever logical-level data elements are included in the descriptions.

DIV-3 Physical Data Model
Provides the physical implementation of the logical data model entities, e.g., message formats, file structures, physical schema.

OV-1 High-Level Operational Concept Graphic
Enables communication with high-level decision-makers by putting an operational situation or scenario into context and by providing a tool for orienting and focusing discussion and presentation.

OV-2 Operational Resource Flow Description
Describes who or what has the need to exchange information or resources in the support of a capability. Informs stakeholders of the operational characteristics of an architecture and of their collaboration needs.

OV-3 Operational Resource Flow Matrix
Provides the details required for interoperability in support of a capability. The focus of the model is on the resource flows that cross the capability.

OV-4 Operational Relationships Chart
Clarifies the various relationships that exist between organizations and sub-organizations and between internal and external organizations of interest to an enterprise architecture.

OV-5a Operational Activity Decomposition Tree
Clearly delineates lines of responsibility for activities when coupled with the OV-2. Uncovers unnecessary operational activity redundancy, enables decision-making about streamlining, combining, or omitting activities, and defines or flags issues, opportunities, or operational activities and their interactions that need to be scrutinized further.

OV-5b Operational Activity Model
In addition to the usages described for the OV-5a, this model clarifies the relationships or dependencies among the activities, the resources exchanged between activities, and the external interchanges (from/to business activities) that are outside the scope of the model.

OV-6a Operational Rules Model
Supports the development and maintenance of capabilities by specifying operational or business rules that constrain the way business is done in the enterprise.

OV-6b State Transition Description
Enables the analysis of business events, behavioral analysis, and the identification of constraints of an operational scenario by describing critical sequencing of behaviors and timing of operational activities.

OV-6c Event-Trace Description
Supports the analysis of operational events, behavioral analysis, the identification of non-functional user requirements, and operational test scenarios by providing a time-ordered examination of the resource flows as a result of a particular scenario.

PV-1 Project Portfolio Relationships
Supports program management by documenting the dependency relationships between the organizations that own the programs, projects, portfolios, or initiatives and allows for the analysis of the main dependencies between acquisition and transformation elements.

PV-2 Project Timelines
Provides support to acquisition, fielding, and other processes by documenting an overview of a program, or portfolio of individual projects or initiatives, based on a timeline. They may be broken down into work streams to show the dependencies at a lower-level.

PV-3 Project to Capability Mapping
Shows how programs, projects, portfolios, or initiatives support a capability. Identifies capability redundancies and shortfalls, highlights phasing issues, exposes organizational or system interoperability problems, and supports program decisions on when to phase out a legacy system.

StdV-1 Standards Profile
Enables the application of standards (informing project strategy) and standards compliance by identifying and listing the applicable portions of existing and emerging technical, operational, and business standards as well as applicable guidance and policy documentation.

StdV-2 Standards Forecast
Forecasts future changes in standards identified in the StdV-1 by identifying their fragility and the impact of these standards on the future development and maintainability of capabilities.

SV-1 Systems Interface Description
Supports capability integration planning, system integration management, and operational planning (capability and performer definition) by defining the composition and interaction of systems.

SV-2 Systems Resource Flow Description
Gives a precise specification of a connection between systems whether it is an existing connection, or a specification for a connection that is to be made.

SV-3 Systems-Systems Matrix
Enables a quick overview of all of the system resource interactions specified in the SV-1s. Supports a rapid assessment of potential commonalities and redundancies, enables interface management, and supports the comparison of interoperability characteristics of potential system solutions.

SV-4 Systems Functionality Description
Develops a clear description of the necessary data flows that are input (consumed) by and output (produced) by each resource, ensures that the functional connectivity is complete, and ensures that the functional decomposition reaches an appropriate level of detail to support the allocation of functions to resources and the flow of resources between functions.

SV-5a Operational Activity to Systems Function Traceability Matrix
Traces functional system requirements to user requirements and solution options to requirements by specifying the relationships between the set of operational activities and the set of system functions applicable to an architecture.

SV-5b Operational Activity to Systems Traceability Matrix
Depicts the mapping of systems and, optionally, the capabilities and performers that provide them to operational activities which allows for tracing system requirements to user requirements, tracing solution options to requirements, and identification of overlaps or gaps.

SV-6 Systems Resource Flow Matrix
Specifies the characteristics of the system resource flows exchanged between systems with emphasis on resources crossing the system boundary.

SV-7 Systems Measures Matrix
Provides the definition of performance characteristics and measures (metrics) and identifies non-functional requirements.

SV-8 Systems Evolution Description
When linked together with other evolution models, e.g., CV-3 and StdV-2, provides a rich definition of how an enterprise and its capabilities are expected to evolve over time. The model can be used to support an architecture evolution project plan or transition plan, and the development of incremental acquisition strategy.

SV-9 Systems Technology & Skills Forecast
Enables forecasting technology readiness against time, HR trends analysis, recruitment planning, planning technology insertion, and input to options analysis by providing an inventory of trends, capabilities and systems.

SV-10a Systems Rules Model
Enables the definition of implementation logic and the identification of resource constraints by specifying functional and nonfunctional constraints on the implementation aspects of the architecture.

SV-10b Systems State Transition Description
Provides the information for the definition of states, events and state transitions (behavioral modeling) and the identification of constraints by describing a resource (or system function) response to various events by changing its state.

SV-10c Systems Event-Trace Description
Provides a time-ordered examination of the interactions between functional resources to support analysis of resource events impacting operation, behavioral analysis, and the identification of non-functional system requirements.

SvcV-1 Services Context Description
Supports capability integration, operational planning, and service integration management by describing services and sub-services, and identifying the resource flows between them.

SvcV-2 Services Resource Flow Description
Provides a precise specification of an existing or future connection between services. Can also describe non-IT type services such as Search and Rescue.

SvcV-3a Systems-Services Matrix
Describes service resources and their interactions and is a useful tool for managing the evolution of solutions and infrastructure, the insertion of new technology and functionality, the redistribution of systems and evolving operational requirements.

SvcV-3b Services-Services Matrix
Summarizes service resource interactions to support interface management and the analysis of the interoperability characteristics of various solution options.

SvcV-4 Services Functionality Description
Supports a net-centric (service-oriented) implementation and the registration of services in net-centric implementations by describing the producing services and consuming services.

SvcV-5 Operational Activity to Services Traceability Matrix
Allows for the tracing of service functional requirements to user requirements or solution options to requirements for the purposes of identifying overlaps or gaps in service functionality. With tailoring, can also be used to document the status of each service.

SvcV-6 Services Resource Flow Matrix
Supports the development and maintenance of services by providing the details of the resource flows that occur between services and enables the net-centric (service-oriented) implementation of services.

SvcV-7 Services Measures Matrix
Enables the net-centric (service-oriented) implementation of services by providing a definition of performance characteristics and identifying non-functional requirements, as well as specifying the qualitative and quantitative measures of resources.

SvcV-8 Services Evolution Description
Enables the development of incremental acquisition strategy and the planning for technology insertion by presenting a whole lifecycle view of resources (services), describing changes over time and the structure of several resources mapped against a timeline.

SvcV-9 Services Technology & Skills Forecast
Provides an inventory of trends, capabilities, services and an assessment of the potential impact of these on the future business.

SvcV-10a Services Rules Model
Specifies functional and non-functional constraints on the implementation aspects of the service and enables the net-centric (service-oriented) implementation of services.

SvcV-10b Services State Transition Description
Supports the development or evolution of a service by describing the explicit sequencing of the service functions or of the actions internal to a single service function.

SvcV-10c Services Event-Trace Description
Allows an organization to move to the next level of detail from the initial solution design, to help define a sequence of service functions and service data interfaces. Ensures that each participating resource or service port role has the necessary information it needs, at the right time, to perform its assigned functionality.