



# Joint Capabilities Integration and Development System (JCIDS) Changes

## Sources:

- CJCSI 3170.01I, 23 Jan 2015
- CJCSI 5123.01G, 15 Feb 2015
- JCIDS Manual, 12 Feb 2015 with errata, 23 Feb 2015
- Joint Staff, J-8

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- Review of 2012 Changes
- 2015 Changes
- Requirements Acquisition Interface
- Refined Capabilities-Based Assessment (CBA) Guidance
- Portfolio Management
- Document Content Changes
- Changes to Mandatory KPPs
- Intelligence Supportability
- IT Box Changes – Addition of the IS-CDD
- Staffing and Validation Changes
- DODAF Architecture Views
- Managing an Information System (IS) Requirement

# **What did we change in Jan 2012?**



# 2012 Changes (part 1 of 2)

- Consolidated Guidance: CJCSI 5123.01 (JROC Charter), CJCSI 3170.01 (JCIDS), and the JCIDS Manual are the core products
  - CJCSI 3137.01 (FCBs) and CJCSI 3470.01 (JUONs) cancelled, with content absorbed into the three core documents.
- Requirements Training:
  - Mandated Requirements Management Certification Training (RMCT)
- Implemented Study Notification/Repository:
  - Centralized repository for CBAs and other studies/analyses supporting JCIDS documents to facilitate visibility, collaboration, and re-use
- Documents:
  - Page limits: ICD (10), DCR (30), CDD (45), CPD (40)
  - Implemented “IT Box” construct – IS ICD.
  - Institutionalized JUONs and JEONs for urgent/emergent needs.
  - Clarified joint visibility requirements for all documents
  - Clarified submission of higher classification documents/issues
  - (June 2012) Introduced alternate/streamlined document formats

- Organizations:
  - Added CCMDs as full members of JROC
  - Disestablished the Building Partnerships FCB
  - Established SAP Integration Group
  - Established Joint Requirements Assessment Division (JRAD)
  - Clarified Joint Staff J-7 Role and DOTmLPP-P Endorsement
- Staffing:
  - Streamlined staffing: Deliberate: 83 days. Urgent/Emergent : 15-31 days
  - Placed focus on finding “knee in the curve” tradeoffs
  - Post-AoA review of results/recommendations and draft KPP review
- Post-Validation:
  - More robust Tripwire Process – for cost, schedule, quantity changes.
  - Institutionalized Capability Gap Assessment (CGA) Process
  - Introduced a post-fielding assessment for JUONs/JEONs

# 2015: The Evolution Continues...

- Consolidated Guidance: CJCSI 5123.01 (JROC Charter), CJCSI 3170.01 (JCIDS), and the JCIDS Manual are still the core products
  - CJCSI 3312.01 (Intelligence Certification), CJCSI 6212.01 (Net-Ready KPP), and JWSTAP Charter (Weapon Safety Endorsement) cancelled, with content absorbed into the three core documents
  - Significant revision of Intelligence Certification content
- Roles/Responsibilities:
  - Expanded guidance for stakeholder roles/responsibilities in CJCSI 5123
- Developing Requirements:
  - Refined CBA guidance
  - Focus on leveraging DODAF to streamline development activities
  - ICD Attributes: “Initial Objective Values” vice “Minimum Values”
  - Enable more robust leverage of S&T efforts to satisfy requirements
  - Introduces the Capability-Mission Lattice as a framework for traceability to operational missions
  - Increased focus on ensuring attributes are measurable and testable

- Documents:

- Streamlines document formats (starts with June 2012 alternate formats)
- Adds Net-Ready KPP to IS-ICD; Extends “IT Box” construct to IS CDD
- Aligns affordability sections of CDDs/CPDs with new DODI 5000.02
- Content/Endorsement guides for Mandatory KPPs, Weapon Safety endorsement, DOTmLPF-P endorsement, and Intelligence Certification
- Requires “validation page” to be combined with JCIDS documents

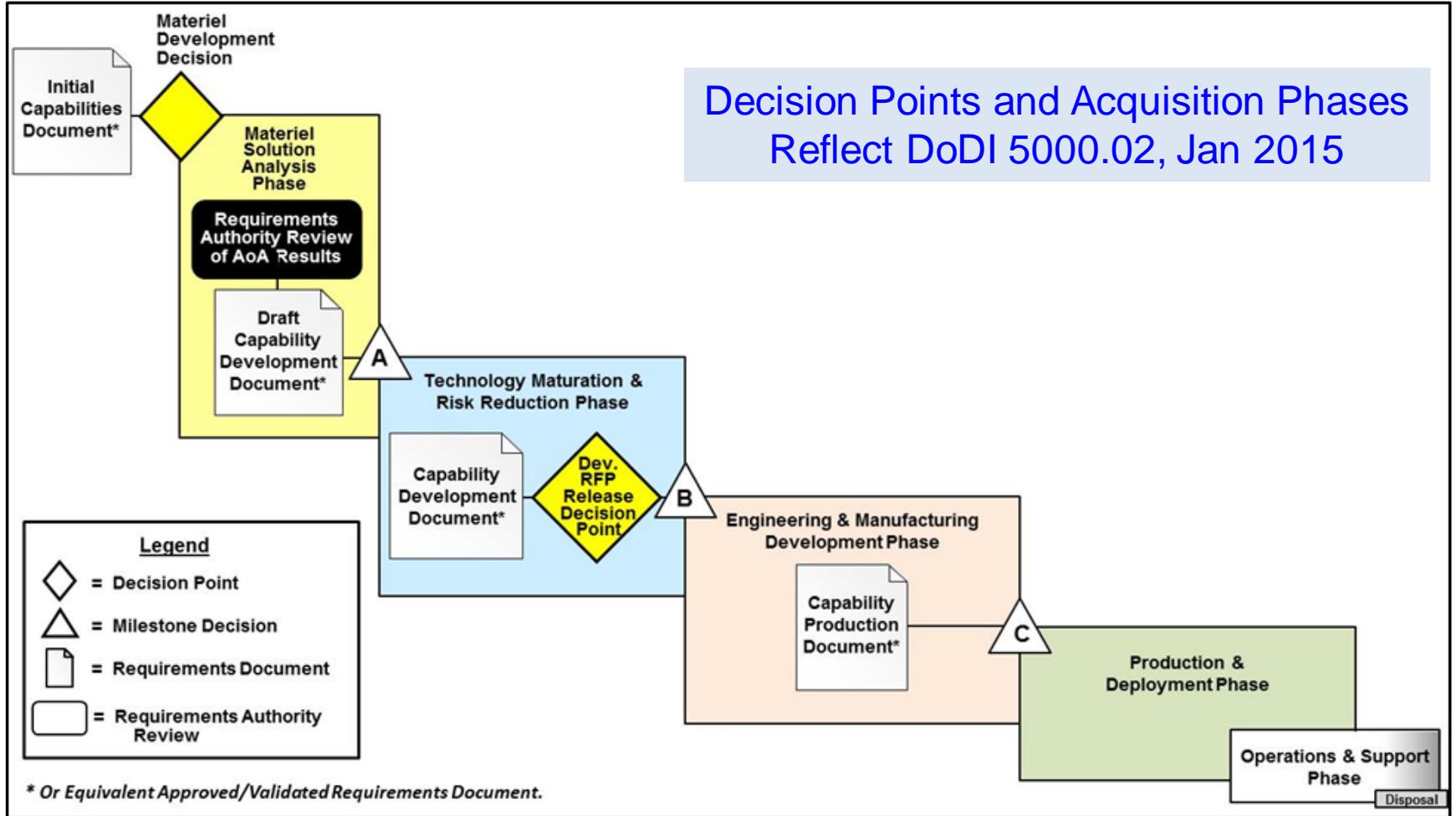
- Staffing:

- Merges JSDs of Joint Information and Independent
- Integrates Common gatekeeping with DCMO for Defense Business Systems
- Enhances guidance for submission and review of higher classification documents/issues, including SAP/SAR and ACCM

- Portfolio Management:

- Consolidates “post validation processes” and “prioritization” guidance into the “portfolio management” guidance.

Decision Points and Acquisition Phases  
Reflect DoDI 5000.02, Jan 2015



## 2012 – CBA Steps



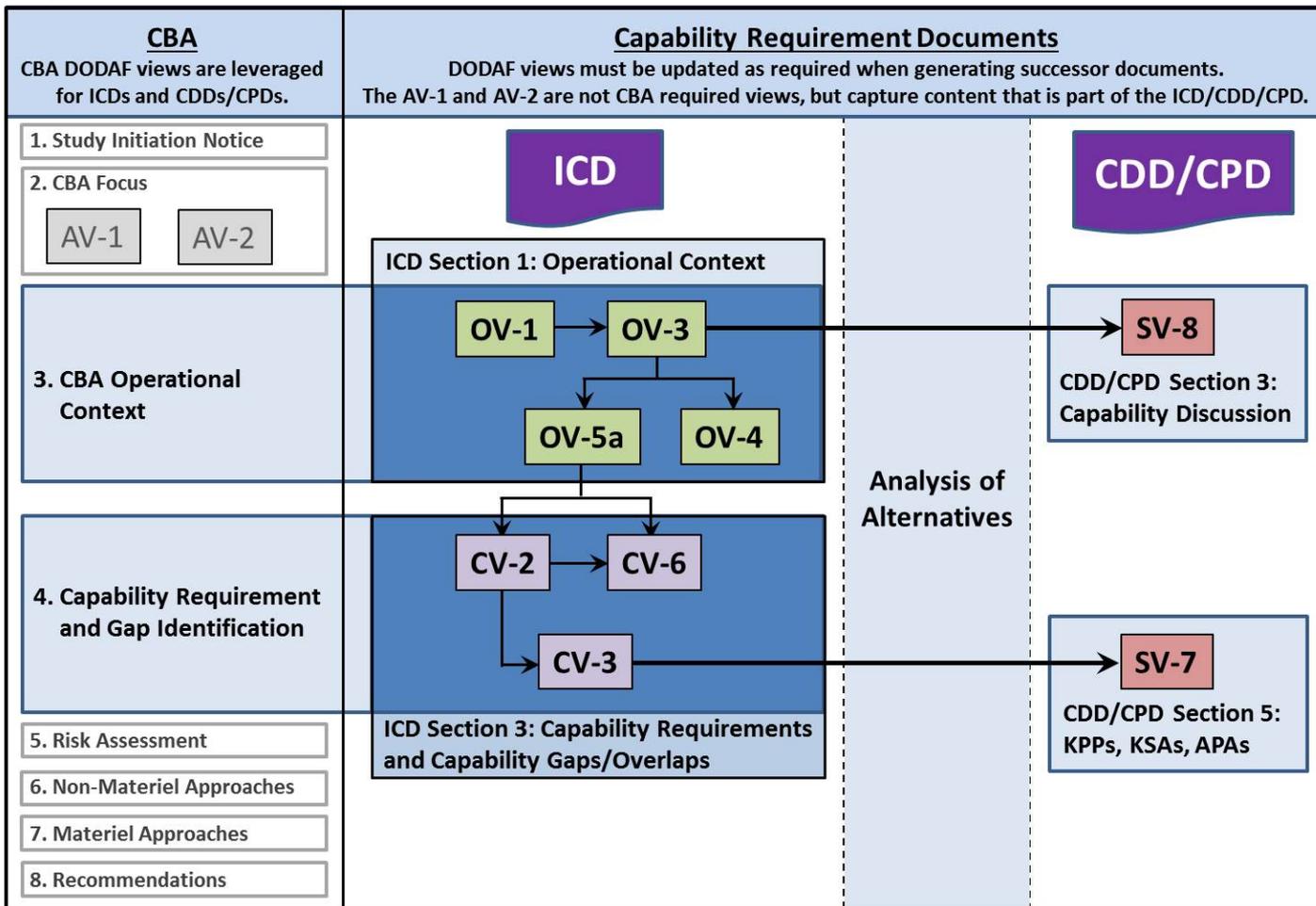
## 2015 – CBA Steps

1. Identify Mission or Military Problem to be Assessed: Use OPLANS, CONPLANS, Integrated Security Constructs, results of the Chairman's Risk Assessment (CRA); Assess Threats and Timeframe
2. Identify and Build Upon Previous CBAs and Other Studies
3. Determine Level of Analytical Rigor
4. Perform Operational Assessment of Current and Programmed Force to Determine Capability Requirements and Gaps
5. Determine if Non-Materiel Approach appropriate
6. If Risks Remain, Assess General Approaches for Materiel Solutions
7. Offer Recommendations
8. Provide Results to KM/DS Studies Repository

1. Submit Study Initiation Notice to Joint Staff Gatekeeper. Determine and Build Upon Previous Studies
2. Derive CBA Focus: Strategic Context, Missions and Scenarios, Joint Lessons Learned, Use of DODAF Views
3. Determine Operational Context: Timeframe, threats, Concepts and CONOPS
4. Identify Capability Requirements and Gaps: Use of DODAV OV-3, CV-2, CV-3, CV-6 and OV-5a; use of Support to Strategic Analysis (SSA) Products.
5. Conduct Risk Assessment: Risk to mission; risk to force; others such as resourcing and risks to allies
6. Determine Non-Materiel Approaches
7. If Risks Remain, Assess General Approaches for Materiel Solutions
8. Documentation: Provide results to Joint Staff Gatekeeper; offer recommendations in one or more capability requirement documents.



# DODAF Architecture Data Flow from CBA to CDD/CPD

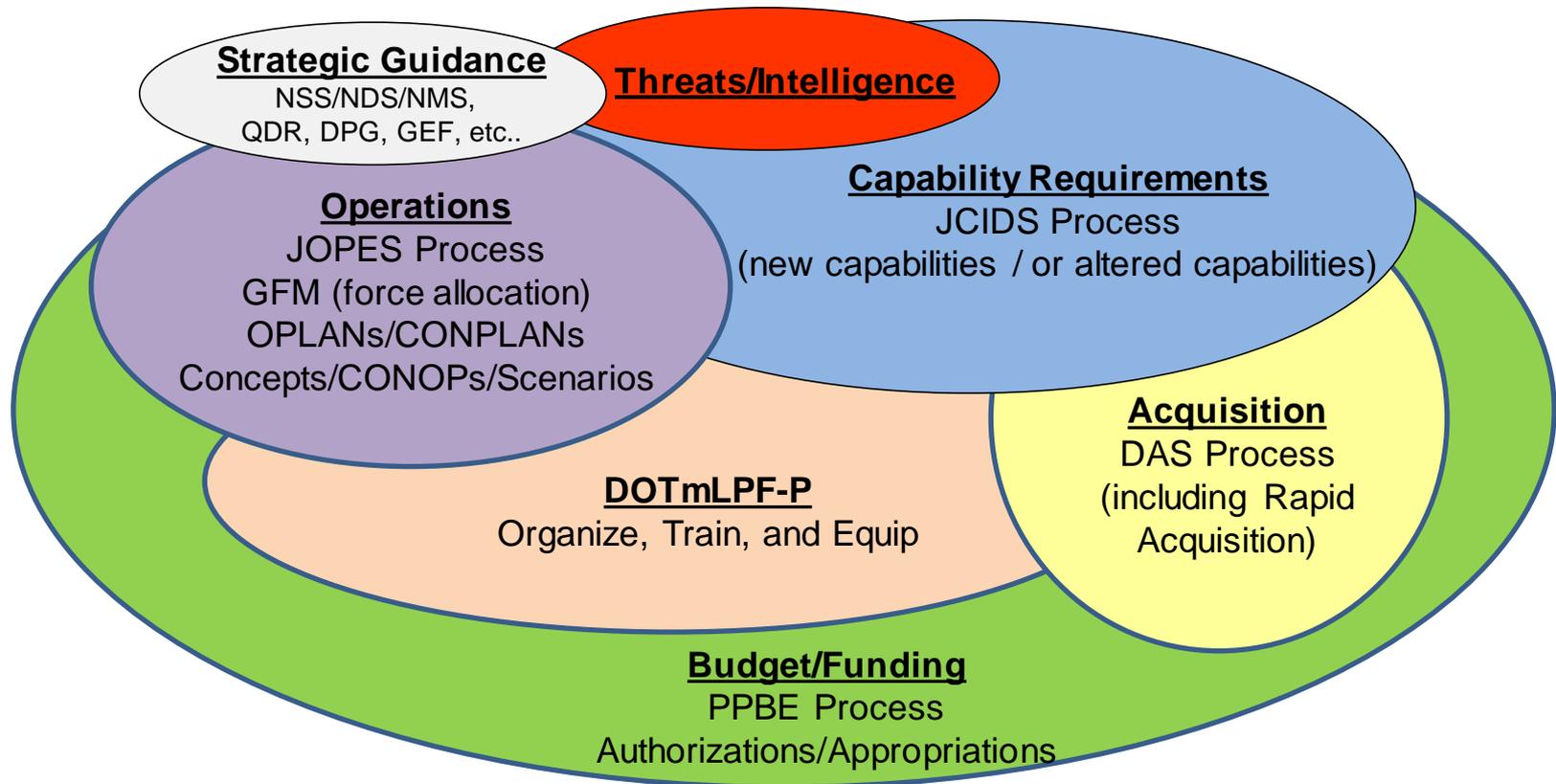


# Capability Requirement Portfolio Management

## *The Key to Robust Integration in an Uncertain Future*

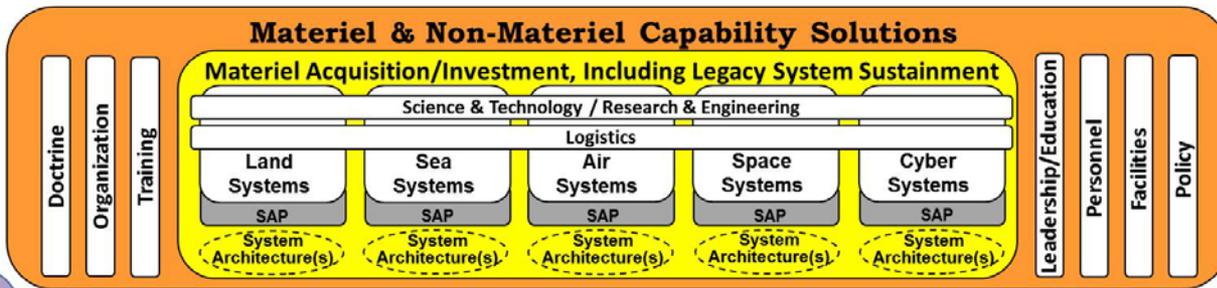
Consolidates “post validation processes” and “prioritization” guidance into the “portfolio management” guidance.

The capability requirement portfolios managed under the JCIDS process inform and are informed by other processes and activities across the department.

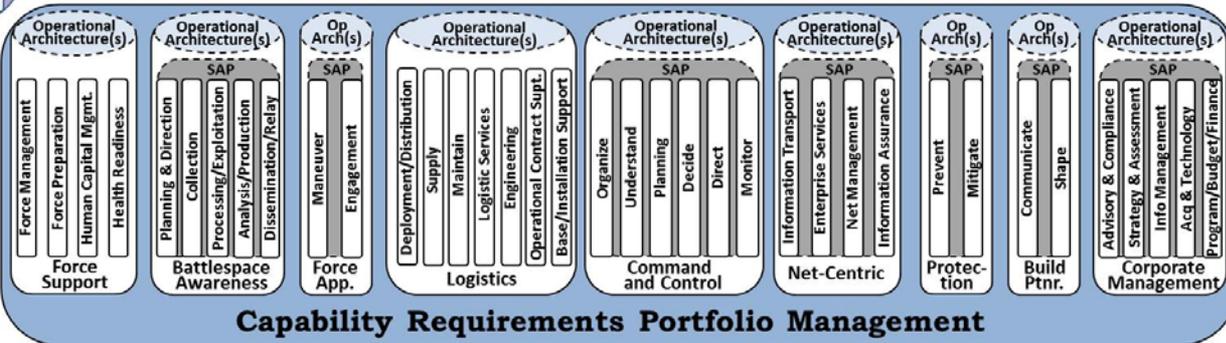
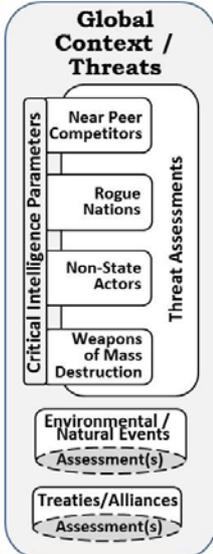
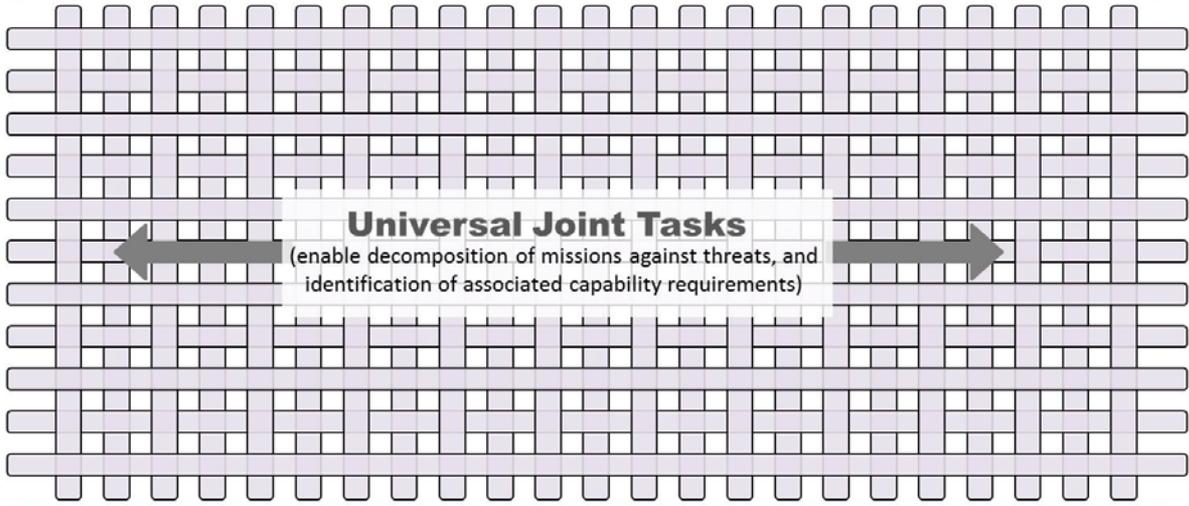


- Stakeholders must understand capability dependencies, relationship to the Universal Joint Tasks (UJTs) they enable, and the missions they support.
- The Capability Mission Lattice (CML) (next slide) provides a logical construct for dependencies and traceability of capability requirements.
- Knowledge of historical decisions and rationale, including past cycles of Capability Gap Assessment (CGA) and Program Budget Review (PBR), is also critical to make informed assessments and decisions.

# Capability-Mission Lattice



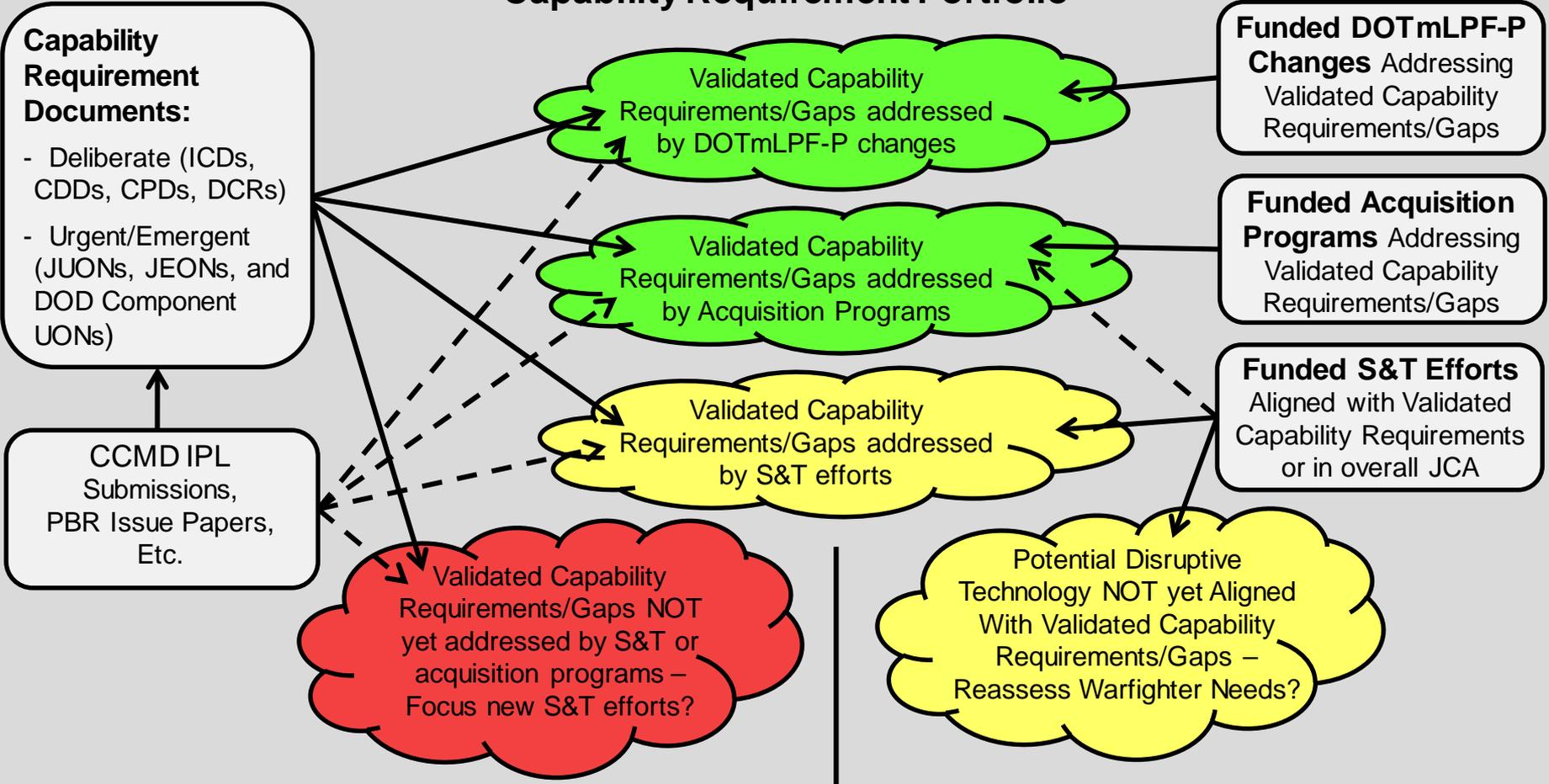
- Strategic Guidance**
- National Security Strategy
  - National Defense Strategy
  - National Military Strategy
  - Quadrennial Defense Review
  - National Security Interests
  - Quadrennial Roles/Missions
  - Defense Planning Guidance
  - Guidance for Employment of The Force
  - Unified Command Plan
  - Joint Strategic Capabilities Plan





# More Robust Leverage of S&T Efforts

## Capability Requirement Portfolio



- Changes may require reassessment of the capability requirement portfolios to ensure that any impacts are identified and appropriate actions taken to best serve the joint force.
  - Revisiting previously validated capability requirements for potential adjustment in light of the updated guidance.
  - Initiating studies or analyses to assess identified gaps or overlaps in the capability requirement portfolios.
  - Using capability requirement portfolio assessments to inform other Departmental processes or decision making, such as in PBR.

# JCIDS Document Content Changes

*Flow From Alternate Document Formats, mid-2012*

### ICD 2012

- Cover Page
- Executive Summary
- Sections
  1. CONOPS Summary
  2. JCAs
  3. Capability Requirements
  4. Capability Gaps and Overlaps/Redundancies
  5. Threat and Operational Environment
  6. Assessment of Non-Materiel Approaches
  7. Final Recommendations
- Appendices
  - A. Architecture Data
  - B. References
  - C. Acronym List
  - D. Glossary



### ICD 2015

- Cover Page
- Validation Page
- Executive Summary
- Sections
  1. Operational Context
  2. Threat Summary
  3. Capability Requirements and Gaps/Overlaps
  4. Assessment of Non-Materiel Approaches
  5. Final Recommendations
- Appendices
  - A. References
  - B. Acronym List
  - C. Glossary
  - D. Classified Annex (optional)

## CDD & CPD 2012



## CDD & CPD 2015

- Cover Page
- Executive Summary
- Sections
  1. Capability Discussion
  2. Analysis Summary
  3. CONOPS Summary
  4. Threat Summary
  5. Program Summary
  6. KPPs, KSAs and additional performance attributes
  7. SoS Synchronization
  8. Spectrum Requirements
  9. Intelligence Supportability
  10. Weapon Safety Assurance
  11. Technology Readiness Assessment
  12. Assets Necessary to Achieve IOC
  13. IOC and FOC Schedule Definitions
  14. DOTmLPPF-P Considerations
  15. Other System Attributes
  16. Program Affordability
- Appendices
  - A. Net-Ready KPP Architecture Data
  - B. References
  - C. Acronym List
  - D. Glossary

- Cover Page
- Validation Page
- Executive Summary
- Sections
  1. Operational Context
  2. Threat Summary
  3. Capability Discussion
  4. Program Summary
  5. KPPs, KSAs, and APAs
  6. Other System Attributes
  7. Spectrum Requirements
  8. Intelligence Supportability
  9. Weapon Safety Assurance
  10. Technology Readiness
  11. DOTmLPPF-P Considerations
  12. Program Affordability
- Appendices
  - A. References
  - B. Acronym List
  - C. Glossary
  - D. Classified Annex (optional)

## Joint DCR 2012

- Cover Page
- Executive Summary
- Sections
  1. Purpose
  2. Background
  3. Description
  4. Analysis Process
  5. Findings and Proposed Implementation Plan
  6. Constraints
  7. Policy
  8. Issues
  9. Recommendation Summary
- Appendices
  - A. Net-Ready KPP
  - B. References
  - C. Acronym List
  - D. Glossary



## Joint DCR 2015

- Cover Page
- Validation Page
- Executive Summary
- Sections
  1. Operational Context
  2. Threat Summary
  3. Capability Discussion
  4. Change Recommendations
  5. Final Recommendations
  6. Implementation Plans
- Appendices
  - A. References
  - B. Acronym List
  - C. Glossary
  - D. Classified Annex (optional)

## JUON & JEON 2012



## JUON & JEON 2015

- Sections
  1. Title
  2. CCMD Submitted by
  3. Date Submitted
  4. CONOPS Summary
  5. Required Capability
  6. Flexibility
  7. Mission and Threat Analysis
  8. Potential Non-Materiel Alternatives
  9. Potential Materiel Alternatives
  10. Required Quantities
  11. Constraints
  12. Primary and Secondary POCs
  13. Authorized by

- Cover Page
- Validation Page
- Executive Summary
- Sections
  1. Administrative Data
  2. Operational Context and Threat Analysis
  3. Required Capability
  4. Flexibility
  5. Potential Non-Materiel Solutions
  6. Potential Materiel Solutions
  7. Required Quantities
  8. Constraints



# Resource Estimate Changes

- ICD: Affordability (opportunity cost) added.
- Joint DCR: Chart for “rough-order-of magnitude” total resources added. Includes cost by FY, total across FYDP, and total life-cycle cost of implementing DOTmLPF-P solution(s). (RDT&E, Procurement, MILCON, O&M and MILPERS)
- CDD and CPD:
  - MILPERS added to affordability chart
  - Warfighter Resources for Operations & Support Costs added (includes O&M and MILPERS):
    - Pre-IOC
    - IOC to FOC
    - Post-FOC
    - Operational Life Total



# Document Content and Endorsement/ Certification Guides for 2015

- Document Content Guides:
  - Intelligence Supportability – new
  - Weapon Safety Assurance – new
  - DOTmLPF-P – new
  - Net-Ready KPP – Expanded. CJCSI 61212.01F, *Net-Ready KPP*, cancelled; content added to JCIDS Manual
  - Training KPP – significant revisions
- Endorsement/Certification Guides
  - Endorsement Guide for Weapon Safety – updated
  - Endorsement Guide for Force Protection KPP – new
  - Endorsement Guide for Systems Survivability KPP – new
  - Endorsement Guide for Sustainment KPP – new
  - Certification Guide for Net-Ready KPP – new
  - Endorsement Guide for Training KPP – new
  - Endorsement Guide for DOTmLPF-P – new
  - Certification Guide for Intelligence Supportability – new



# Changes to Performance Attributes

- 2012 JCIDS Manual dealt with development of KPPs
- 2015 JCIDS Manual deals with development of KPPs, KSAs and APAs
- Mandatory KPPs:
  - Force Protection – no change
  - Survivability changed to System Survivability – now applies to all CDDs and CPDs
  - Sustainment – now applies to all CDDs and CPDs
  - Net-Ready – now applies to JUON, JEON, and DOD Component UON
  - Energy – no change
  - Training – major changes

2012



2015

Force Protection	All manned systems
Survivability	All manned; may be applicable to unmanned
Sustainment	ACAT I
Net Ready	All IS and NSS CDD/CPD
Energy	All where provisions of energy impact operational reach, or protection of energy infrastructure or energy resources is needed
Training	ACAT I

Force Protection	No change
System Survivability	<b>All CDDs &amp; CPDs</b>
Sustainment	<b>All CDDs &amp; CPDs</b>
Net Ready	Added to IS-ICD, JUON, JEON, & DOD Component UON
Energy	No change
Training	<b>All with training requirements that dictate operational performance characteristics</b>

2012 – Personnel Related  2015 – Materiel Related

- Applies to ACAT I Programs
- Attributes: (among others): Proficiency level; time to train; training retention and associated metrics.
- Intent: Ensure training requirements are properly addressed from the beginning of the acquisition process and throughout the program's acquisition life-cycle.
- Endorsement: J-7, in coordination with USD(Personnel & Readiness)

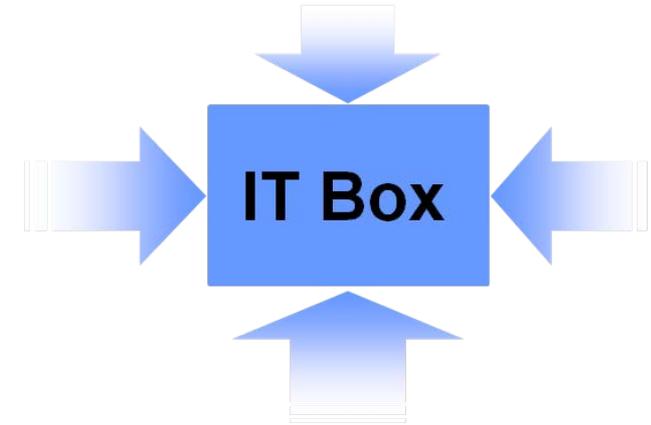
- Applies to all CDDs and CPDs with materiel training requirements that dictate specific operational performance characteristics of the capability solution.
- Intent: Ensure materiel aspects of training capabilities addressed as part of the solution outlined in CDD/CPD
- Separate Endorsement Not Required. Part of DOTmLPF-P Endorsement by Joint Staff J-7, with advice from the Office of the USD (Personnel & Readiness)



# Intelligence Supportability

- CJCSI 3312.01B, *Joint Military Intelligence Requirements Certification*, cancelled; content moved to CJCSI 5123.01G and JCIDS Manual.
- Content and Certification Guides for Intelligence Supportability added to JCIDS Manual.
- Intelligence Supportability Paragraph for CDD and CPD, para 8:
  - a. Intelligence Support Category Requirements
    - 1) Intelligence Manpower Support
    - 2) Intelligence Resource Support
    - 3) Intelligence Planning and Operations Support
    - 4) Targeting Support
    - 5) Intelligence Mission Data Support
    - 6) Warning Support
    - 7) Space Intelligence Support
    - 8) Counter Intelligence Support
    - 9) Intelligence Training Support
  - b. Cross-reference intel requirements discussed in other places in the document, or in other documents
  - c. Intelligence Security Requirements

- IT Box Applies to:
  - Information Systems (IS) with software development only
  - Includes integration onto commercial off-the-shelf hardware
  - Program costs that exceed \$15 million
- IT Box *DOES NOT* Apply to:
  - IS with a developmental cost less than \$15 million
  - Defense Business Systems (DBS)
  - Systems which are an integral part of a weapon or weapon system which enables weapon capabilities and are considered part of the weapon system program
- Jan 2015 JCIDS Manual Expands on the Jan 2012 version by Implementing the “IS CDD”.



# Changes to the IT Box for an IS-ICD

## Requirements Organization & Oversight

Flag-level oversight through [describe oversight body]

- Chair
- Members (list)

### Capabilities & Initial Minimum Values

List Capabilities & initial values

**Net-Ready KPP**

Added by JCIDS Manual  
Feb 2015



### Hardware Refresh and System Enhancements & Integration Cost Controls

- Per year = \$XXX
- Lifecycle cost = \$XXX
- Rationale

### Application and System Software Development Cost Controls

- Per year = \$XXX
- Lifecycle cost = \$XXX
- Rationale

- No return to the JROC unless new core capabilities added to the IS-ICD
- Further definition of capabilities through Requirements Definition Packages/Capability Drops



# Information Systems CDD (IS-CDD)

Added by JCIDS Manual, 2015

- IS-CDD
  - Implements IT Box model used in the IS-ICD
  - May be used where a validated ICD contains capability requirements which can be addressed by a combination of IS and non-IS solution and the IT Box is applicable to the IS portion
  - May be used for MDAP and MAIS programs to comply with statutory requirements for a CDD while allowing for the flexibilities of the IT Box
  - May be used when a validated CDD was generated before the IT Box construct was introduced, and the Sponsor wants to revalidate under the IT Box construct.
- IS-CDDs are appropriate in the same situations where the IS-ICD is appropriate, and are NOT appropriate in the same situations where the IS-ICD is not appropriate.
- Capability Production Documents (CPDs) are not required as successor documents for an IS-CDD – the delegated authority may prescribe alternate document formats

## Requirements Organization & Oversight

Flag-level oversight through [describe oversight body]

- Chair
- Members (list)

### Key Performance Parameters

List KPPs



**Major difference from IS-ICD IT Box.**

KPPs may be quantified in terms of initial performance values rather than objective / threshold values. Same applies to KSAs and APAs used in the body of the IS-CDD



### Hardware Refresh and System Enhancements & Integration Cost Controls

- Per year = \$XXX
- Lifecycle cost = \$XXX
- Rationale

### Application and System Software Development Cost Controls

- Per year = \$XXX
- Lifecycle cost = \$XXX
- Rationale

- No return to the JROC unless new core capabilities added to the IS-CDD
- Further definition of capabilities through Requirements Definition Packages/Capability Drops



# Successor Documents for IS-ICDs and IS-CDDs

- CDDs are Not Required as Successor Documents for Non-MDAP IS-ICDs; CPDs are Not Required as Successor Documents for IS-CDDs.
  - Sponsors have management flexibility for successor documents
  - JCIDS Manual provides examples of potential IS ICD/CDD follow-on documents (actual names, content, and approval TBD by the delegated validation authority):
    - Requirements Definition Package (RDP) – identifies KPPs and non-materiel changes
    - Capability Drop (CD) – lower level document that specifies the characteristics of a “widget” or “app” for partial deployment of the solution
- FCB is Briefed Every 2<sup>nd</sup> Year After Validation on Progress Toward Delivering the Solution (May Recommend JROC Oversight)



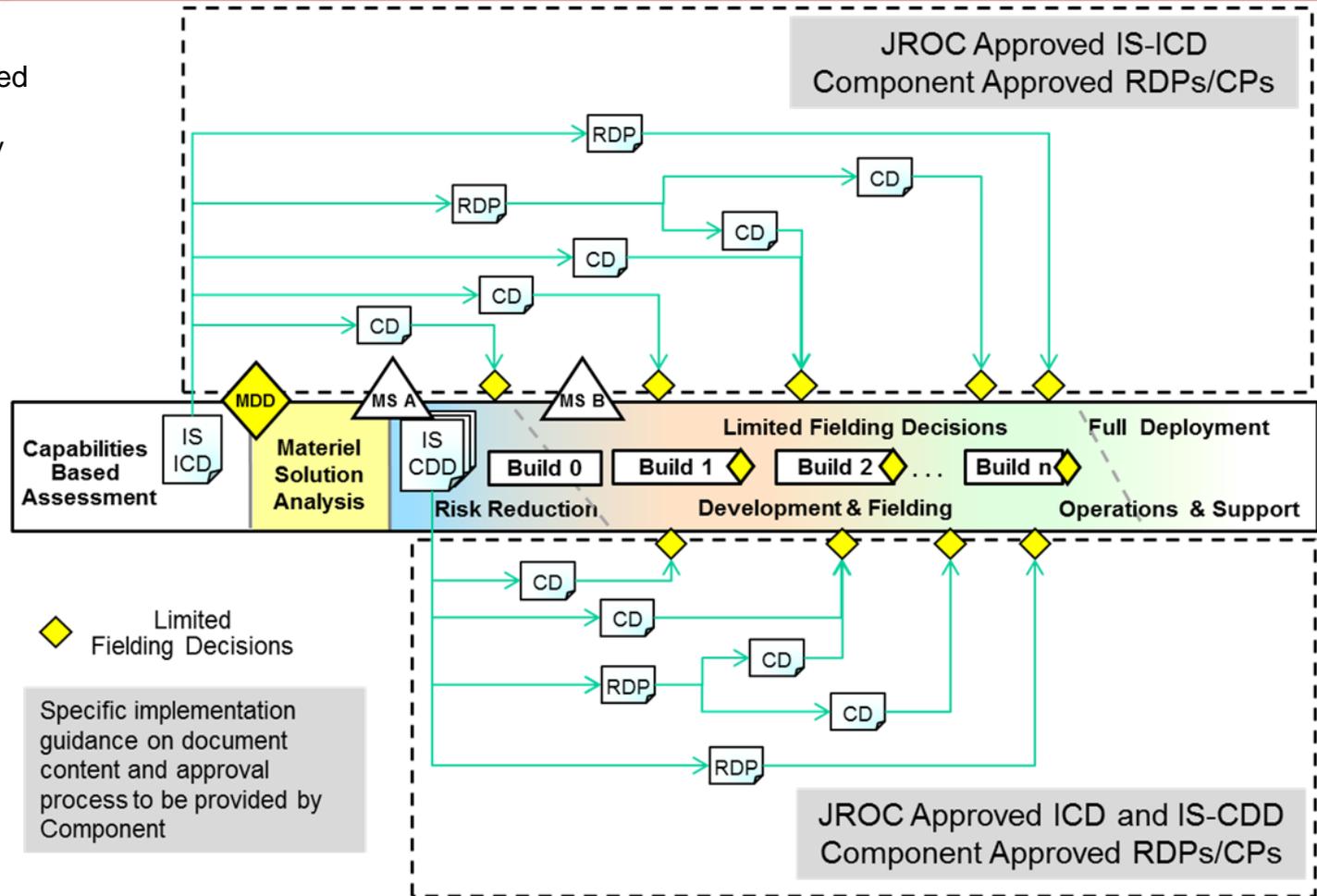
# Managing an IS Requirement Using the IT Box Construct

- As the IS-ICD and IS-CDD only streamline the applicable requirements processes, the Sponsor must still ensure compliance with acquisition policy and processes in DoDI 5000.02, and Information Support Plan (ISP) policy and processes in accordance with DoDI 8330.01.
- Since the standard CDD and CPD are not typically required, an IS-ICD or IS-CDD provides Sponsors the flexibility to manage IS requirements with alternate documents and validation processes as necessary, as long as development efforts remain within the boundaries of the validated IT-Box and any additional guidance provided by the validation authority.



# Example of IS-ICD or IS-CDD Successor Documents

Illustrative - not intended to limit potential flexibilities provided by the IS-ICD or IS-CDD



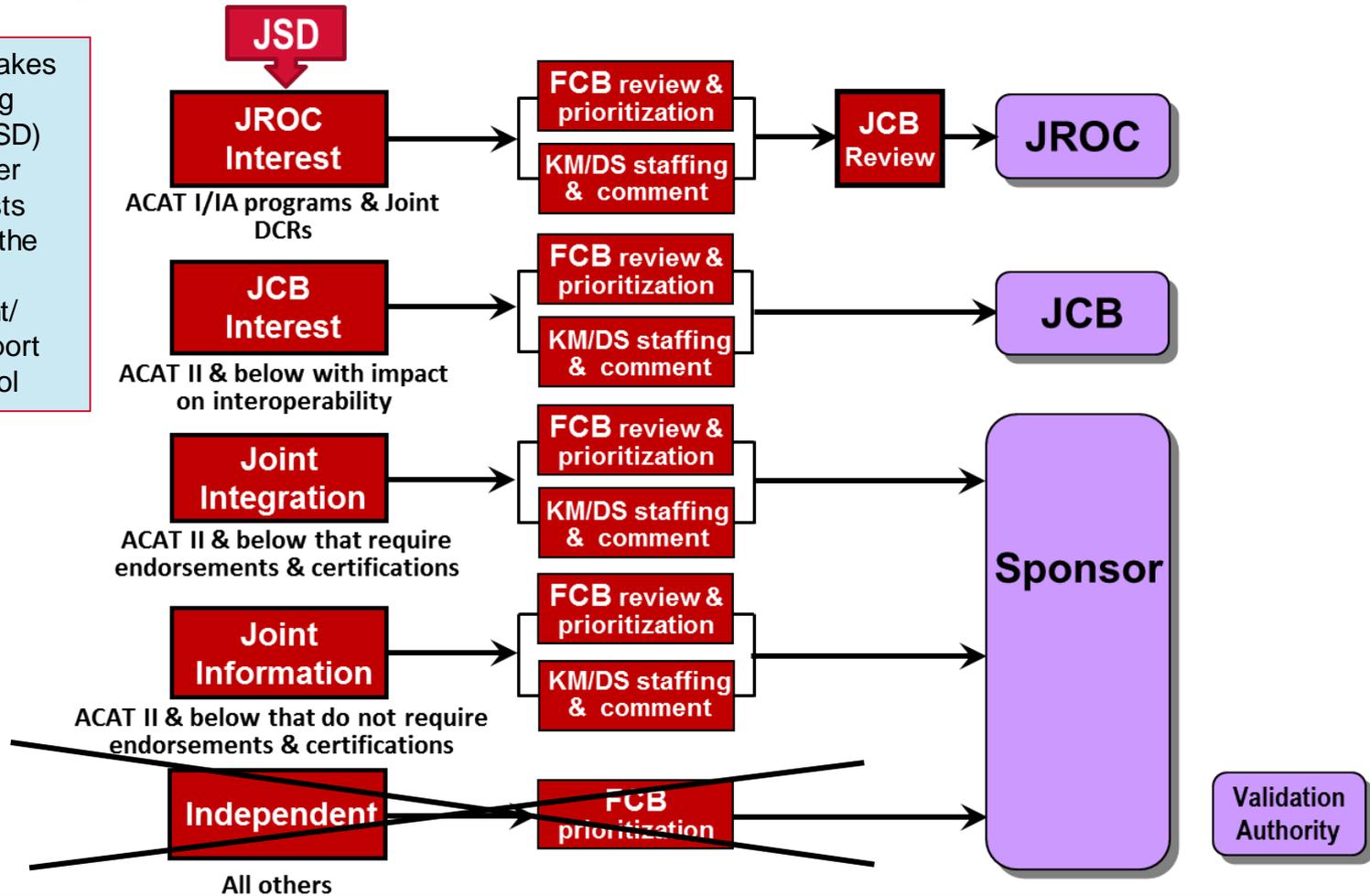
Referred to as "limited deployment" by DODI 5000.02

# JCIDS Documents Staffing and Validation Changes

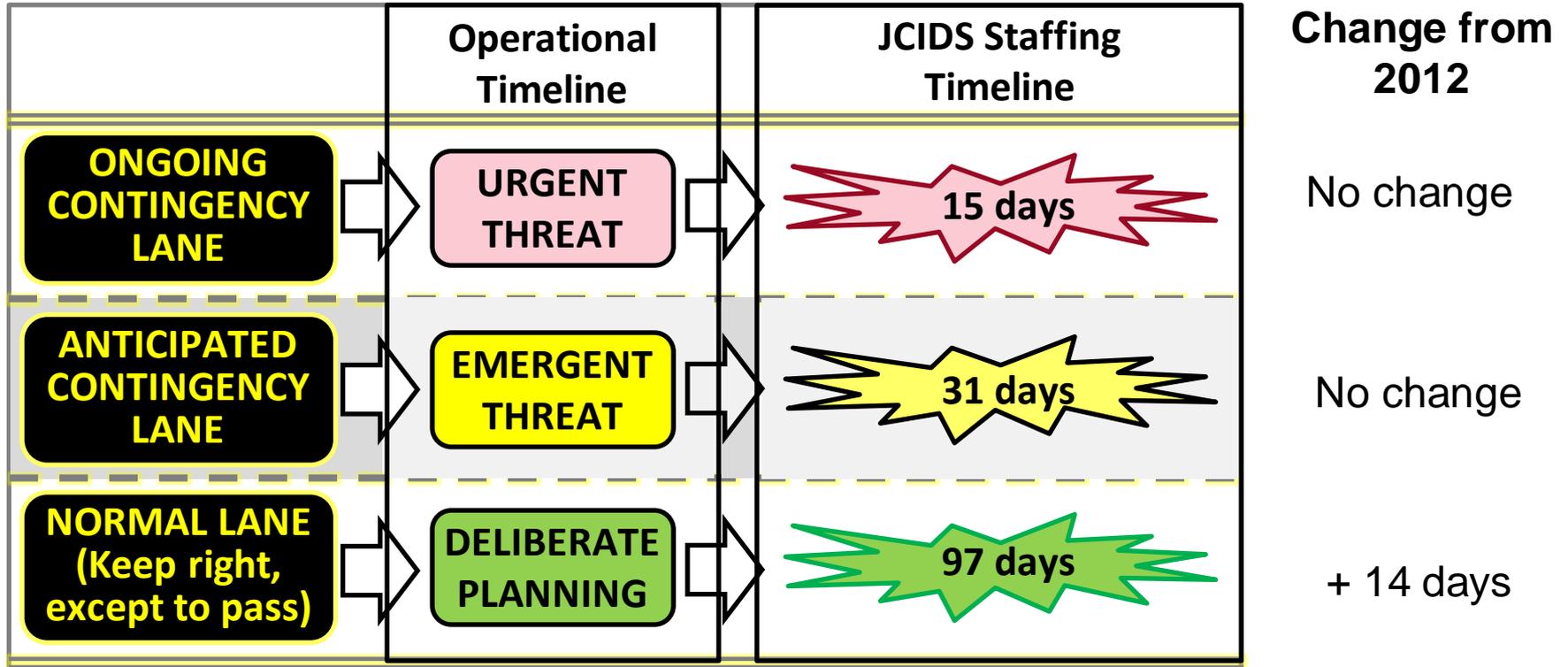


# Joint Staffing Designation (JSD) of Independent Deleted

**Gatekeeper** Makes Joint Staffing Designator (JSD) Decision After Sponsor Posts Document to the Knowledge Management/ Decision Support (KM/DS) Tool



# Process Lanes Staffing Timeline



# Use of DOD Architecture Framework (DODAF) Data

- 2012 JCIDS Manual provided one table for DODAF views to support capability requirement documents
- 2015 JCIDS Manual:
  - Provides two tables:
    - Table D-1. DODAF Views Supporting Capability Requirement Documents
    - Table D-E-4. NR-KPP Architecture Data and Associated Artifacts/Views
  - Indicates that all capability requirement documents should leverage and update DODAF views generated during a CBA or other prior study
  - Adds a comprehensive DOD Architecture Primer



# DODAF Views Supporting Capability Requirement Documents

DODAF View	ICD/DCR	CDD/CPD
OV-1. High-level Operational Concept	S	Note 1
OV-3. Operational Resource Matrix Flow	S	Note 1
OV-4. Organizational Relationships Chart	S	Note 1
OV-5a. Operational Activity Decomposition Tree	S	Note 1
CV-2. Capability Taxonomy	S	Note 1
CV-6. Capability to Operational Development Mapping	S	Note 1
SV-7. Services Measures Matrix		S/P
SV-8. Systems Evolution Description (new)		S/P

S: Sponsor or operational user/representative is responsible for development

S/P: Sponsor or operational user/representative work jointly with the program office to develop

Note 1: Leverage and update DODAF views generated during the CBA or other prior study

- Components may have additional requirements for CDD/CPD
- OV-5a must use UJTs (and Service task list extensions if applicable) for alignment of activities

See Table D-1, and the DOD Architecture Primer, JCIDS Manual, for more detail



# Net-Ready KPP Architecture Data

DODAF View	IS-ICD (RDPs/CDs)	CDD/CPD
AV-2. Dictionary of Terms	S	S/P
OV-2. Operational Resource Flow Description		S
OV-5b. Operational Activity Decomposition Tree	S	S
OV-6c. Event-Trace Description		S
DV-1. Conceptual Data Model		S
DV-2. Logical Data Flow		S
DV-3. Physical Data Flow		P
PV-2. Project Timeline		P
SV-1. Systems Interface Description	S	S/P
SV-2 or SvcV-2. Systems or Services Resource Flow Matrix		P
SV-4 or SvcV-4. Systems or Services Functionality Description		P
SV-5 or SvcV-5. Systems or Services Operational Activity to Services Traceability Matrix		P
SV-6 or SvcV-6. Systems or Services Resource Flow Matrix		S/P
SV-7 or SvcV-7. Systems or Services Measures Matrix	P	P
StdV-1. Standards Profile		P
StdV-2. Standards Forecast		P

S: Sponsor or operational user/representative is responsible for development

S/P: Sponsor or operational user/representative work jointly with the program office to develop

P: Obtain from program office. Components may have additional requirements for CDD/CPD

See Table D-E-4 and the DOD Architecture Primer, JCIDS Manual, for more detail



# Summary of 2015 JCIDS Changes

- Refined CBA guidance, to include use of DODAF data
- Added guidance for capability portfolio management, to include process interactions, dependencies, use of the CML, robust leverage of S&T, and post-validation guidance
- JCIDS Document changes: Streamlined formats; added validation page; additional content and endorsement/ certification guidance; changes to mandatory KPPs; addition of Intel Supportability; addition of NR-KPP to IS-ICD; addition of IS-CDD; and, enhanced resource estimates in ICD, CDD, CPD and Joint DCR
- Staffing: Deleted JSD of “Independent”; added 14 days to deliberate staffing
- Enhanced use of DODAF data; tutorial added to JCIDS Manual