

This briefing is UNCLASSIFIED



Capabilities Overview

**National Defense Industrial Association
18 February 2004**

**Brigadier General Ken Hunzeker
Vice Director, J-8, Force Structure, Resources and Assessment
The Joint Staff**

Agenda



- Why Joint Capabilities Integration and Development System (JCIDS)?
- Munitions Requirement Process
- Insensitive Munitions

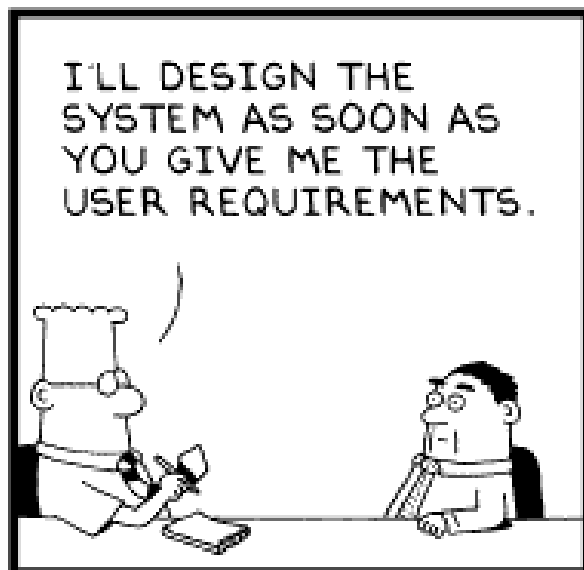
Why JCIDS?



- JCIDS
 - Why Change?
 - Ties to the DoD 5000 Acquisition Process
 - What's Changed?
 - JCIDS Benefits



Just a Thought



www.dilbert.com
scott@adams@aol.com



© 2003 United Feature Syndicate, Inc.



Copyright © 2003 United Feature Syndicate, Inc.

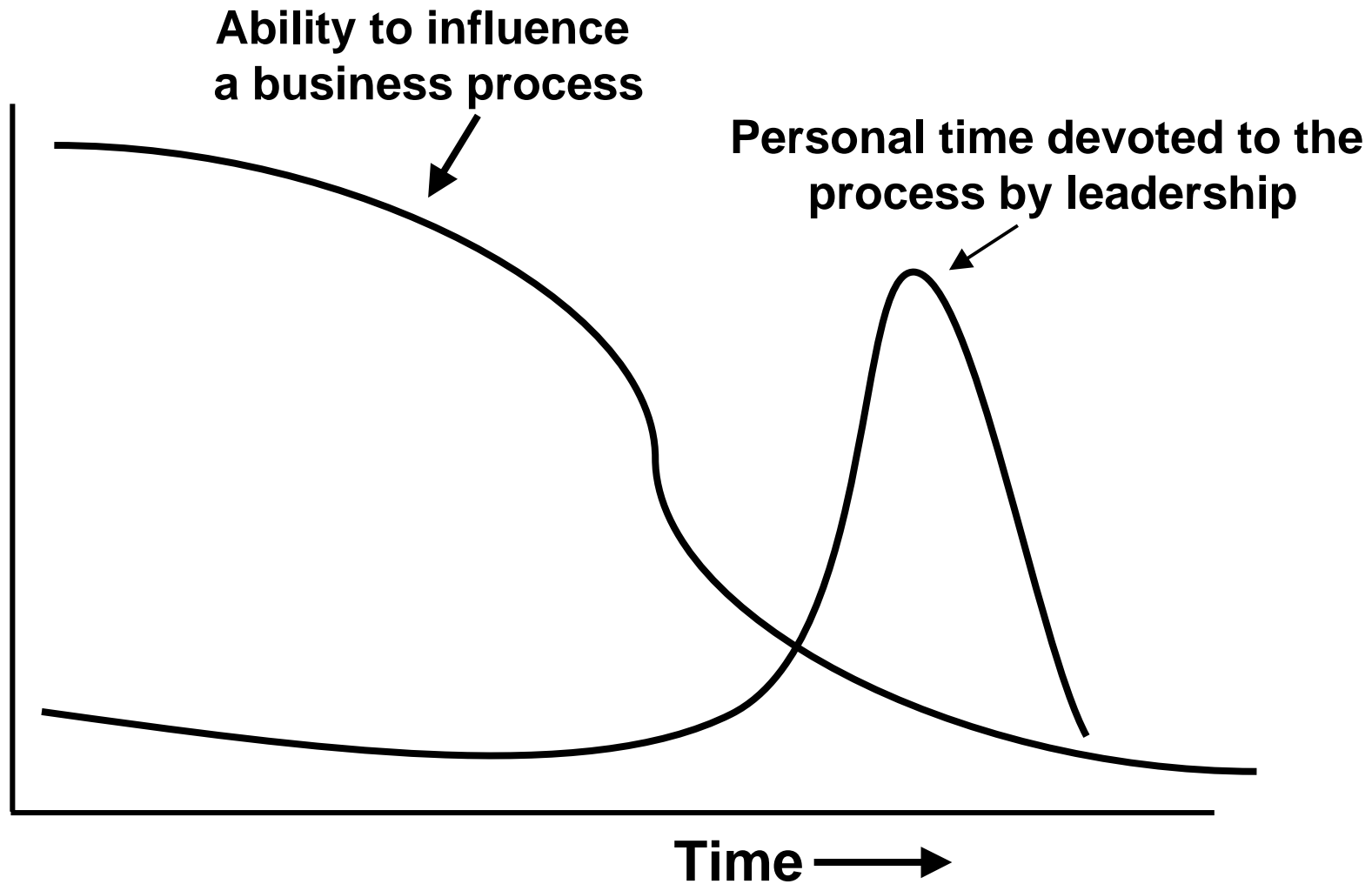


Previous Requirements and Acquisition Process

Frequently produced stovepiped system solutions

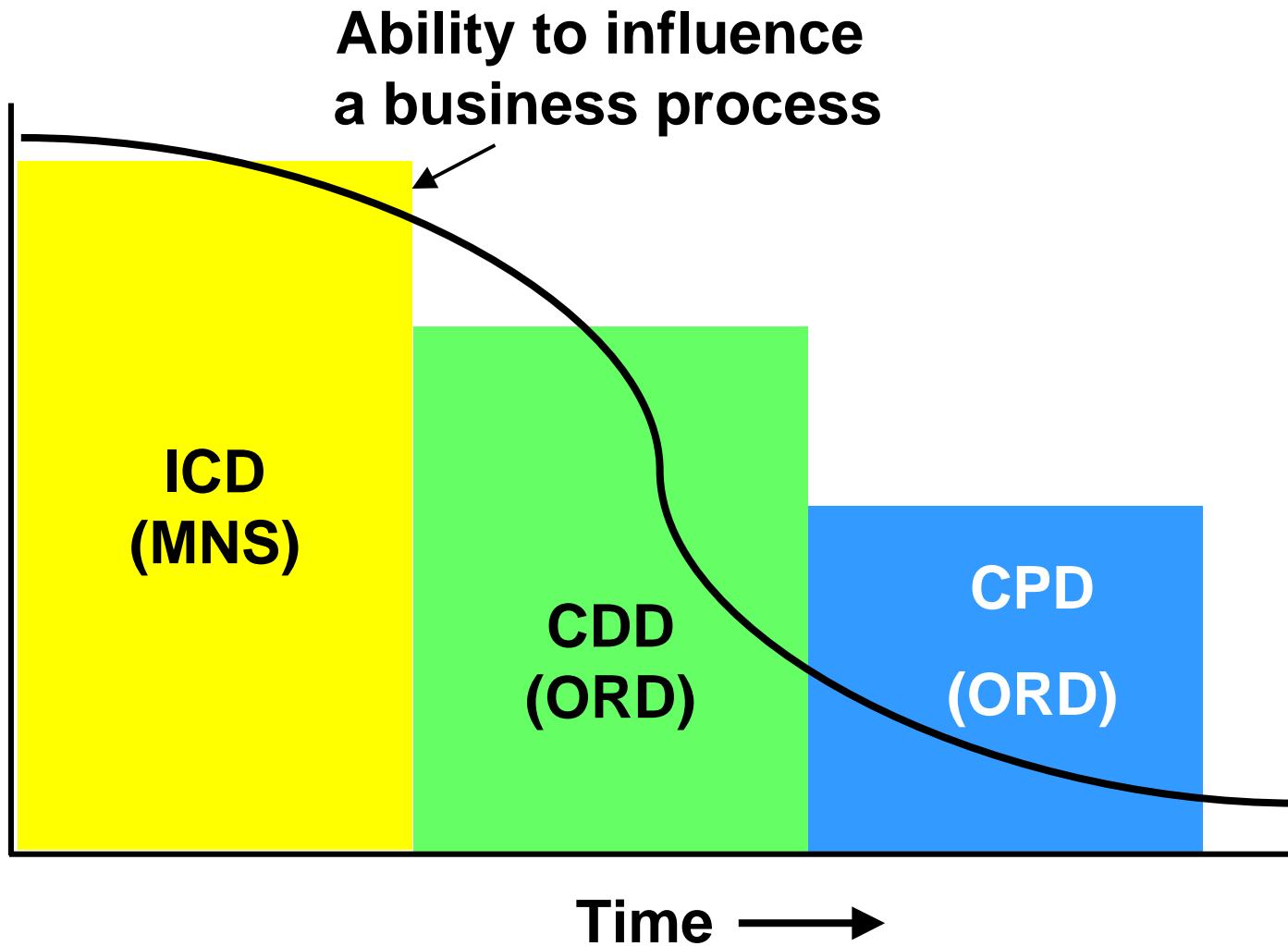
- Requirements were Service rather than Joint focused
- Lacked construct for objective analysis
- Systems not necessarily integrated
- Duplication existed particularly in smaller programs
- Evolutionary acquisition not well institutionalized
- Joint warfighting needs not prioritized

Capabilities Challenge



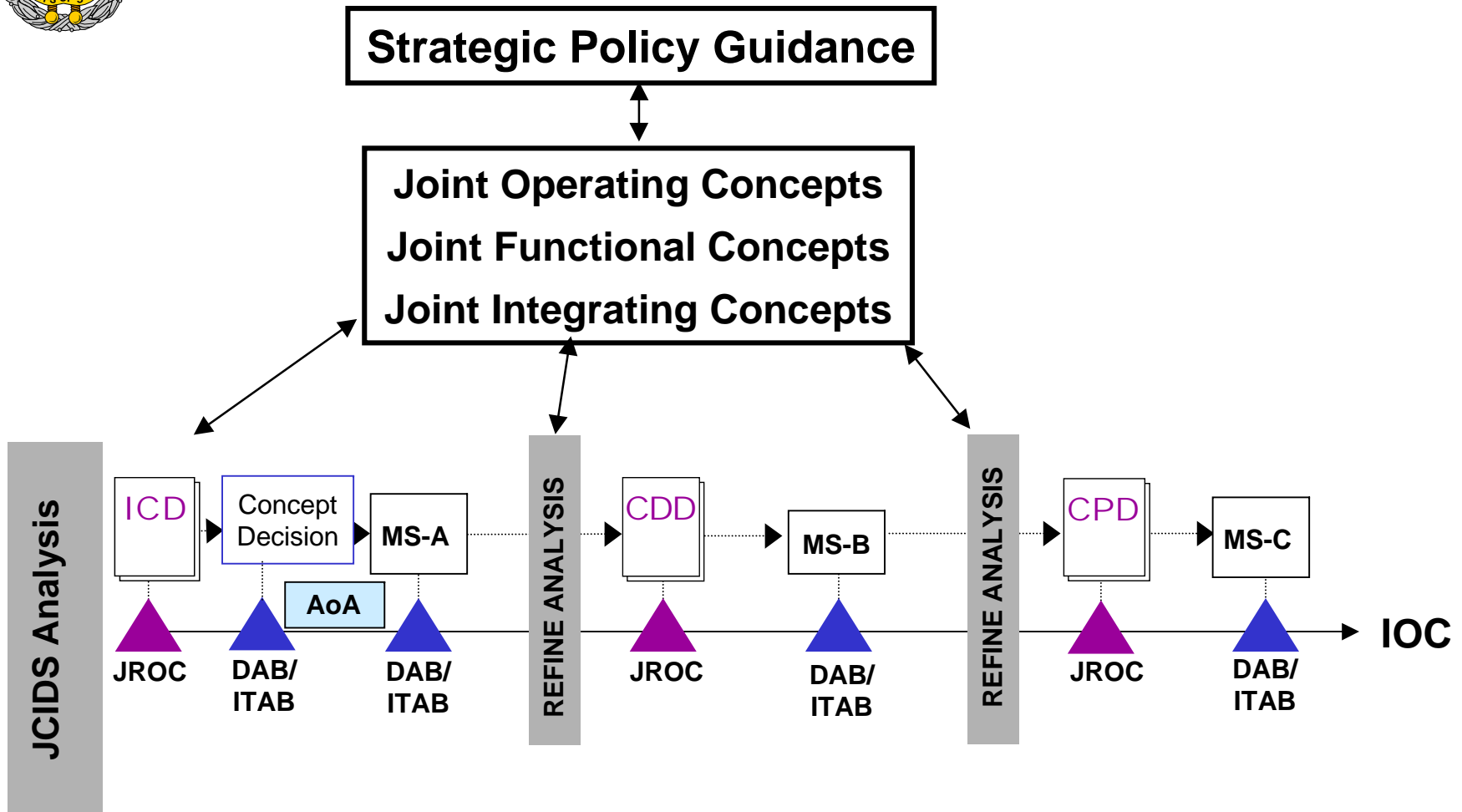
Source: McKinsey & Company

JCIDS Process



Source: McKinsey & Company

JCIDS Ties to the DOD 5000 Series



DAB - Defense Acquisition Board
 DSAB - Defense Space Acquisition Board
 ITAB - Information Technology Acquisition Board
 KDP - Key Decision Point

ICD - Initial Capabilities Document
 CDD - Capability Development Document
 CPD - Capability Production Document

Oversight Body Comparison (old/new)



Joint Requirements Panel (JRP)

- Services
- DIA Representative (Intelligence Supportability)

Functional Capabilities Board (FCB) x 6

- Services
- Combatant Commanders
- USD (AT&L), USD (I), USD (C)
- USecAF (Space)
- ASD NII/ DOD CIO
- D, PA&E
- DIA Representative
- Mission Requirements Board Executive Secretary

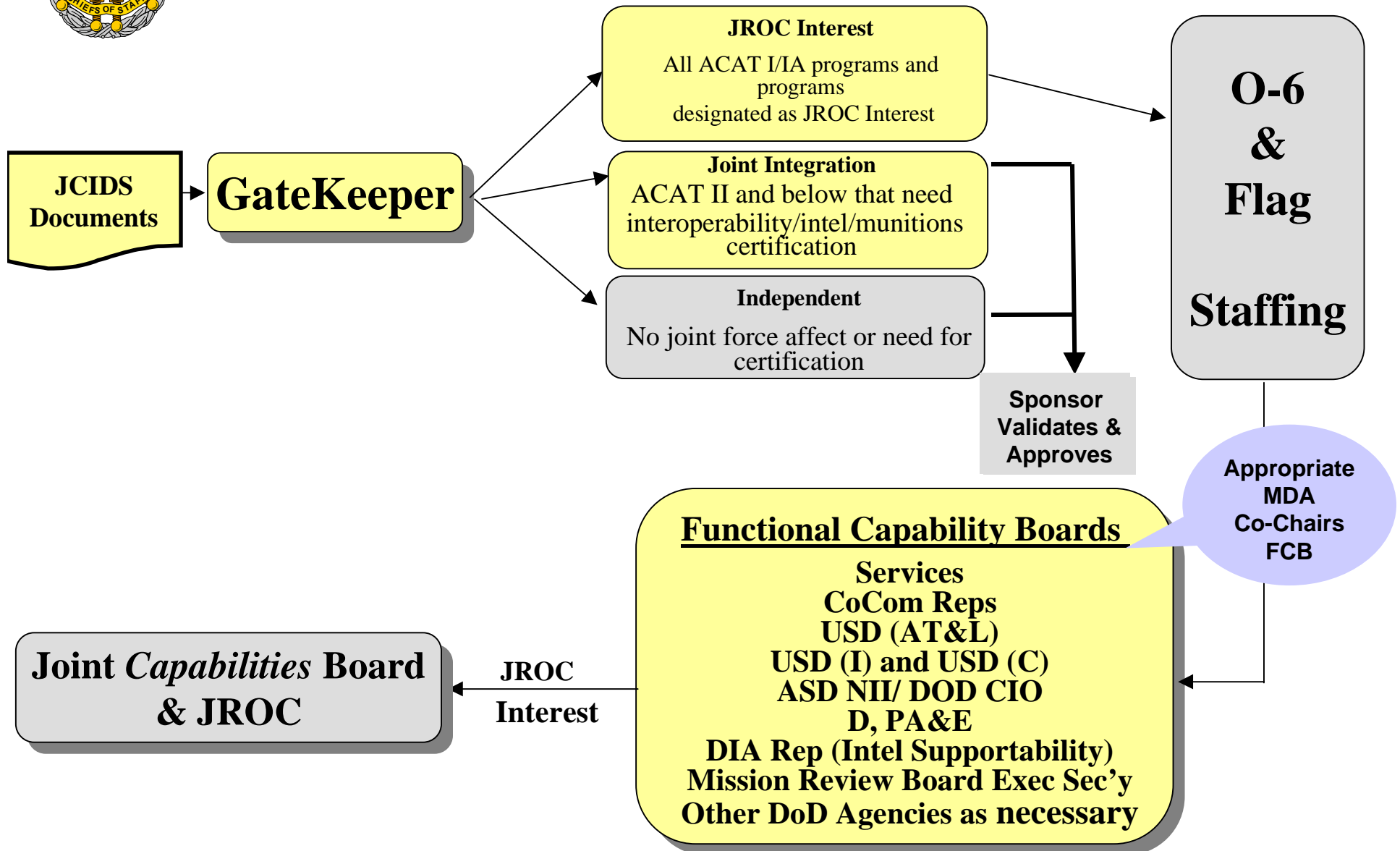
Joint Requirements Board (JRB)

Joint Requirements Oversight Council (JROC)

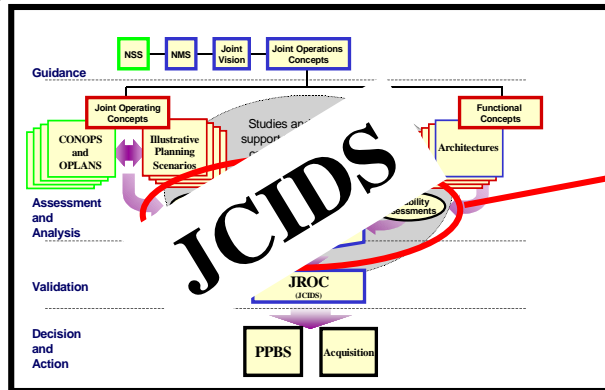
Joint Capabilities Board (JCB)

Joint Requirements Oversight Council (JROC)

JCIDS Process



Two Munitions Processes



“WHAT DO WE BUY?”

JCIDS

3170.1C

July 2003

Capability Based

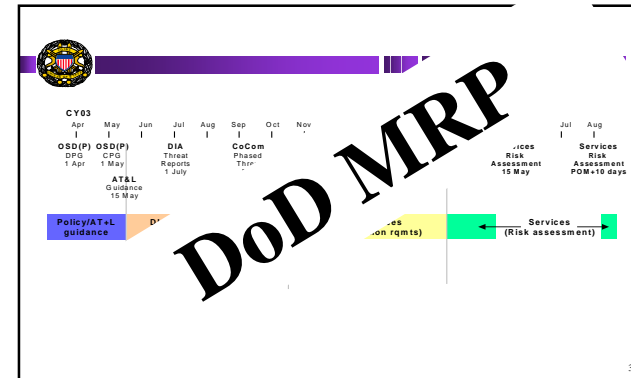
Purpose

Driver

Implementing Doc

Date Implemented

Basis



“HOW MUCH OF EACH DO WE BUY?”

PPBES

3000.4

October 2003

Threat Based

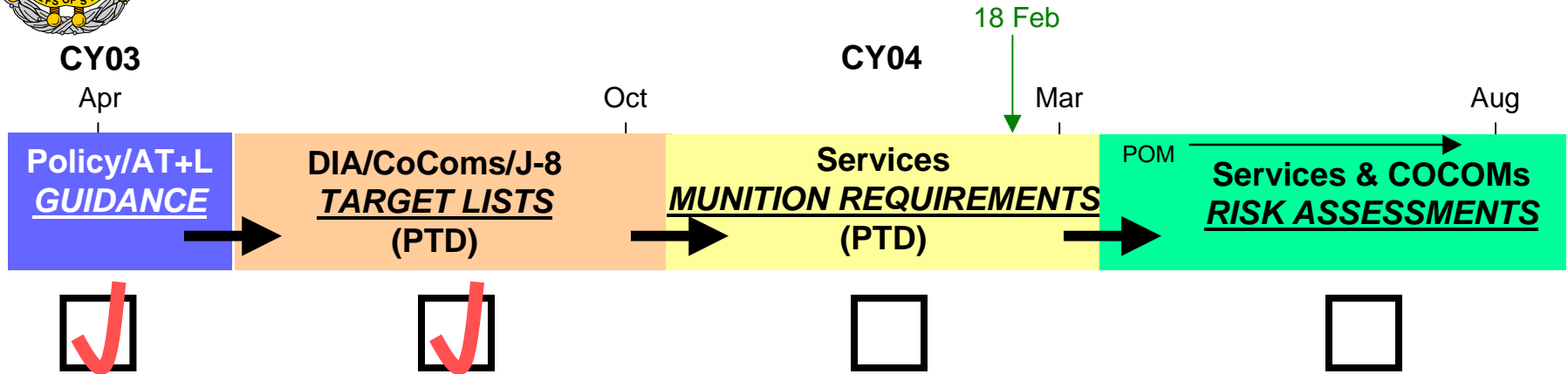


Munitions Requirements Process: Now



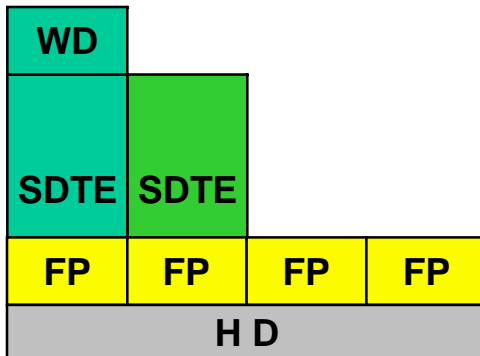
- 16 Month Process (Bi-annual now)
- Involves numerous organizations
 - Services
 - COCOMs
 - DIA
 - OSD
 - Joint Staff
- Strategy → Threats → Requirements

18 Feb 04: Where We Are



1-4-2-1

- 1 x Homeland Defense (HD)
- 4 x Forward Presence (FP)
- 2 x Swiftly Defeat (SDTE)
- 1 x Win Decisively (WD)



Services Work
In Progress

- Extensive modeling and simulation
- Results due 15 Mar

Pending

Vision for the Future



- Strategy is still the driving force, but...
- Challenge is determining the right mix:
 - Surge Capability
 - Shelf life
 - Demil/Surveillance
 - Risk/Budget
 - Industrial base



Inensitive Munitions





What is an Insensitive Munition?

Munitions which reliably fulfill their performance, readiness and operational requirements on demand, but which minimize the probability of inadvertent initiation and severity of subsequent collateral damage to weapon platforms, logistic systems and personnel when subjected to unplanned stimuli.

- IM Addresses the Joint Warfighting Need – CJCSI 3170.01C
- IM is the Law - United States Code, Title 10, Chapter 141, Section 2389
- IM is required for DoD Acquisitions – DoD Directive 5000.1



What are the metrics for IM?

Fast Cook-off (FCO)



Fuel fire such as on a carrier flight deck.

Slow Cook-off (SCO)



Heat or conflagration in an adjacent compartment.

Bullet Impact (BI)



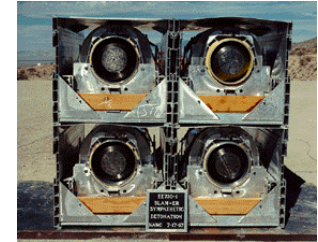
Low velocity gunfire threats.

Fragment Impact (FI)



High velocity fragments from high performance warheads.

Sympathetic Detonation (SD)



Propensity for mass detonation of adjacent rounds.

(NOTE: Due to recent operational needs, **shaped charge jet** will be reemphasized in IM testing.)

| | |
|------|--------|
| Pass | V |
| Fail | IV |
| Fail | III |
| Fail | I / II |

Burning reaction (FCO, SCO, BI, FI) or no propagation (SD)
Deflagration or propulsive reaction
Explosion
Detonation

Expiration of Gansler Memo



- On 26 Jan '99 DOD Acquisition Executive Dr Gansler issued a memo exempting all munition items in inventory from meeting IM requirements. Memo would be in effect for 5 years, until—26 Jan '04.
- After 26 Jan '04, all munition procurements, regardless of ACAT level, are subject to IM compliance and those that do not fully meet the requirement require a JROC approved IM waiver. Anticipate several hundred requests in the next 1 to 3 years.
- OSD, the Joint Staff and Service PEO's are working to develop an IM Strategic Plan then group munitions by various categories and then prepare and submit IM waivers, by groups, to the JROC.



Joint Staff & OSD Way Ahead

- OSD, the Joint Staff and Service PEO's are working to develop way ahead.
 - Develop IM Strategic plan IAW DOD IM Roadmap.
 - Group munitions by various categories (energetics, size, caliber, etc.)
 - Prepare and submit groups of IM waivers to the JROC. Note: JROC may elect to examine particular programs individually.
 - Each service would continue to ID newly developed an/or high profile weapon systems and submit individual IM waiver.
- OSD and the Joint Staff are also working with Service Science and Technology Executives to highlight and emphasize overall IM shortfalls and required development.



S&T's Near Term IM Weapon Priorities

| Legend | FCO | SCO | BI | FI | SD | Joint Priority |
|--|-----------|-----------|-----------|-----------|--------|----------------|
| CATEGORY | | | | | | |
| Gun Propellant Large Caliber | IV | IV III | IV | III | P | 1 |
| General Purpose Explosives | IV | V | V | V | F | 2 |
| Solid Rocket Propulsion Minimum Smoke | IV | I | I | I | P F | 3 |
| Metal Accelerating Explosives Castable (Heavy) | V I | IV III | V IV | V IV | P F | 4 |
| Advanced Penetrator Explosives | V IV | V IV | V IV | V IV | P F | 5 |
| Metal Accelerating Explosives Pressed (Light) | V III | V IV | V IV | IV III | P F | 6 |
| Solid Rocket Propulsion High Performance | IV III | III II | IV III | V III | P | 7 |

- Pass **V** Burning Reaction (FCO, SCO, BI, FI) or No Propagation (SD)
- Fail **IV** Deflagration or Propulsive Reaction
- Fail **III** Explosion
- Fail **I / II** Detonation or Partial Detonation (Except SD and SCJ)

Solving the top 7 priorities will have a positive effect on approximately 70-75% of the weapons DoD plans to procure.

OSD/JS IM Waiver Summary



- ? JROC only body that can provide an IM Waiver.
- ? JROC is looking for consistent improvements with a long term plan for achieving incremental and full IM compliance per DoDD 5000.1 and USD(AT&L) Policy.
- ? IM addresses the Joint and International warfighting needs.
- ? IM saves lives and material.

Bottom Line: Services and industry need to make the necessary funding investments for the development of IM technologies!



Questions?

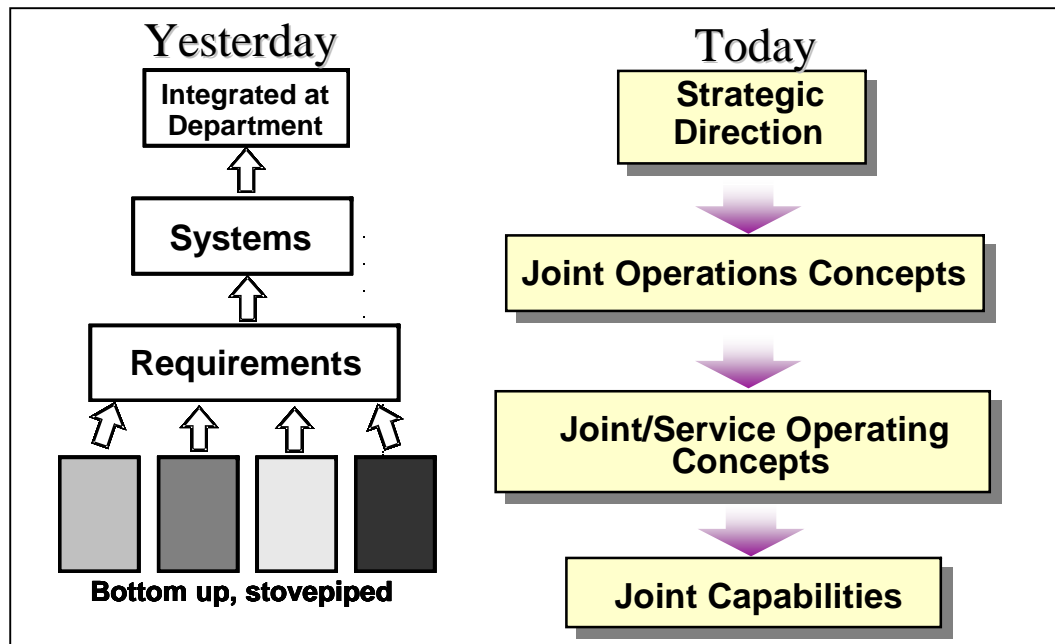


Backup



JCIDS

Moving From Strategy to Task



- *Guidance*
- *Concepts*
- *Scenarios*
- *MOEs*
- *Capabilities*

Driving “jointness” from the top-down, strengthening joint warfighting capabilities

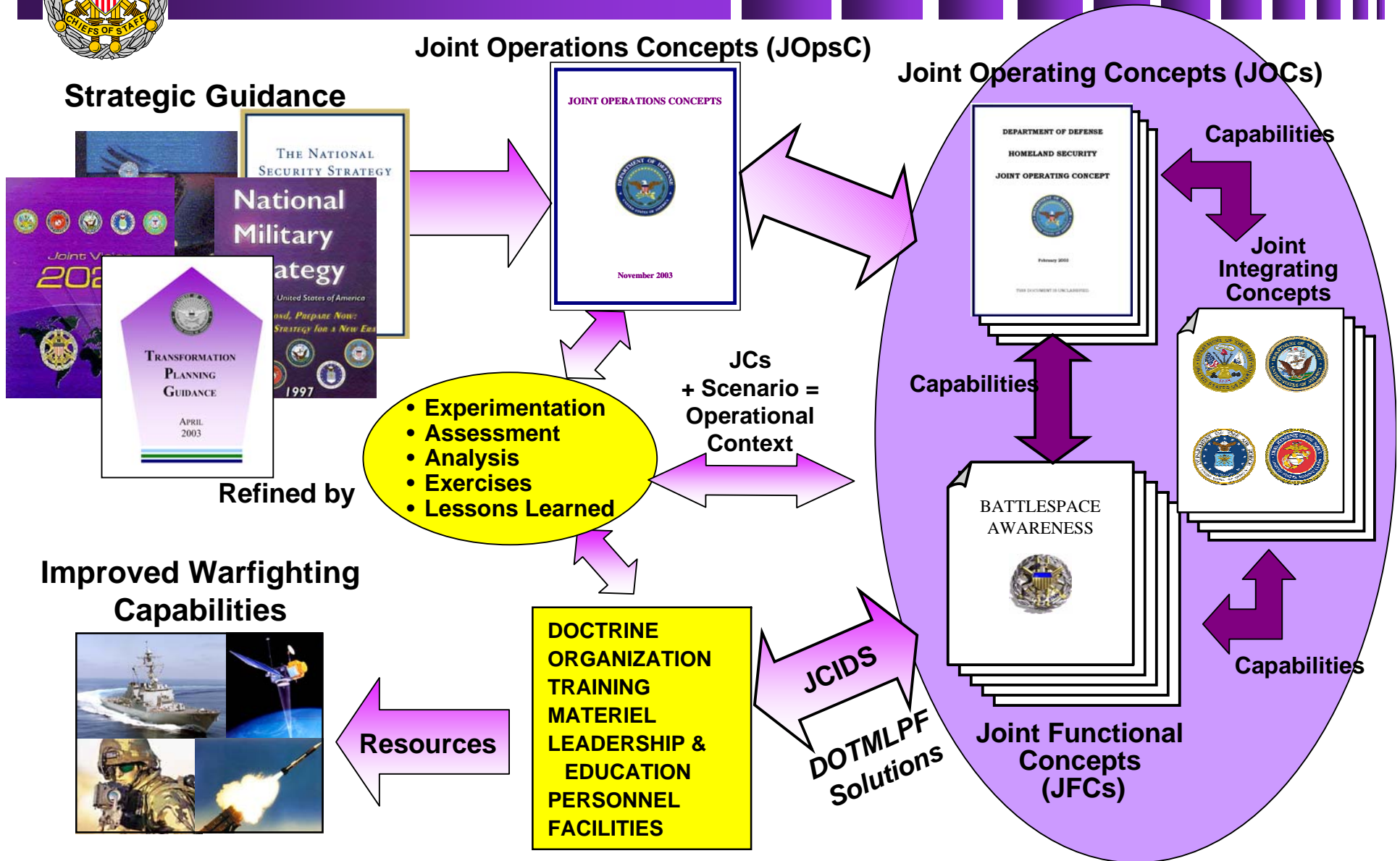


FCB Working Groups

Working Arm of the Functional Capabilities Boards

- Coordinate and assist sponsors during JCIDS analysis and document development
- Analyze capabilities documents to ensure sponsor is considering joint warfighting aspects
- Review assigned functional area to identify capability shortfalls
- Develop/maintain prioritized lists of capability shortfalls and current JCIDS proposals across the functional area
- Provide the warfighting context and recommendation to the FCB/JCB/ JROC on validation and/or approval of JCIDS documents

Concept Relationships





Example: Short Notice Changes

- February 2003, OSD QUESTION:
 - What will it take to increase JDAM production from 2800/mo to ~ 4000/mo? (recurring/non-recurring cost, schedule)
- ANSWER:
 - \$45M Non-Recurring Cost (Facilitization Only)
 - Two Options possible with different schedules
 - Option 1: Mix of A/B Grade IMUs
 - Achieved in 15 months from receipt of facilitization funds
 - Option 2: A grade IMUs only
 - Achieved in 21 months from receipt of facilitization funds
 - \$24M/Month Recurring Procurement Cost (tail kits only) to maintain 4000/mo
- Recommendation:
 - Stay on current production schedule



Camp Doha, Kuwait, July 1991



\$40.3M Total Loss: \$23.3M in Vehicles, \$14.7M in Munitions; \$2.3M in Facilities. Three killed while clearing the area; 49 others injured. Chain reaction to fire in M992 ammunition carrier vehicle loaded with 155mm projectiles.