CJCSI 3170.01B
Requirements Generation System
(One Year Later)

Colonel Michael T. Perrin

Chief, Requirements and Acquisition Division, J-8

The Joint Staff

Report Documentation Page

Report Date	Report Type	Dates Covered (from... to)
15052001	N/A	-

Title and Subtitle CJCSI 3170.01B Requirements Generation System (One Year Later)	**Contract Number**
	Grant Number
	Program Element Number
Author(s) Perrin, Michael T.	**Project Number**
	Task Number
	Work Unit Number
Performing Organization Name(s) and Address(es) The Joint Staff	**Performing Organization Report Number**
Sponsoring/Monitoring Agency Name(s) and Address(es) NDIA (National Defense Industrial Association 2111 Wilson Blvd., Ste. 400 Arlington, VA 22201-3061	**Sponsor/Monitor's Acronym(s)**
	Sponsor/Monitor's Report Number(s)

Distribution/Availability Statement
Approved for public release, distribution unlimited

Supplementary Notes
Proceedings from 3rd Simulation Based Acquisition conference, 15-17 May 2001, sponsored by NDIA, The original document contains color images.

Abstract

Subject Terms

Report Classification unclassified	**Classification of this page** unclassified
Classification of Abstract unclassified	**Limitation of Abstract** UU

Number of Pages
20

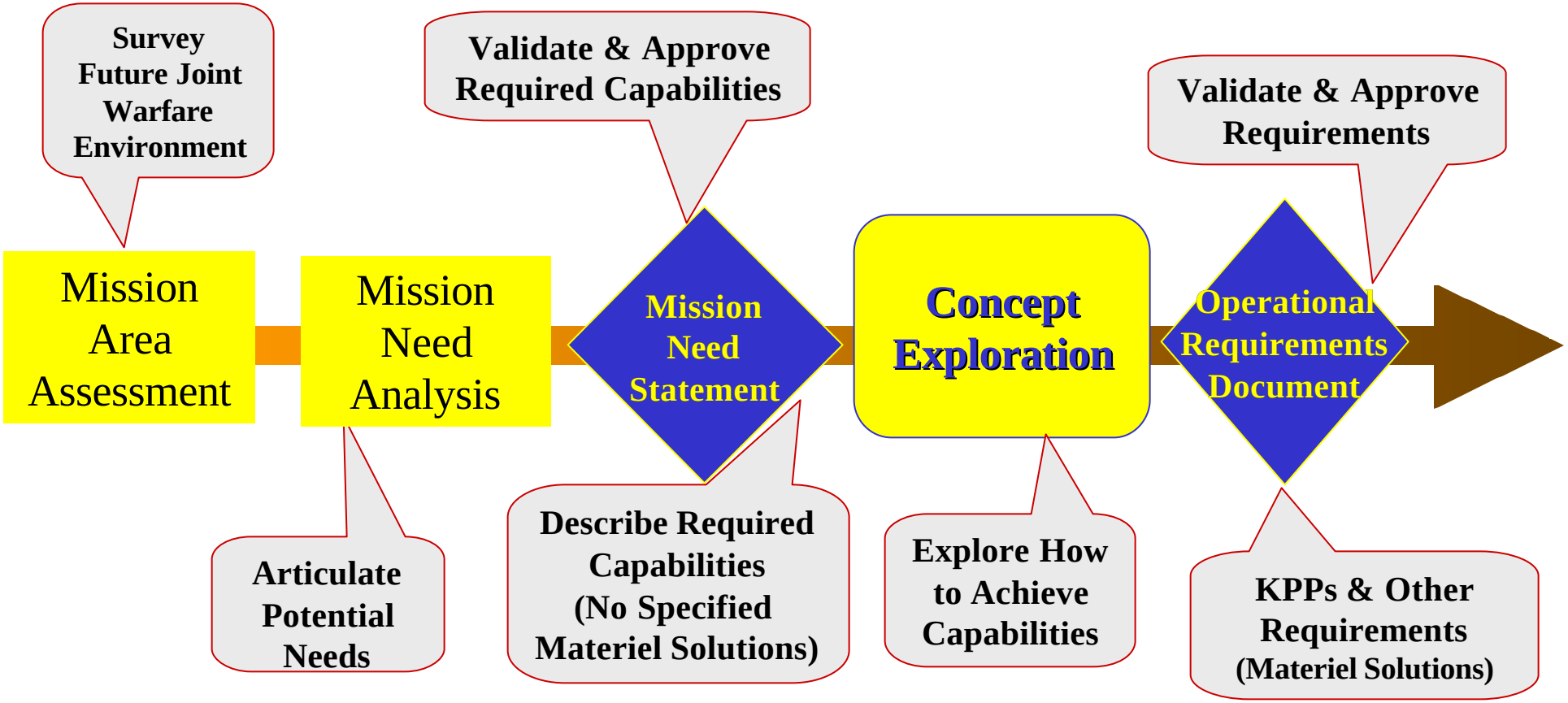
Agenda

- **Introduction**
- **CJCS 3170 Changes**
- **Role of M&S**
- **Summary**
- **Questions**

Joint Vision 2020

"Up-front" planning must provide the framework for identifying future operational capabilities!

Requirements Generation Process



CJCSI 3170.01A

SWARF

Automated Information Systems

JFCOM Role

Affordability

Interoperability

CRD/ORD KPP

Time Phased Requirements

Information Exchange Requirements

CRD Development & Lead Responsibilities

Interoperability: JFCOM Role

JFCOM will serve as the Chairman's advocate for joint warfighting interoperability.

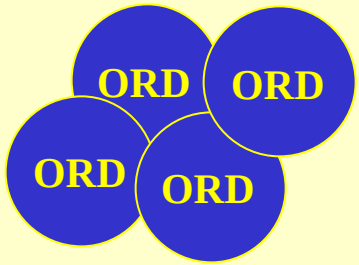
- **JFCOM**
  - **Coordinates with the Joint Staff J6, ASD(C3I) and the CINCs in development of the C4ISR Joint Operational Architecture (JOA).**
  - **Provides comments on unresolved Interoperability issues at the JROC.**
  - **Is available to comment on interoperability issues that are forwarded to the DAB by the JROC.**
  - **Coordinates on all C4ISPs (contains IA areas)**
  - **Is Lead for Joint Experimentation**

Enforcing Interoperability

Capstone Requirements Document

Establishes the Information Exchange and Interoperability requirements for the Family of Systems. Leads to the development of the Mission Area architectures

CINC Lead



ORDs comply with CRD Interoperability KPP as price of membership into the Family of Systems

Service Lead

CRD Development and Lead Responsibilities

- **CRD development approved by JROC**

- **CRD contains Interoperability KPP**

- **CRD lead will**

  - Accompanies all ORDs falling under the CRD through the JROC and acquisition milestone reviews

  - Ensures the ORDs KPPs map to the CRD

Information Exchange Requirements (IERs)

***Definition*:**

Requirements for information to be passed between and among Joint forces, organizations, or administrative structures.

(DOD C4ISR Architecture Framework Version 2.O)

***Identifies*:**

- ***WHO*** **exchanges**
- ***WHAT*** **information**
- **with *WHOM***
- ***WHY*** **the information is necessary**
- ***HOW*** **the information is used**
- ***ATTRIBUTES (READ METRICS)*** **to further define the requirement and add levels of detail necessary to support the warfighter**

Time-Phased Requirements

- **Supports Evolutionary Acquisition**

- **Fields system in increasing increments of capability as defined by:**
  - **Warfighter needs**
  - **Evolving threat**
  - **Available technology**
  - **Affordability**

Time-Phased Requirements (*Guidelines)*

- JROC approved KPP's ***must*** be achieved in the specified increment
  - If increments are not defined in the ORD, all KPP thresholds must be met in the first increment

- Delegated ORD approval authorities may approve "block" ORD's if no KPP's are involved

- Each Increment ***must*** have ***standalone*** military utility
  - Must be acceptable to the user even if no further increments are funded (per Clinger-Cohen)

Time-Phased Requirements (*Strategies)*

- **New ORD for each block**
  - **Suitable for slowly developing programs**
- **Multiple-Block ORD**
  - **Define multiple blocks in the same ORD - captures old "P3I"**
- **ORD Update for each block**
  - **Rapid turnaround update---staff changes only**

Addressing Cost in ORD

- **Cost will be addressed in the ORD**
- **Inclusion of cost allows DoD component sponsor to emphasize affordability early in the proposed program**
- **Cost figure should be stated in terms of a threshold and Objective (not necessarily a KPP)**
- **The cost figure should provide flexibility to allow for program evolution and CAIV trade studies**
- **DoD component sponsor may make cost a KPP if it desires and identify the cost it wishes to evaluate**

CJCSI 3170.01B (Interim) Changes

DOTMLPF

Jointness

Environmental Impacts

Noise

Endangered Species

More Emphasis on Time-Phased Requirements

Warfighting Capability Early

New Milestone Designations

MS A

MS B

MS C

DOTMLPF

(Doctrine, Organization, Training, Materiel, Leader Development, Personnel & Facilities)

- **Review for Joint implications**
- **Identify deficiencies and determine solutions and cost**
- **Submit to JROC for approval of solutions and resources**
- **JFCOM has major role – Joint Experimentation**

Roles for M&S

Measuring M&S Effectiveness

- **Outcome-Based Measures**
  - Reduced total ownership costs
  - Reduced acquisition cycle times
  - Increased operational capability
  - Improved ability to concurrently deploy systems with their training devices

- **Process-Based Measures**
  - Ability to reuse M&S
  - Extent of collaboration
  - Remain cost effective
  - Extent of netted and distributed network

Earlier deployment of affordable, leading-edge capabilities to warfighters

Environmental Impacts

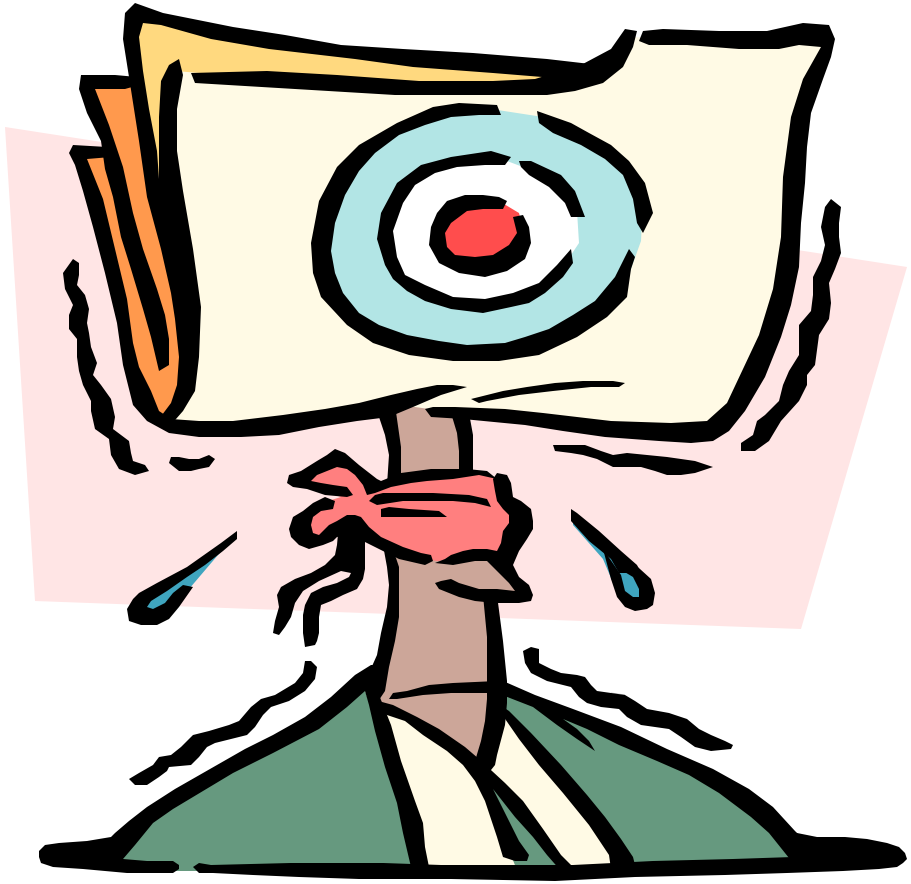
(Noise, Air, Soil, Endangered Species & Other Effects)

- **Encroachments into training areas – reduces proficiency**
- **Restrictions on DT and OT – cannot stress systems on test ranges**
- **Saturation of frequency spectrum – less bandwidth availability**
- **Must be addressed during requirements generation and early system design – Pay Now or Pay Later!**

Summary

- **Greater warfighter role in requirements generation**
- **Clear focus on interoperability**
- **Supports evolutionary acquisition & time-phased requirements**
- **Streamlines staffing process where appropriate**
- **More emphasis on DOTMLPF – M&S can add value!**
- **Considers environmental impacts**
- **Early fielding of warfighting capability - M&S can add value!**

Questions



Contact Information

Name: Colonel Michael T. Perrin, USA

Title: Division Chief, Requirements and Acquisition Division
J-8, The Joint Staff

Phone: (703) 614-9760

Fax: (703) 614- 4701

Email: perrinmt@js.pentagon.mil