IntegratedEA '08
Enterprise Architecture Conference

This presentation is from the 2008 Integrated EA Conference

The 2009 event will be held Feb 24-25

see www.integrated-ea.com

CIO/NII
Enabling Net-Centric Operations

Department of Defense Architecture Framework (DoDAF) v 2.0 Development

Integrated EA ’08

February 2008

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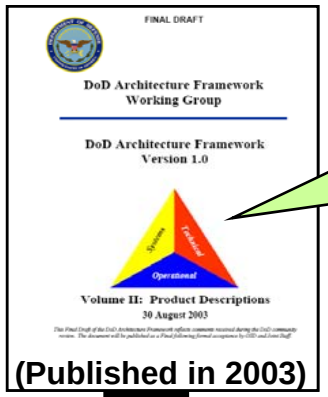
www.defenselink.mil/cio-nii

CIO/NII Enabling Net-Centric Operations

The Importance of DoDAF Evolution

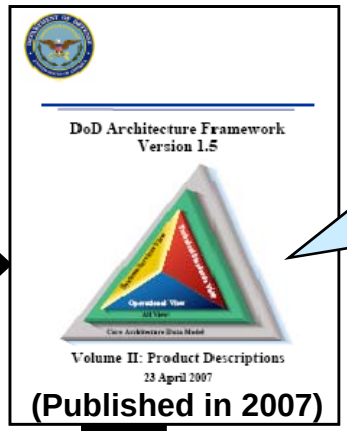
- As our Department policies and decision processes evolve, so must the DoDAF
- DoDAF v1.5 represents an important step toward addressing the requirements of the Net-Centric Environment in architectures
- DoDAF v2.0 must address evolving information requirements of the Department using both top-down and bottom-up approaches
  - Information Sharing
  - Net-Centric Strategies
  - Portfolio Management

DoDAF Evolution To Support "Fit For Purpose" Architecture



(Published in 2003)

DoDAF 1.0
- CADM Separate
- Baseline For DoDAF 1.5
- Removed Essential & Supporting Designations
- Expanded audience to all of DoD



(Published in 2007)

DoDAF 1.5
- **Addresses Net-Centricity**
- Volume III is CADM & Architecture Data Strategy
- **Addresses Architecture Federation**
- Baseline for DoDAF 2.0
- **Shifted away from DoDAF mandating a set of products**

DoDAF

2.0

(NOV 2008)

DoDAF 2.0
- **Cover Enterprise and Program Architecture**
- **Emphasize Data versus Products**
- **Tailored Presentation**
- **AV-1 to capture federation metadata**
- **Quality Support to Decision Processes**
- **FEA & Allied/Coalition Support**
- **Journal**
  - Errata & Interim Releases

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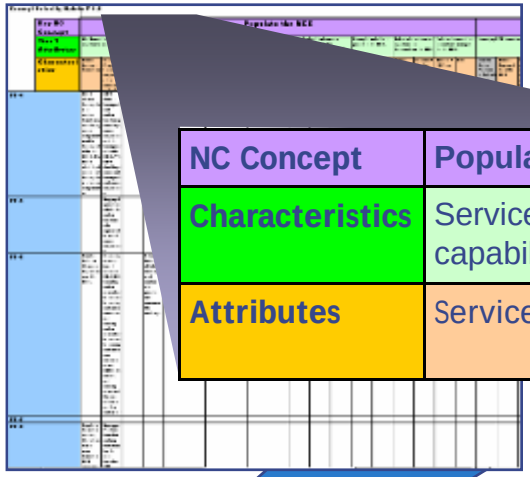
Net-Centric Concepts addressed in DoDAF 1.5

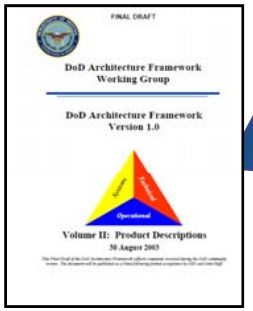
The following Net-Centric Concepts were presented and discussed to be included in DoDAF 1.5

1. **Populate the Net-Centric Environment**
   - Represent what information and capabilities are being made available (as services) to the NCE so they can be leveraged by others.
2. **Utilize the Net-Centric Environment**
   - Represent what information and capabilities provided on the GIG will be available to service consumers through service discovery and leveraged across the NCE.
3. **Support the Unanticipated user**
   - Represents that 1) capabilities can scale to support both human and system unanticipated users, and 2) the posting of information, data, applications and services to the NCE occur as soon as possible to enable multiple use.
4. **Leverage COIs to promote Jointness**
   - Represents the utilization of COI specific interface specifications, taxonomies, and common vocabulary to support interoperability in the NCE.
5. **Support Shared Infrastructure**
   - Represents that the shared physical and services infrastructure (the EIE) is identified and leveraged in the NCE.



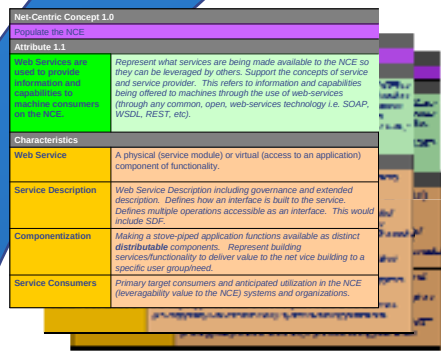
1. Review Concept and attributes from Net-Centric Concepts workshop

NC Concept	Populate the NCE				...
Characteristics	Services are used to provide information and capabilities to machine consumers on the NCE.				...
Attributes	Service	Service Description	Component -ization	Service Consumers	...

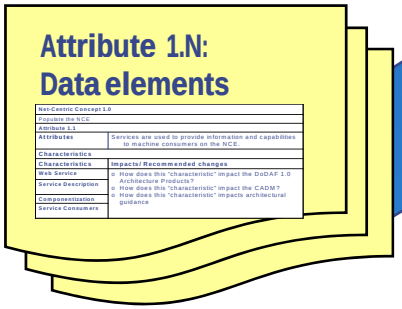


5. Propose Net-Centric Guidance for DoDAF 1.5

4. Apply Data Elements to DoDAF 1.0 views and identify gaps



2. Review architectural relevance of each attribute



3. Decompose attributes to Data Element level

Three Integrated Volumes

Net-Centricity Sources & Prioritization

Decision Support Processes

Survey, SME interviews, Feedback

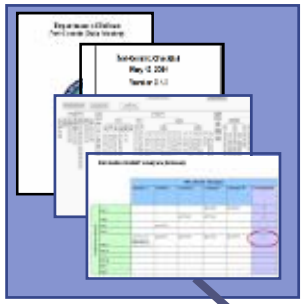
Workshop Inputs

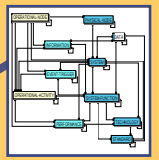
State of DOD Architecting

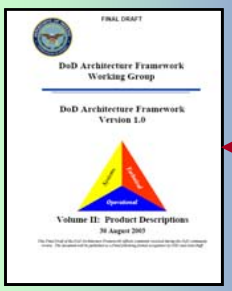
DoDAF Overlays

Federation Strategy

CADM 1.5

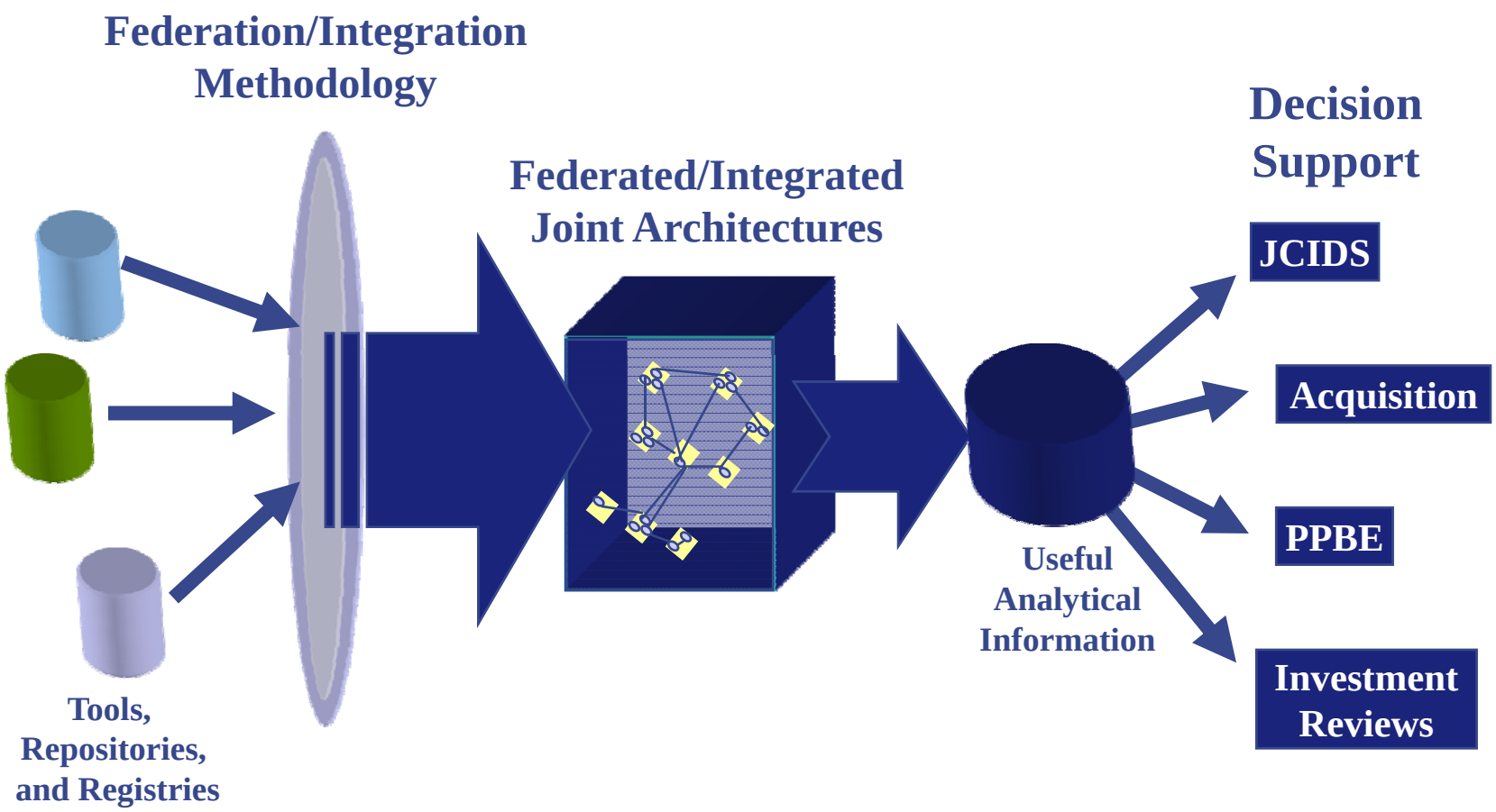






Volume I **Volume II** **Volume III**

Desired End-State



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Architecture Federation

Registration

- *Discovery/Re-use*
- *Availability*
- *Location*
- *Owner*
- *Development*
- *Description*

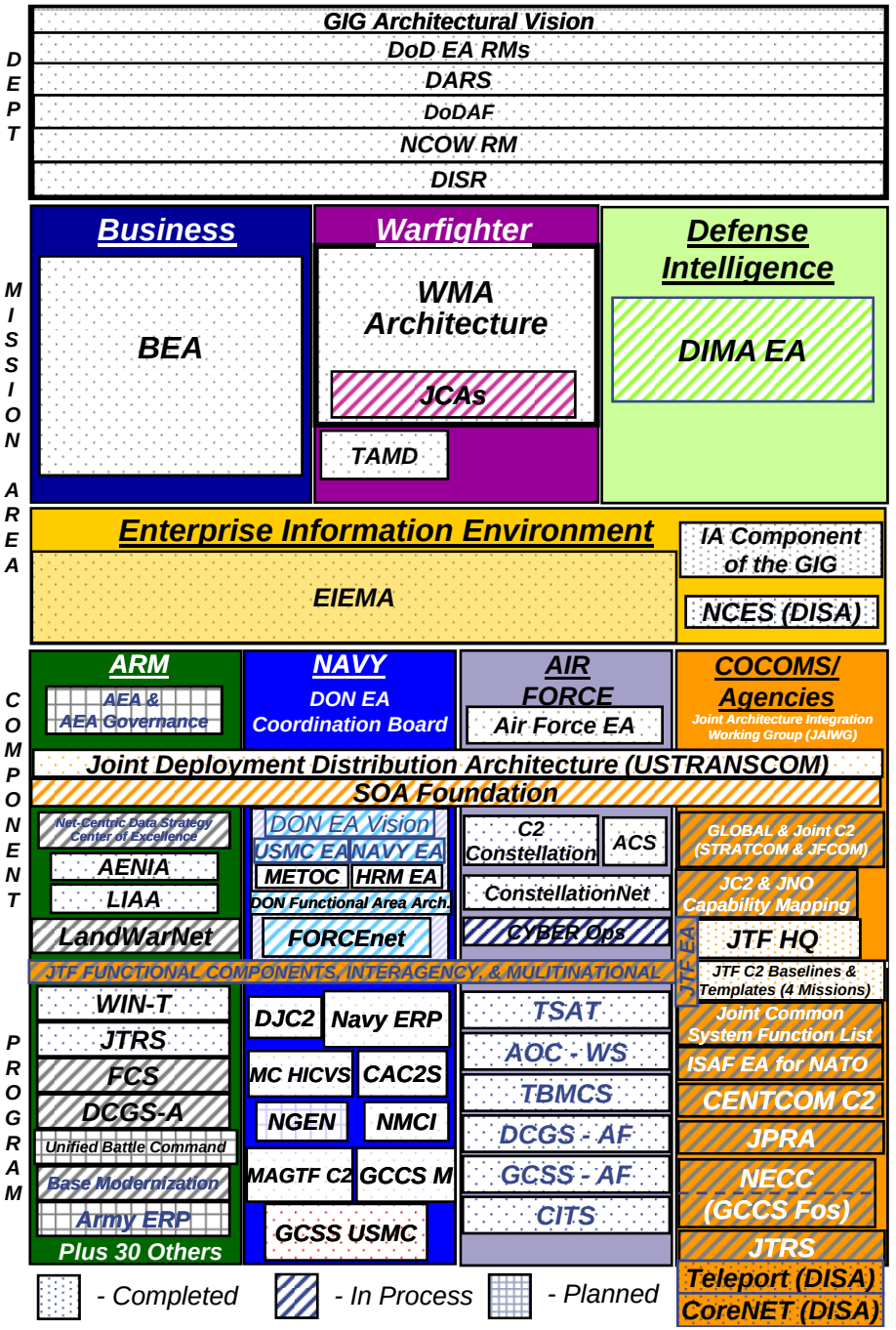
Alignment

- *Mission Threads*
- *Standards/Compliance*
- *Cross-Enterprise Perspective*
- *Content Comparison*

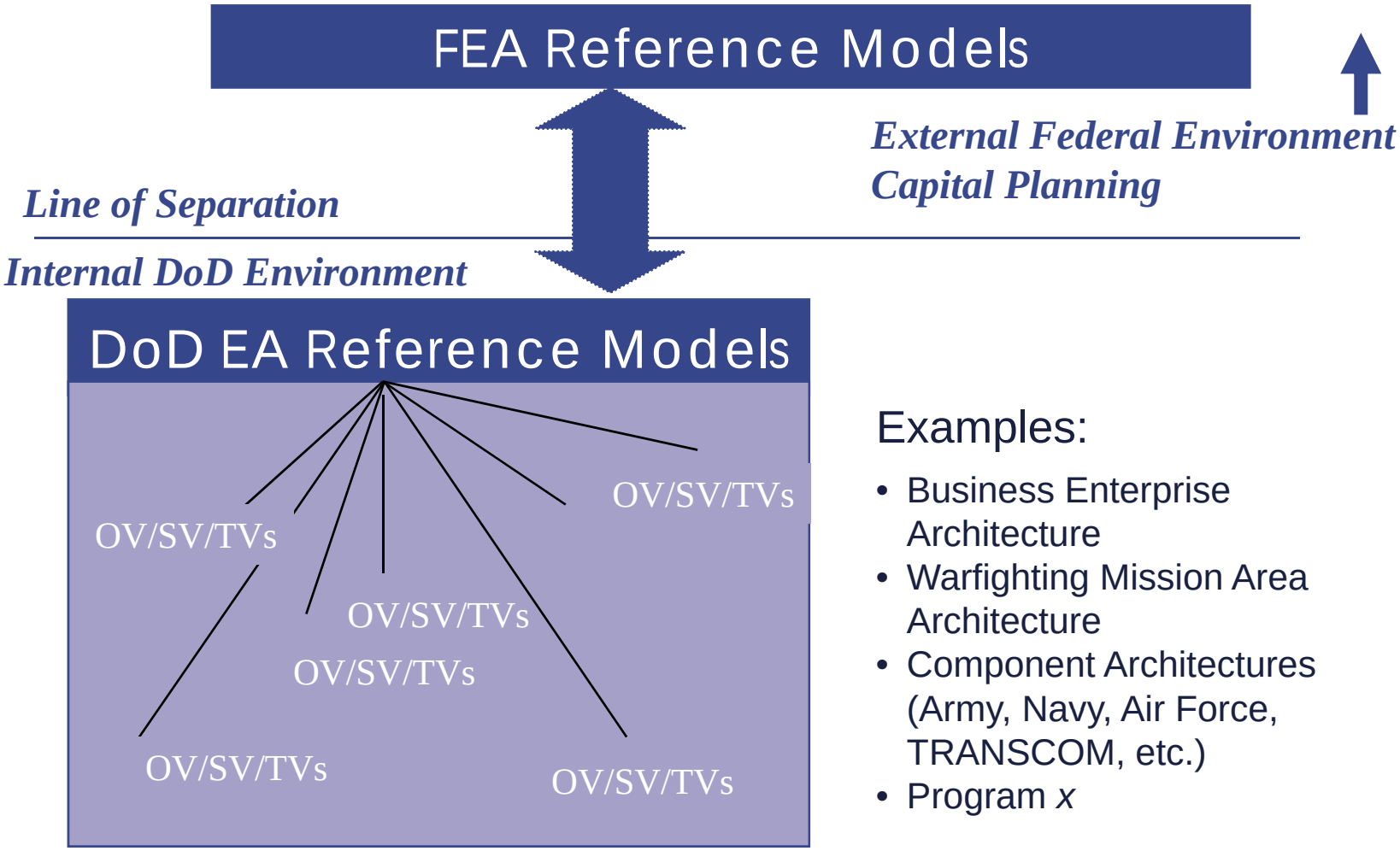
Tiered Accountability

- *Distributes responsibility*
- *Appropriate SME Involvement*
- *Improved Configuration Management*

DoD Enterprise Architecture



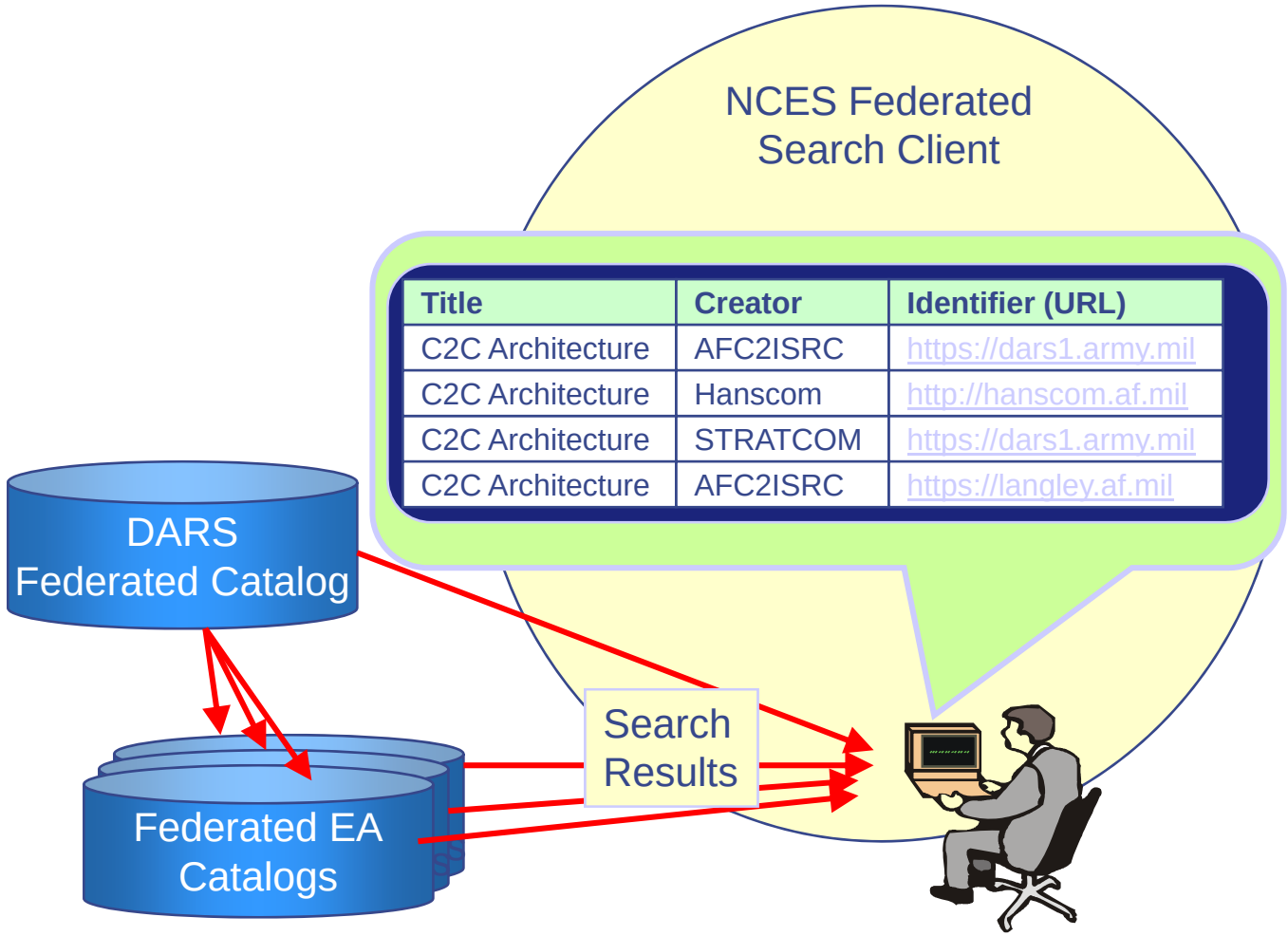
The DoD EA Business Reference Model Serves Two Functions



Examples:

- Business Enterprise Architecture
- Warfighting Mission Area Architecture
- Component Architectures (Army, Navy, Air Force, TRANSCOM, etc.)
- Program *x*

DoD Architecture Registry System Federated Discovery Services



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DoDAF v2.0 Development Approach

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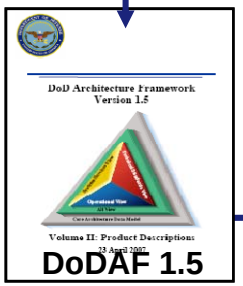
Comments
&
Stockholder Feedback
Plus



Derive

DAS Process
JCIDS Process
PfM/CPM Process
Operations Processes
PPBE Process
SE Processes
Requirements Workshops Input

Phase I:
Requirements Identification

Baseline Requirements

Workshops
Interviews
Surveys

VALIDATION

Initial Input

Technical Working Group Analysis

Phase II: Synthesis

Methods
BTA

DOTMLPF
FEA
MODAF
TOGAF
NAF
BPMN
GAO Assessment
SOA

Presentation
OUSD (P&R) IM

Net-Centricity
ASM UPDM CADM
Policy
Data-Centric

Data
Army CIO

Mediation
Semantic Interoperability
Federation

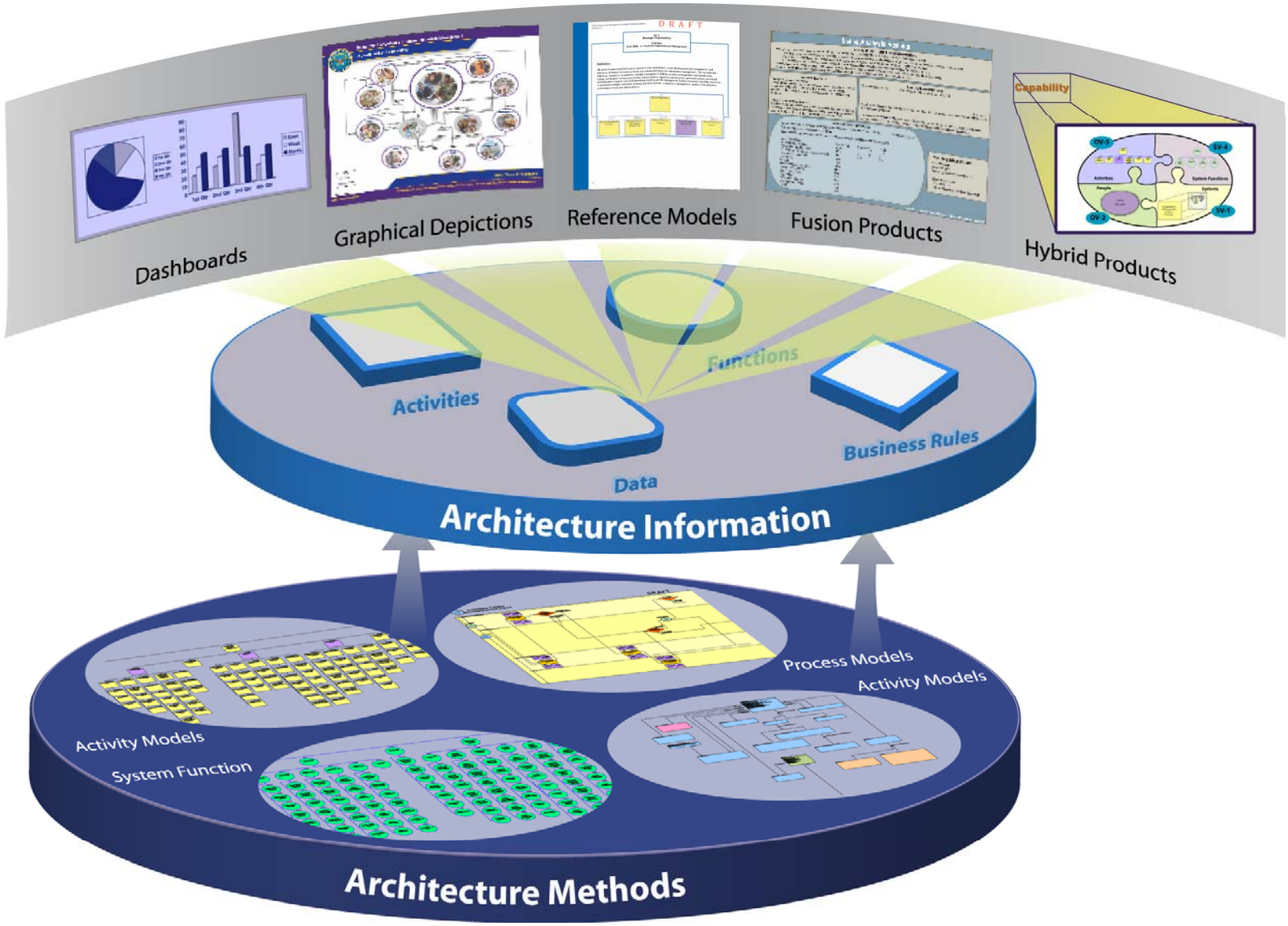
Phase III:
Production

DoDAF 2.0

CADM 2.0

Journal 2.0

DoDAF v2.0 Fit for Purpose Visualization



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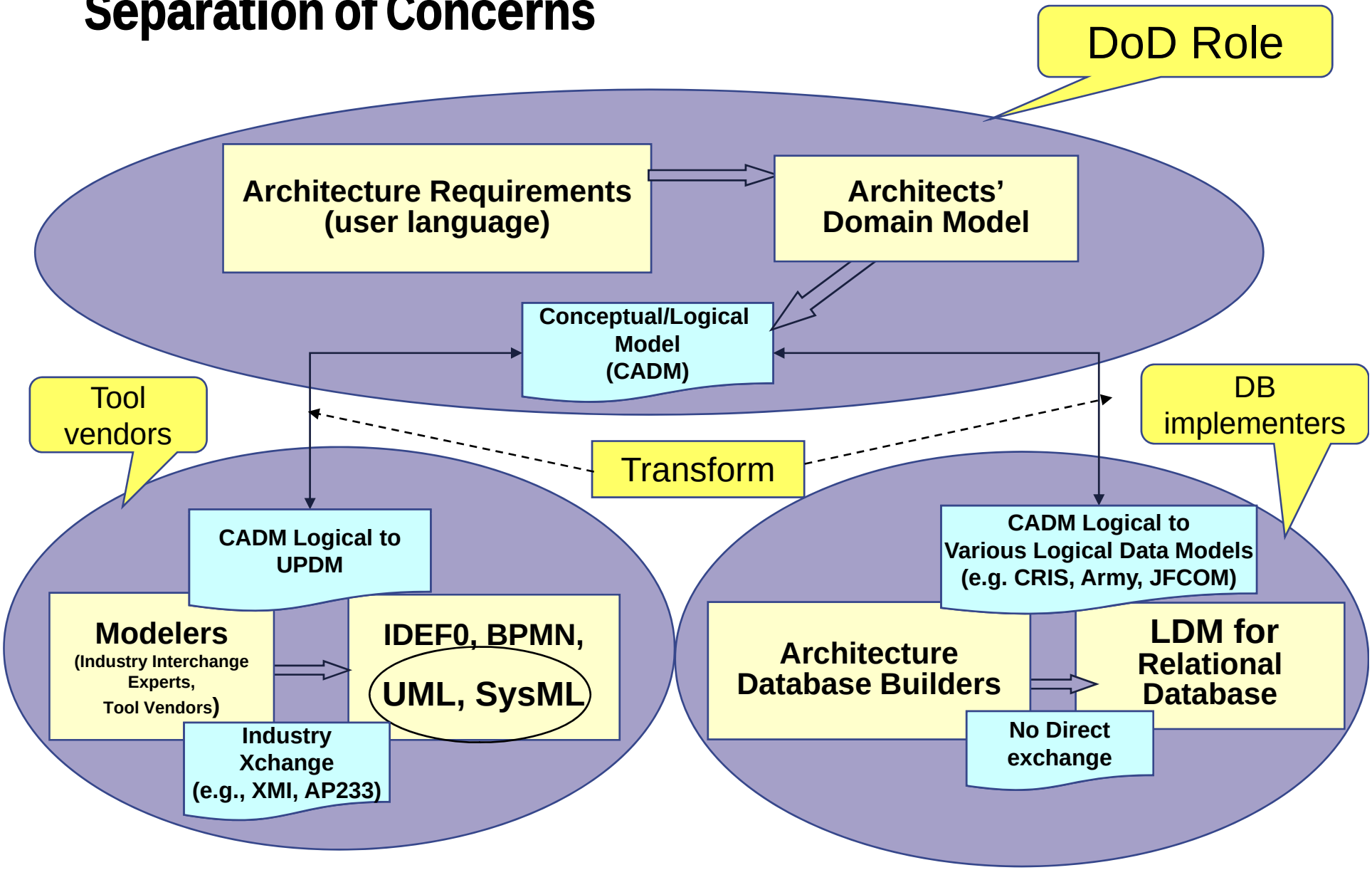
Information Requirements and Data Exchange: Separation of Concerns



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Summary

- The DoDAF has been evolving since version 1.0
- Version 1.5 incorporated concepts of net-centricity
- Version 2.0 will represent the results of a complete requirements review:
  - Support for major processes of the Department
  - Support for the Net-Centric Data and Services Strategies of the Department
  - Analysis of framework alignment (Federal, MODAF, NAF)
  - Shift to a meta-model approach and Standards Development Organization engagement

DoD Enterprise Architecture Conference

DoD Missions and the Architectural Vision

April 14-18,2008
The Florida Hotel and Conference Center
Orlando, FL

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http://www.afei.org/brochure/8a05/index.cfm