NR KPP Orientation

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Agenda

- 2003 “Interoperability” KPP
- 2004 “Net Ready” KPP
  - Compliance Areas
- 2008 “Net Ready” KPP
  - Compliance Areas
- Refining the NR KPP
  - Attributes
  - MOP/MOE
  - Architecture
- Summary of Changes
- “So What”
- Backup Slides

Introduction

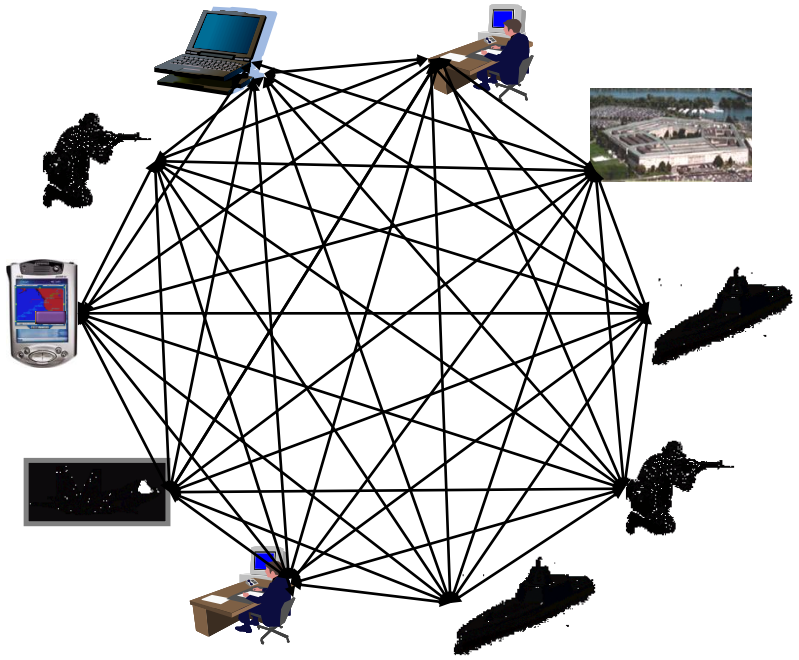
- NR KPP one of three CJCSI 3170 certifications
  - Weapons Safety Endorsement
  - Intel Cert
  - NR KPP Cert
- NR KPP one of six mandatory KPPs
  - force protection, survivability, sustainment, net-ready, training, and energy.

2003 RGS Interoperability KPP

One-to-One

Interoperability KPP centered around one DoD architectural view (OV-3) that contains "Information Exchange Requirements" (IERs)

- **One-to-one relationship (point-to-point)**
- **Testing verification required**
- **Not focused on Net-Centric concept of GIG**



Interoperability KPP	Threshold (T)	Objective (O)
All top-level IERs will be satisfied to the standards specified in the threshold (T) and Objective (O) values (**In blocks when applicable).**	100% of top-level IERs designated critical	100% of top-level IERs

*RGS – Requirements Generations Systtem (replaced by JCIDS in CJCSI 3170)
*IER – Information Exchange requirement

2003 RGS Interoperability KPP

Top-level IERs will be used as the basis to develop interoperability KPPs. The interoperability KPP definition will include that all top-level IERs will be satisfied to the standards specified in the threshold and objective values.

Typically the threshold criterion for the interoperability KPP will be 100 percent accomplishment of the critical top-level IERs, and the objective criterion for the interoperability KPP will be the accomplishment of all top-level IERs.

Interoperability KPP	Threshold (T)	Objective (O)
All top-level IERs will be satisfied to the standards specified in the Threshold (T) and Objective (O) values.	100% of top-level IERs designated critical	100% of top-level IERs

(CJCSI 6212.01B)

*IER – Information Exchange requirement

Early NR-KPP Background

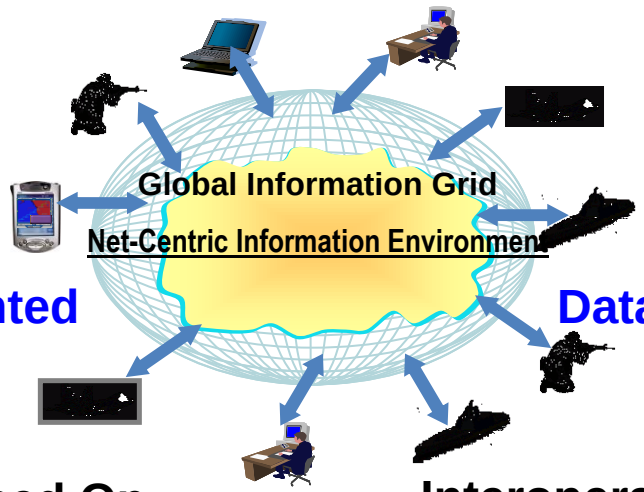
- **NR-KPP:**
  - Established to focus attention on information / information sharing
  - Not a traditional measurable testable KPP
  - **Compliance** measures establish implementation constraints
  - **Performance** and **effectiveness** measures were not addressed

2004 Net Ready Approach

Net Centric Interoperability

Ability to post and retrieve information to/from the common GIG information environment

Converged on IT standards



Net-Readiness

Ability of systems to enable warfighters to exercise control over enterprise information and services

Service oriented

Data sharing

Interoperability Based On:

- NCOW Reference Model
- Integrated architectures
- Key Interface Profiles
- Information Assurance

Interoperability Ensured By:

- J6 Interoperability & Supportability Certs
- NR-KPP Validation
- Joint Interoperability Test Certification
- Military Comm Electronics Board
- Joint Requirements Oversight Council

One-to-Many vs. One-to-One Information Exchanges

*NCOW -Net-Centric Operations and Warfare (NCOW) Reference Model
*KIPs -Key Interface Profiles
*IA -Information Assurance

2004 JCIDS Net Ready Key Performance Parameter (NR KPP) Elements

- Net-Centric Operations and Warfare (NCOW) Reference Model
- Integrated Architectures
- Key Interface Profiles (KIPs)
- Information Assurance

* JCIDS -Joint Capabilities Integration and Development System (CJCSI 3170)

2004 Net Ready KPP Statement

Net Ready KPP	Threshold (T)	Objective (O)
All activity interfaces, services, policy-enforcement controls, and data-sharing of the NCOW-RM and GIG-KIPs will be satisfied to the requirements of the specific Joint integrated architecture products (including data correctness, data availability and data processing), and information assurance accreditation, specified in the threshold (T) and objective (O) values.	100% of interfaces; services; policy-enforcement controls; and data correctness, availability and processing requirements designated as enterprise-level or critical in the Joint integrated architecture	100% of interfaces; services; policy-enforcement controls; and data correctness, availability and processing requirements in the Joint integrated architecture

*NCOW -Net-Centric Operations and Warfare (NCOW) Reference Model
*KIPs -Key Interface Profiles
*IA -Information Assurance

2008 Net Ready Key Performance Parameter (NR KPP) 5 Elements

NR KPP 5 Elements:

- Integrated Architectures
- Net-Centric Data and Services Strategy
- Compliance with Applicable Technical Standards and Interfaces through the GIG Technical Direction
- Compliance with mandatory DOD IA Requirements
- DOD Supportability Requirements

Compliance Artifacts "homework checking"

2008 JCIDS NR KPP Statement

*5 elements

KPP	Threshold (T)	Objective (O)
Net-Ready: The capability, system, and/or service must support Net-Centric military operations. The capability, system, and/or service must be able to enter and be managed in the network, and exchange data in a secure manner to enhance mission effectiveness. The capability, system, and/or service must continuously provide survivable, interoperable, secure, and operationally effective information exchanges to enable a Net-Centric military capability.	The capability, system, and/or service must fully support execution of joint critical operational activities identified in the integrated architectures and must satisfy the technical requirements for transition to Net-Centric military operations to include **1)** Integrated Architecture Products, **2)** Compliant with Net -Centric Data Strategy and Net-Centric Services Strategy, **3)** Compliant with GIG Technical Direction to include DISR mandated IT Standards reflected in the TV-1 and implementation guidance of GIG Enterprise Service Profiles (GESPs) necessary to meet all operational requirements specified in the integrated architecture system views **4)** Information assurance requirements including availability, integrity, authentication, confidentiality, and non-repudiation, and issuance of an interim approval to operate(IATO) by the Designated Approval Authority (DAA), and **5)** Supportability requirements to include SAASM, Spectrum and JTRS requirements.	The capability, system, and/or service must fully support execution of all operational activities identified in the integrated architectures and must satisfy the technical requirements for Net-Centric military operations to include 1) Integrated Architecture Products, 2) Compliant with Net -Centric Data Strategy and Net-Centric Services Strategy, 3) Compliant with GIG Technical Direction to include DISR mandated IT Standards reflected in the TV-1 and implementation guidance of GIG Enterprise Service Profiles (GESPs) necessary to meet all operational requirements specified in the integrated architecture system views 4) Information assurance requirements including availability, integrity, authentication, confidentiality, and non-repudiation, and issuance of an approval to operate (ATO) by the Designated Approval Authority (DAA), and 5) Supportability requirements to include SAASM, Spectrum and JTRS requirements.

2008 - 5 Elements of the NR-KPP (per current CJCSI 6212.01E):

- 1: Compliant Solution Architectures*
  - **1.1: DODAF* & DARS**
  - **1.2: DoD Information Enterprise Architecture***
  - **1.3: OVs and SVs in ISPs (with CDDs & CPDs)**
  - **1.4: Joint Common System Function List (JCSFL)**

- **2: Compliance with Net-Centric Data and Services Strategy***
  - 2.1: DoDD 8320.02 "Data Sharing in a Net Centric DoD"*
  - 2.2: DOD Net-Centric Services Strategy*
  - 2.3: "DISA services and tools
  - 2.4: Requirements: Data and Services must be visible, accessible, & understandable
  - 2.5: Verification of compliance using an Exposure Verification Tracking Sheet
  - 2.6: OV-7 & SV-11 in CPDs and MS-C ISPs

- **3: Compliance with Applicable Technical Standards and Interfaces**
  - 3.1: GIG Technical Guidance
  - 3.2: GESPs* (7 of ~40 completed)
  - 3.3: DISRonline
  - 3.4: GTG Compliance at MS B & C by identifying applicable GESPs

- **4: Compliance with mandatory DoD IA (and Critical Infrastructure Protection (CIP) Requirements**
  - 4.1: DODD 8580.1* and the DAG*
  - 4.2: DOD 8500 series* and CJCS 6510 series*
  - 4.3: IA Requirements
  - 4.4: OT for IA in TEMP

- **5: Compliance with mandatory DoD Supportability Requirements***
  - 5.1a: DODD 3222.03, "DoD Electromagnetic Environmental Effects (E3) Program"*
  - 5.1b: DODI 4650.01, "Policy for Management and Use of the EM Spectrum"*
  - 5.2: Use JTTRS
  - 5.3: CJCSI 6130.01D, "Anti-Spoofing of GPS"*

Compliance Artifacts "homework checking" with governance documents

2008 NR-KPP 5 Elements With Architecture Breakout

Document	Supportability Compliance	Integrated Architecture Products (IAW DODAF) (see Note 5)															Data/Service Exposure Sheets	IA Compliance	GTD Compliance
		AV-1 /AV-2	OV-1	OV-2	OV-3	OV-4	OV-5	OV-6C	OV-7	SV-1	SV-2	SV-4	SV-5	SV-6	SV-11	TV-1	TV-2			
ICD			X																	
CDD	X	3	X	X	X	X	X	X			X	X	X	X		2	2	1	X	X
CPD	X	3	X	X	X	X	X	X	1		X	X	X	X	1	2	2	1	X	X
ISP	X	3	X	X	X	X	X	X	4		X	X	X	X	4	2	2	1	X	X
TISP	X	3	X		X		X	X		X			X	X		2	2	1	X	X
ISP Annex (Svcs/ Apps)	X	3	X				X				X	X	X	X		2	2	1	X	X
X		Required (PM needs to check with their Component for any additional architectural/regulatory requirements for CDDs, CPDs, ISPs/TISPs. (e.g., HQDA requires the SV-10c)																		
Note 1		Required only when IT and NSS collects, processes, or uses any shared data or when IT and NSS exposes, consumes or implements shared services,																		
Note 2		The TV-1 and TV-2 are built using the DISRonline module of the GTD and must be posted for compliance.																		
Note 3		The AV-1 must be uploaded onto DARS and must be registered in DARS for compliance																		
Note 4		Only required for Milestone C, if applicable (see Note 1)																		
Note 5		The naming of the architecture views is expected to change with the release of DODAF v2.0 (e.g., StdV, SvcV, StdV, DIV). The requirements of this matrix will not change.																		

*Compliance Areas “homework checking”

NR KPP Refinement

- Current Net Ready Key Performance Parameter (NR KPP)
  - Too Broad
  - Not Measurable or Testable
  - Ambiguous, contains “compliance areas” (homework checking)
  - No longer answers the “So What” for certification or provide the operational impact if not interoperable
- NR KPP Refined
  - NR KPP refined by synchronizing all the ASD/NII, AT&L, MCEB, NC FCB, RDA CHSENG, DISA OAS/DNII, DISA JITC, JFCOM and Services efforts thru a year long working group
  - Refined NR KPP: maps back to military operations
    - ATTRIBUTES : Support Military Operations; Enter And Be Managed in the Network; Exchange Information
    - MEASURABLE/TESTABLE: User/PM Developed MOE and MOP; Objective and Threshold Values.
    - VALIDATED BY ARCHITECTURE
  - CJCSI 6212.01F
    - Reviewed by 31 organizations (AO, O-6, FOGO) that concur, adjudicated 72 critical comments.
    - Refined down to the NR KPP (128 pages down to 61 pages) to what JCIDS requires, Integrators, Assessors, Users, PMs, Reviewers have to do.
    - NR KPP “Online” Manual created (Tell Integrators, Assessors, Users, PMs, Reviewers how to do it)

6212 F NR KPP and 6212E I&S Cert

6212.01 F NR KPP*

NR-KPP Attribute	Key Performance Parameter	Threshold	Objective
Support net-centric military operations	Mission: Tracking and locating (Finding, Fixing, Finishing) High-Value Target (HVT) -Measure: Dissemination of acquisition data for HVT -Conditions: C 2.3.1.6 Communications Connectivity	 --10 minutes --Continuous	 --Near-Real-Time --Continuous
	Mission Activities: Find HVT --Measure: Location accuracy --Conditions: C 2.4.6 Certitude of Data	 --100 Meter circle --High	 --25 Meter circle --Absolute
Enter and be managed in the network	Network: SIPRNET --Measure: Time to connect to an operational network from power up --Conditions: C 2.3.1.6 Communications Connectivity	 --2 minutes --Continuous	 --1 minute --Continuous
	Network: NIPRNET --Measure: Time to connect to an operational network from power up --Conditions: C 2.3.1.6 Communications Connectivity	 --2 minutes --Continuous	 --1 minute --Continuous
Exchange information	Information Element: Target Data --Measure: Dissemination of HVT biographic and physical data --Measure: Latency of HVT biographic and physical data --Conditions: C 1.3.5 RF Spectrum	 --10 seconds --5 seconds --Unrestricted	 --5 seconds --2 seconds --Unrestricted

6212.01E I&S 5 Elements

1. NR KPP Table
2. Data Strategy -Blue Sheets
   - Date exposure
   - Service exposure
3. GIG Technical Guidance
   - IT Standards (TV1/TV2)
4. Information Assurance
   - DIACAP Knowledge Service
   - MAC, CL and IA Controls
5. Supportability
   - DD Form 1494
   - Bandwidth Analysis

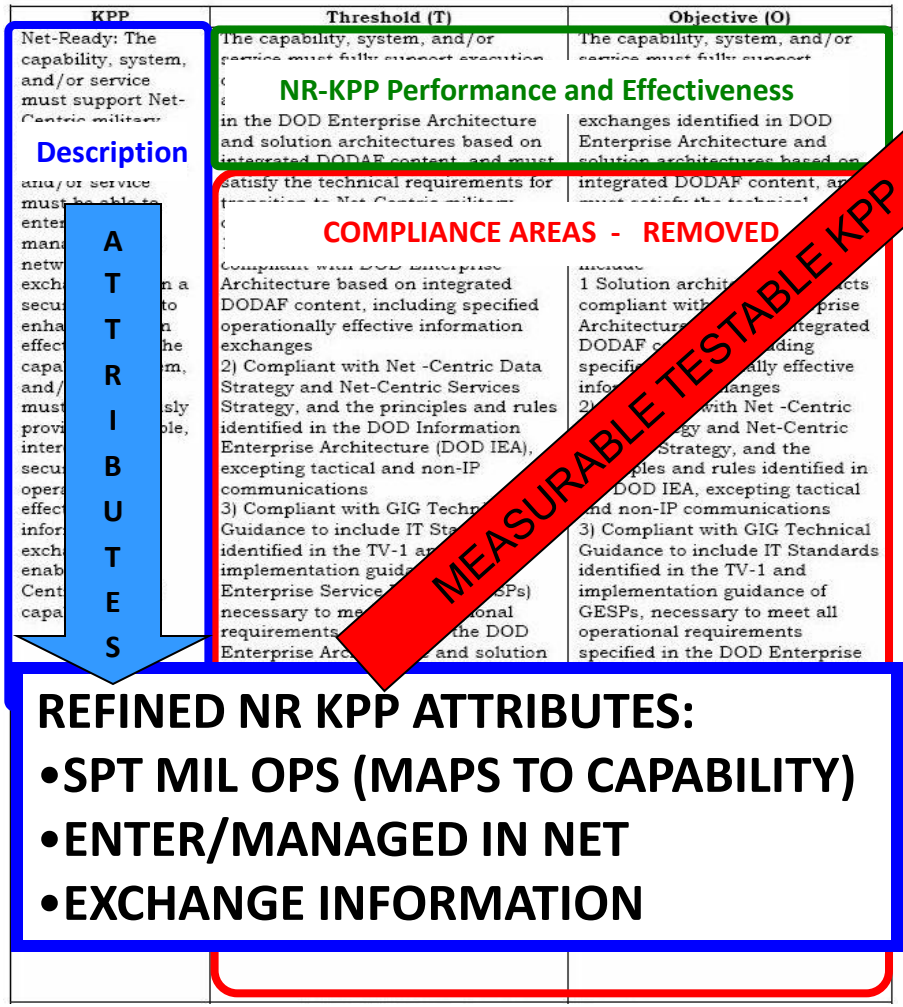
10/31/2012

*And Architecture Data

NR KPP REFINED FROM OLD NR KPP TO USER/PM DEVELOPED MEASURABLE/TESTABLE NR KPP KPP

OLD NR KPP
- BASED ON 5 "COMPLIANCE AREAS "
- NOT MEASURABLE/TESTABLE

REFINED NR KPP
- ATTRIBUTES
- MEASURABLE/TESTABLE
- VALIDATED BY ARCHITECTURE



KPP	Threshold (T)	Objective (O)
The capability, system, and/or service must	Effectiveness Measures	Effectiveness Measures
- Support Net-Centric military operations	Performance Measures	Performance Measures
- Enter and be managed in the network		
- Exchange Information		

REFINED NR KPP EXAMPLE

NR KPP Attribute	Key Performance Parameter	Threshold	Objective
Support to military operations	Mission: Tracking and locating (Finding, Fixing, Finishing) High-Value Target (HVT) Measure: Timely, actionable dissemination of acquisition data for HVT Conditions: Targeting quality data to the neutralizing/tracking entity	10 minutes Area denial of HVT activities	Near-real-time HVT tracked, neutralized
	Mission Activities: Find HVT Measure: Location accuracy Conditions: Individual differentiation	100 meter circle Identify armed/not armed	25 meter circle Identify individual
Enter and be managed in the network	Network: SIPRNET Measure: Time to connect to an operational network from power up Conditions: Network connectivity	2 minutes 99.8	1 minute 99.9
	Network: NIPRNET Measure: Time to connect to an operational network from power up Conditions: Network connectivity	2 minutes 99.8	1 minute 99.9
Exchange information	Information Element: Target Data Measure: Dissemination of HVT biographic and physical data Measure: Receipt of HVT data Measure: Latency of data Measure: Strength of encryption Conditions: Tactical/Geopolitical	10 seconds Line of Sight (LOS) 5 seconds NSA certified type 1 Permissive environment	5 seconds Beyond LOS 2 seconds NSA certified type 1 Non-permissive environment

Three Attributes of the NR-KPP Description

NR-KPP Description	Attribute	Metrics	Used For	Data Sources
Support net-centric military operations	Military Operations (e.g. mission areas or mission threads)	Effectiveness Measures used to determine success of the military operation	NR-KPP Effectiveness Measures	JMETLs and NMETLs
		Conditions under which the military operations must be executed		
	Operational tasks required by the military operations	Operational Performance Measures used to determine activity performance	NR-KPP Performance Measures	JMETLs and NMETLs
		Conditions under which the activity must be performed		
Enter and be managed in the network	Which networks do the net-centric military operations require	Operational Performance Measures for entering the network	NR-KPP Performance Measures	N/A
		Operational Performance Measures for being managed in the network		
Exchange Information	Information produced and consumed by each military operation and operational task	Operational Performance measures to ensure exchanges are: Continuous Survivable Interoperable Secure Operationally Effective	NR-KPP Performance Measures	DoDAF OV-3 Operational Information Exchange Matrix

NR KPP Example

NR KPP Attribute	Key Performance Parameter	Threshold	Objective
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Supporting NR KPP Architecture DATA – Yikes!

Document/ Architecture	AV-1	AV-2	CV-1	CV-2	CV-3	CV-4	CV-5	CV-6	DIV-1	DIV-2 (OV-7)	DIV-3 (SV-11)	OV-1	OV-2	OV-3	OV-4	OV-5a	OV-5b	OV-6a	OV-6c	PV-2	SV-1 or SvcV-1	SV-2 or SvcV-2	SV-4 or SvcV-4	SV-5a or SvcV-5	SV-6 or SvcV-6	SV-7 or SVcV-7[6]	SvcV-10a	SvcV-10b	SvcV-10c	StdV-1 (TV-1)	StdV-2 (TV-2)
DCR	1		R	R	R	R						R														R					
CONOPS	1		R	R	R	R		R				R	R		R	R										R					
ICD	1	X	R	R	R	R		R				X	X		X	X	O									R					
CDD	1	X	X	X	X	X	X	X		X		X	X	X	X	X	X		X	X	X	X	X	X	X	X				X^2	X^2
CPD	1	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X				X^2	X^2
IC[3, 4]	X	X	X	X			X		X	X		X	X	X		X	X	X	X		X	X	X	X	X		X	X	X	X	X
Legend		X – Required O – Optional R- Recommended, PM needs to check with their Component for any additional architectural/regulatory requirements for CDDs, CPDs. (e.g., HQDA requires the SV-10c, USMC requires the SV-3, IC requires the SvcV-10a and SvcV-8)																													
Note 1		The AV-1 must be registered, must be “public” and “released” at the lowest classification level possible in DARS for compliance.																													
Note 2		The technical portion of the StdV-1 and StdV-2 are built using GTG-F DISR standards profiling resources and, within six months of submitting JCIDS documentation, must be current and published for compliance. Use of non-mandated DISR standards in the StdV-1 must be approved by the PM or other duly designated Component cognizant official and documented by a waiver notification provided to the DoD CIO."																													
Note 3		Intelligence Community (IC) requirements IAW the IC Enterprise Architecture Program Architecture Guide and development phase which clarifies the IC Policy Guidance 801.1 Acquisition.																													
Note 4		Service Views (SvcV) only																													
Note 5		1. The Sponsor* and the Program are jointly responsible for the AV-1, AV-2, CV-1, CV-2, CV-3, CV-4, CV-5, CV6, SV-6 or SvcV-7. 2. The Sponsor* is responsible for the development of the architecture data for the OV-1, OV-2, OV-4, OV-5a, OV6c, DIV-2, and the SV-6 or SvcV-6. 3. The Program is responsible for the development of the architecture data for the DIV-1, DIV-3, OV-3, OV-5b, OV-6a, PV-2, SV-1 or SvcV-1, SV-2 or SvcV-2, SV-4 or SvcV-4, SV-5a or SvcV-5, SvcV-10a, SvcV-10b, SvcV-10c, StdV-1, and StdV-2. * Operational user (or representative).																													
Note 6		The NR-KPP Measures data is captured in the SV-7 or the SvcV-7.																													

CJCSI 6212.01F Summary of Changes

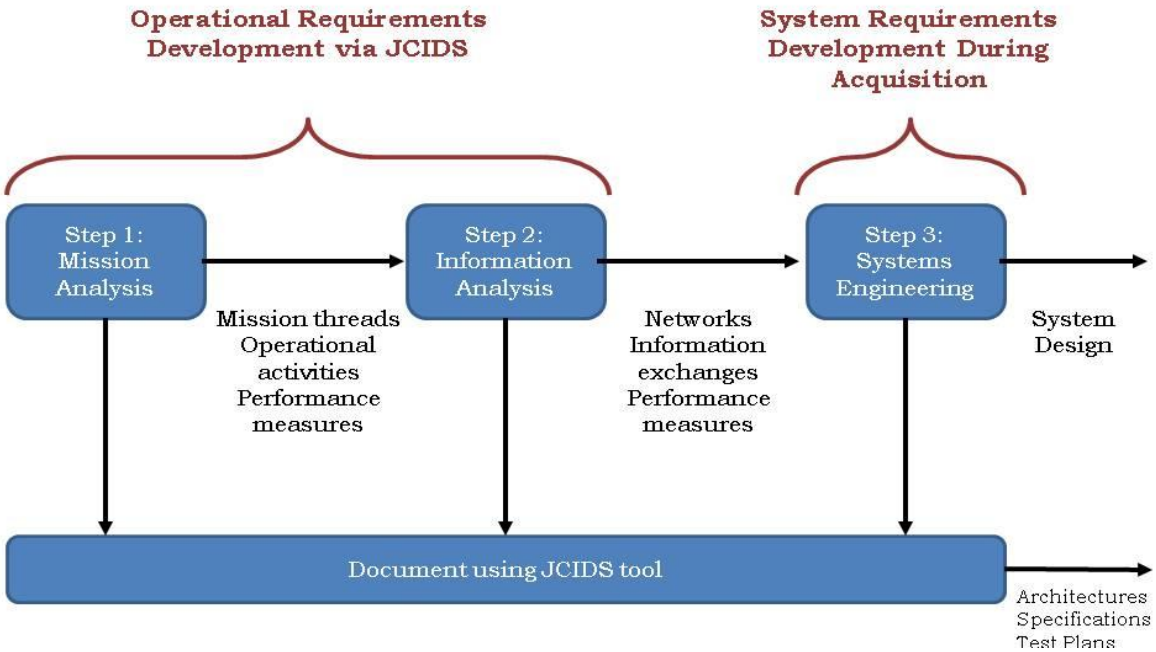
- This revision to the CJCSI 6212.01F eliminates former NR-KPP elements and activities accomplished through other processes (information assurance, data and services strategy, GIG Technical Guidance compliance, and supportability compliance). Previous NR KPP requirement included five elements, their disposition is described below,
  - (1) Compliant solution architecture – within the context of the refined NR KPP - now DODAF Architecture data or the optional NR KPP architecture data assessment template
  - (2) Net Centric data and services strategy – requirement still exists, along with the "blue sheets" in the Information Support Plan (ISP) but can also be analyzed within the DODAF Architecture data or the optional NR KPP architecture data assessment template.
  - (3) GIG Technical Guidance (GTG) - requirement still exists in the Information Support Plan (ISP), additionally standards can be analyzed within the DODAF Architecture data or the optional NR KPP architecture data assessment template.
  - (4) DOD Information Assurance (IA) requirement – requirement still exist, however it is the DAA responsibility, additionally, IA can be analyzed within the DODAF Architecture data or the optional NR KPP architecture data assessment template.
  - (5) Supportability requirements –requirement still exists in the Information Support Plan (ISP) but spectrum compliance will continue to be analyzed within the refined NR KPP.

  b. The NR-KPP was redefined as three attributes focused on program-specific, validated, verifiable performance measures and metrics.

  c. NR-KPP architecture development methodology (based on DODAF architecture or the NR-KPP architecture data assessment template) was added with a requirement to align with DOD Information Enterprise Architecture (IEA), the current DODAF, JIE ORA and JCSFL.

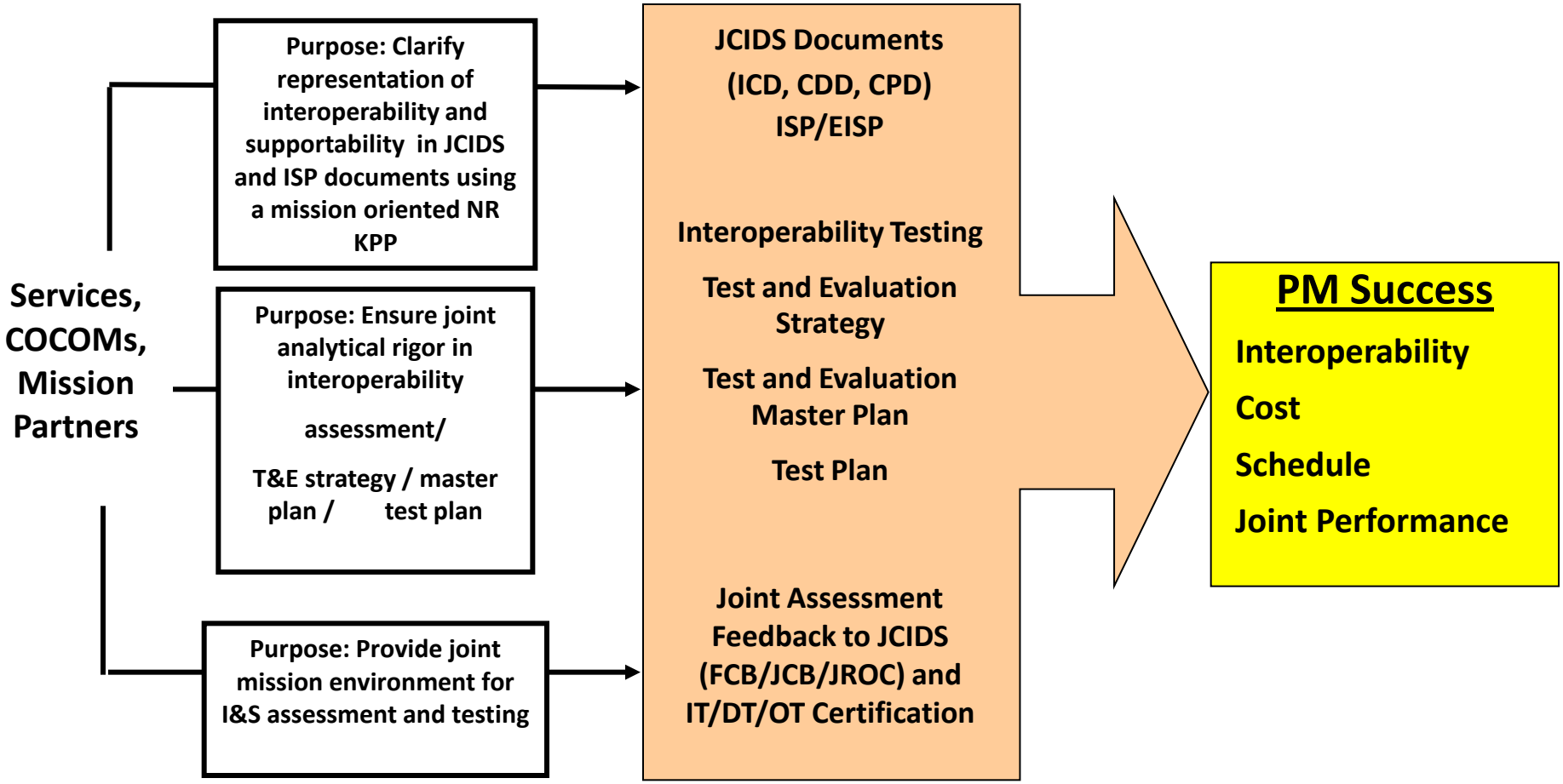
  d. Process details were removed from the instruction and added to the CJCSI 6212 Manual page to allow for more rapid dissemination of changes.

NR-KPP Development Applied to the CJCSI 3170 "JCIDS" and Acquisition Processes



1.Step 1: Mission Analysis. Mission analysis determines the IT's operational requirements in terms of missions, mission tasks, and associated mission effectiveness and operational performance measures;
2.Step 2: Information Analysis. Information analysis determines the IT's information requirements in terms of required networks, mission thread information elements, and associated operational performance measures; and
3. Step 3: Systems Engineering. Systems engineering decomposes NR-KPP requirements defined in mission analysis and information analysis into system performance metrics for use during system design. It also demonstrates how the IT satisfies operational and information requirements.

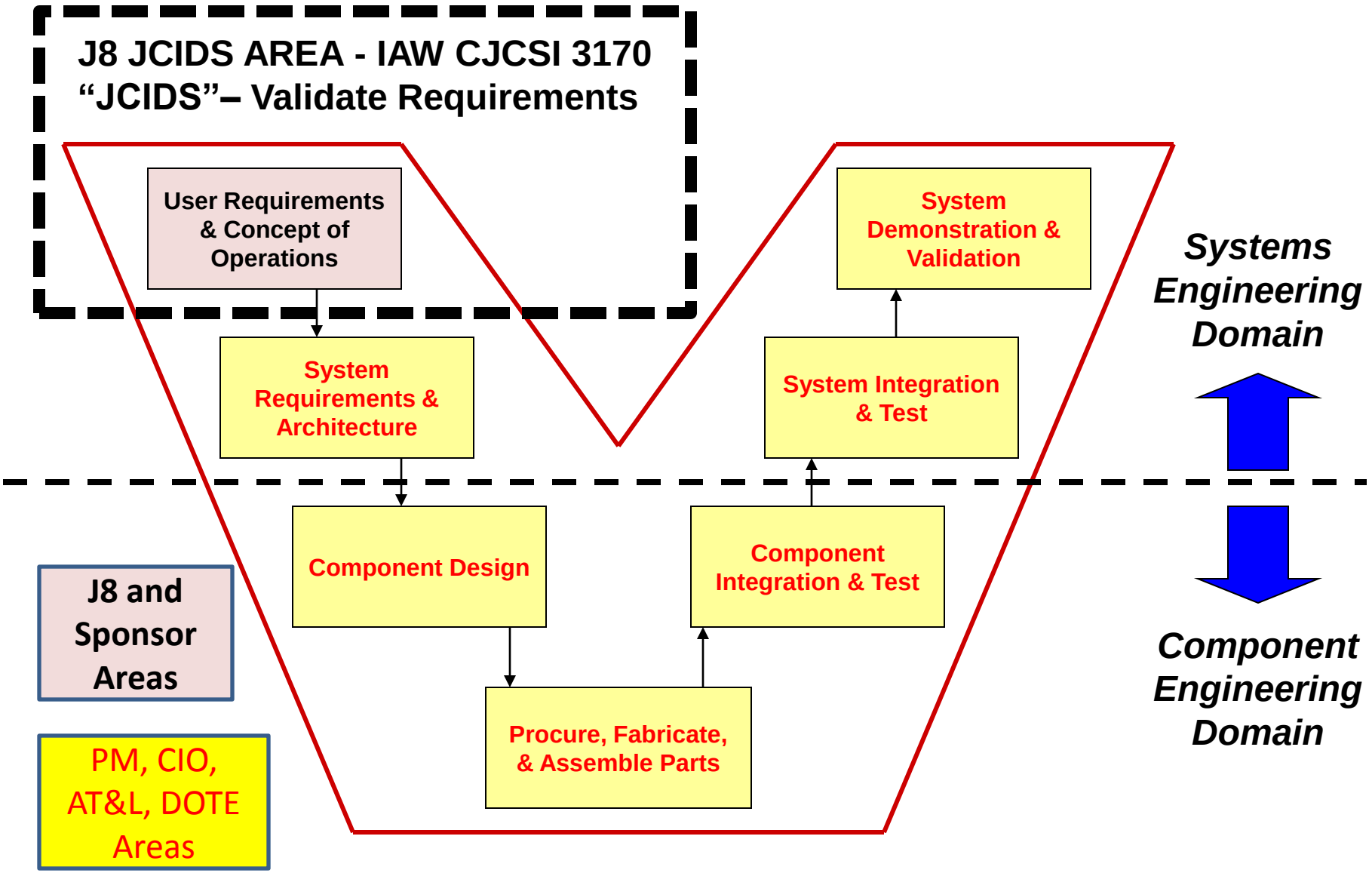
I&S "So What"



Supporting the PMs through Joint Requirements, Joint Mission Threads, Joint Assessment,

Give decision makers a "trade space" to make capability decisions with the right interoperability recommendation and operational impacts

Where J8 “Fits” in System Engineering



Documents Review

MCEB Panels (ICP/IP)	JAN – DEC 2010	
ISP Legacy Waivers	64	
Test Exemptions	69	
TISPs	51	
ICTOs	329	
SUBTOTAL	**513**	
JCIDS ETC	**FEB 2010-JAN 2011**	**FEB 2009-JAN 2010**
ICD	77	
CDD	39	
CPD	45	
ORD	4	
CONOPS	13	
DCR	19	
ISP	120	
TISP	84	
Other	5	
SUBTOTAL	406	451
TOTAL	**919**	

ISP = Information Support Plan

BACKUP

- BACKUP

NR-KPP Architecture Data Assessment Template

NR-KPP Architecture Data Assessment Template Summary

- The NR-KPP has transitioned to a measures-based approach, based on:
  - The change from a “product-focus” to a “data-focus” with DoD Architecture Framework (DoDAF) Version 2.0
  - DoDAF supporting metrics for capabilities, operational activities, systems, services, etc.
- Supporting the measures –based approach, the “NR-KPP architecture data assessment template” indicates:
  - The minimum architecture data required,
  - Based on the DoDAF V2.0 Meta model (DM2)
  - Based on the JCIDS or BCL lifecycle stage, and
  - Organized by the DM2 concept.

NR-KPP Architecture Data Assessment Template Summary

- The "NR-KPP architecture data assessment template":
  - Contains 50 DM2 Primary and Relationship concepts and they build on each other throughout the lifecycle.
  - Is an interim data collection mechanism until the commercial architecture tools can capture the DoD Architecture Framework (DoDAF) V2.0 architecture data and can exchange the architecture data.
  - Is a complicated spreadsheet.
  - Geared for the Architect.
  - Has information supporting programs transitioning from the CJCSI 6212.01E "product-focus" to the 6212.01F "data-focus".
- With other tools, may support interoperability analysis.

NR KPP Architecture Assessment Template

Sections / Document	AV-1	AV-2	CV-2	CV-3	CV-6	DIV-2 (OV-7)	DIV-3 (SV-11)	OV-1	OV-2	OV-3	OV-4	OV-5a	OV-5b	OV-6c	SV-1 or SvcV-1	SV-2 or SvcV-2	SV-4 or SvcV4	SV-5a or SvcV-5	SV-6 or SvcV-6	StdV-1 (TV-1)	StdV-2 (TV-2)
ICD	2		X	X	X			X			X	X	O								
CDD	2	X	X	X	X	1	1	X	X	X	X	X	X	X		X	X	X	X	3	3
CPD	2	X	X	X	X	1, 4	1, 4	X	X	X	X	X	X	X		X	X	X	X	3	3
ISP[5]	2	X	X	X	X	1	1	X	X	X	X	X	X	X		X	X	X	X	3	3
TISP[5]	2	X	X	X	X	1	1	X		X		X	X	X	X			X	X	3	3
Legend	X – Required O – Optional																				
Note 1	Required when IT and NSS collects, processes, or uses any shared data, or when IT and NSS exposes, consumes, or implements shared services.																				
Note 2	The AV-1 must be registered, and must be public and released at the lowest classification level possible in DARS for compliance.																				
Note 3	The technical portion of the StdV-1 and StdV-2 are built using DISRonline and must be current for compliance.																				
Note 4	Not required for JROC approved Operational Requirements Documents.																				
Note 5	DBS IT and legacy IT and NSS joint I&S certification is applied to the IT or NSS' ISP or TISP																				

Primary Concepts

Primary Tabs / Document	Architecture	Activity	Capability	Condtion	File-Database Name	Location	Logical Entity	Measure (Metric)	Organization	Performer	Phase	Physical Entity	Port	Rule-Standard	Resource	View
ICD	X	X	X	O		X			X	O	X				X	X
CDD	X	X	X	X		X	1	X	X	X	X	1	X	X	X	X
CPD	X	X	X	X	O	X	1	X	X	X	X	1	X	X	X	X
ISP	X	X	X	X	O	X	1	X	X	X		1	X	X	X	X
TISP	X	X	X	X		X		X		X				X	X	X
Legend	X - Required O - Optional															
Note 1	Required only when IT and NSS collects, processes, or uses any shared data or when IT and NSS exposes, consumes or implements shared services.															

Relationship Concepts

Relationships / Document	ActivityByPerformer	Activity Resource Flow	ActivityPerformerRule	ActivitySequence	ActivitytoFunc(Sys-Svc)	ActivitytoSystem	Capability-Activity	Capability-Organization	Condition Applies To	Consume-Produce Activity Hier	Data Flow	Data Flow Attribute Description	Hierarchy	Logical EntityAttribute	Logical Relationship	Logical Relationship Desc	Measure Applies to	Physical Entity Attribute	Physical Relationship	Physical Relationship Desc	Port Interface	Related Architectures	Resource Attribute Description	Resource Flow	RuleApplies to
ICD	O						3	X	X	O			3									X	X	X	
CDD	X	X	X	X	2	2	X	X	X	X	X	X	X				X				X	X	X	X	X
CPD	X	X	X	X	2	2	X	X	X	X	X	X	X	1	1	1	X	1	1	1	X	X	X	X	X
ISP	X	X	X	X	2	2	X		X	X	X	X	X	1	1	1	X	1	1	1	X	X	X	X	X
TISP	X	X	X	X	2	2	X		X	X			X				X					X	X	X	X
Legend	X - Required O - Optional																								
Note 1	Required only when IT and NSS collects, processes, or uses any shared data or when IT and NSS exposes, consumes or implements shared services.																								
Note 2	Activity to System or Activity to Function may be required depending on the systems and services implemented.																								
Note 3	Required for the definition of capabilities.																								

Model to Concept Mapping

I&S Certification Fit-For-Purpose Model Area	AV-1	AV-2	CV-2	CV-5	CV-6	DIV-2	DIV-3	OV-1	OV-2	OV-3	OV-4	OV-5a	OV-5b	OV-6c	SvcV-1	SvcV-2	SvcV-4	SvcV-5	SvcV-6	SV-1	SV-2	SV-4	SV-5a	SV-5b	SV-6	StdV-1	StdV-2
Architecture	X																										
Activity					X							X	X	X	X	X		X	X	X	X		X	X	X	O	O
Capability	X		X	X	X																						
Condtion													X	X	X	X			X	X	X				X	O	O
File-Database Name																	X					X					
Location									X																		
Logical Entity						X	X			X																	
Measure (Metric)													O	X					X						X		
Organization	X										X																
Performer													X	X	X	X	X		X	X	X	X			X	O	O
Phase				X																							
Physical Entity							X												O						O		
Port																X			X		X				X		
Rule-Standard																X			X		X				X	X	X
Resource									X	X			X	X						X	X				X		
View	X	O	O	O	O	O	O	X	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
ActivityByPerformer													X	X	X	X			X	X	X				X	O	O
Activity Resource Flow														X					X						X		
ActivityPerformerRule																O					O					O	O
ActivitySequence														X					X						X		
ActivitytoFunc(Sys-Svc)																		X					X				
ActivitytoSystem																								X			
Capability-Activity					X																						
Capability-Organization				X																							
Condition Applies To	O	O											X	X	X	X			X	X	X				X	O	O
Consume-Produce Activity Hier													X	X	X	X			X	X	X				X		
Data Flow																	X					X					
Data Flow Attribute Description																	X					X					
Hierarchy			X								X	X					X					X					
Logical EntityAttribute						X																					
Logical Relationship						X	X																				
Logical Relationship Desc						X																					
Measure Applies to													O	X					X						X		
Physical Entity Attribute							X																				
Physical Relationship							X																				
Physical Relationship Desc							X																				
Port Interface																X					X						
Related Architecture	X																										
Resource Attribute Description									X				O	O	O	O			X	O	O				X		
Resource Flow									X	X			X	X	X	X			X	X	X				X		
RuleApplies to																										X	X

NR KPP Architecture Questions

Architecture View / Document	AV-1	AV-2	CV-2	CV-3	CV-5	CV-6	DIV-2 (OV-7)	DIV-3 (SV-11)	OV-1	OV-2	OV-3	OV-4	OV-5a	OV-5b	OV-6c	SV-1 orSvcV-1	SV-2 orSvcV-2	SV-3 orSvcV-3	SV-4 orSvcV-4	SV-5 orSvcV-5	SV-6 orSvcV-6	StdV-1	StdV-2
ICD	1	1	1	1	1	1			1,2, 7	2		4				3,7							
Pre-CDD ISP or TISP	1	1				3,7			3,7	2	2,4, 5,10	4	4,5		4	3,7	3,8	3	3,4, 9	4,9	4,5, 8, 10		
Pre-CDR ISP or TISP	1	1				3,7	2,6	2,6	3,7	2	2,4, 5,10	4	5	5	4	3,7	3,8	3	3,4, 9	4,9	4,5, 8, 10	6	
Pre-FRP ISP or TISP	1	1				3,7	2,6	2,11	3,7	2	2,4, 5,10	4	5	5	4	3,7	3,8	3	3,4, 9	4,9	4,5, 8, 10	11	11
Legend	The number in each block references the architecture development question(s) that apply.																						

1. **What Military or Business Operations does the solution support?**
2. **Who has the information you need and to whom do you need to give information?**
3. **How does the materiel solution develop, operate (use) or maintain networks or interact with the joint network?**
4. **What does the IT or NSS need to do to meet the user's needs and how will information be sent and received and comply with DOD IEA?**
5. **How well do the information exchanges need to be performed?**
6. **Are communications understandable?**
7. **What are the data formats of the systems information is exchanged with?**
8. **What are the data fields, sequence, and length of the exchanges?**
9. **What specifications and standards are you using to assure the systems can interoperate?**
10. **What systems have the information in them?**
11. **How is information moved (in and out)?**
12. **What solution characteristics are needed to support the operational activities and required communications?**
13. **What are the testable characteristics of communications between materiel solutions?**
14. **How does the materiel system address the unanticipated user?**

Capability Develop Tool Module CDTM

NR KPP Module Output Example