Joint Capabilities and Disruptive Technologies

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6 Sep 06
AGENDA

- Strategic Environment
- Key Capabilities
- Acquisition Challenges
- JROC Initiatives
Capabilities Based Planning (CBP)

Why Change?

Requirements Generation System
~30 Years with RGS

Threat Environment …
- Bipolar World
- Mostly Predicable
- Domain specific
  ➢ System v. System

Platform Centric Requirements Generation System

Capabilities Based Planning
3 Years with JCIDS

QDR Objective – Shift in Focus

Irregular
Catastrophic

Traditional
Disruptive

Continuing the reorientation of military capabilities and implementing enterprise-wide reforms to ensure structures and process support the President and the warfighter.

CCJO Characteristics of the Joint Force

Knowledge Empowered
Enduring/Persistent
Networked
Precise
Interoperable
Fast
Expeditionary
Agile
Adaptable/Tailorable
Lethal

JCIDS is a Deliberate Process to Deliver an Adaptable Force
“Disruptive challenges from state and non-state actors who employ technologies and capabilities (such as biotechnology, cyber and space operations, or directed energy weapons) in new ways to counter military advantages the United States currently enjoys.”

- National Security Strategy, March 2006

“Disruptive challenges may come from adversaries who develop and use break through technologies to negate current U.S. advantages in key operational domains”

- National Defense Strategy, March 2005

“Dual use civilian technologies, especially information technologies, high-resolution imagery and global positioning systems are widely available. These relatively low cost, commercially available technologies will improve the disruptive and destructive capabilities of a wide range of state and non-state actors.”

- National Military Strategy, 2004
Disruptive Challenges
- Electronic Warfare
- Cyber Warfare
- Counter Space
- BM + CM
- Next generation torpedoes
- Adversary Submarines
- Strategic nukes from land and sea based system
- Theater UAVs

Key Tools
- Exercises
- Experimentation
- Training
- Info Sharing
- Intel Cooperation
- Armaments Cooperation
- Security Assistance
- Humanitarian Assistance
- Defense Support to Public Diplomacy
KEY CAPABILITIES – QDR (Slide 2)

- Shaping Choices of Countries at Crossroads
  - Improve the capacity of partner states
  - Reduce partner states vulnerabilities
    - Integration of defensive systems
      - Intel Sensors
      - Communication Networks
      - Information Systems
      - Missile Defense
      - Undersea Warfare
      - Counter Mine

- US diversify basing posture to promote constructive bilateral relations, mitigate anti-access, and offset potential political coercion
  - Mobility/Logistic Support
  - Operational Enablers – ISR, C2, Communications
  - New TRIAD
SHARED ACQUISITION CHALLENGES

- Realistic performance requirements
- Ensure COCOM needs are met
- Focus on most important issues
- Gain senior leader input earlier in development cycle
Senior leaders involved earlier in the process
- Technical, Requirements, Funding Insights

Concept Decision
- Improve integration of key decision processes—Requirements, Acquisition, PPBE
- Determine optimum investment strategy
- Balance capability needs with technical feasibility and affordability

Improved, more consistent KPP selection process
- Mandated Materiel Readiness KPP with supporting Reliability and Ownership Cost KSAs
- Increased focus on Systems Training and Energy Efficiency as potential selectively applied KPPs
Joint Urgent Operational Need (JUON)
- COCOM identified urgent need involved in an ongoing named operation
- Inherently Joint
- Outside of established Service rapid fielding processes
- DOTMLPF solution if left unfilled:
  - Could result in loss of life
  - Near term mission failure
- <ACAT 1

Immediate Warfighter Need (IWN)
- A JUON requiring 120 days or less material or logistics solution

JUON Requests (FY05-06)

C2 Net Centric
- Blue Force Trackers 491
- Radios 167
- SATCOM Equipment 38
- Spectrum Analyzers 85

Battlespace Awareness
- Unmanned Aerial Systems 204
- Aerostat 9
- Sensors 36
- Full Motion Video 535

Force Protection
- Robots 664
- Sensors 335
- CREW 26,930
- IR Defeat Systems 3,498
- Robot Repeaters 435

Focused Logistics
- JPDADS 38
- Generators 18,889
- Vehicles 618
- Float Bridge 1
**Capability Gap Assessment**

**Gap Synthesis & Assessment**
- FCB Assessment & Prioritization
- JCB

**JROC**
- Approved Gaps
- Priorities

**Most Pressing Military Issues**

**Decisions/Guidance**
- Accept Risk
- Support POR/On-Going Efforts
  - Identify Material/ Non-Material Solutions
    - Reprogram or provide additional funding for ongoing programs
    - OSD
      - ACTD-JCTD; S&T Investment
      - Roadmaps
      - Acquisition
      - FCB / Services
        - CBA
  - Develop concepts and experiments that determine how to solve a specific military problem
    - JFCOM
      - Joint Experimentation
    - Joint Staff
      - Concepts
      - OSD
      - S&T Investment; Industry; Conduct CBA
      - Service
      - CBA; DCR; Concepts / Experimentation
  - Study Specific Military Issues
    - OSD/Services/Joint Staff
      - Operational Availability Studies and Sub-studies

**Capability Issue Inputs**
- **OSD**
  - QDR; SPG; TPG; Roadmaps; S&T; Analytic Agenda; SCG; CPG, Defense Agencies
- **COCOM**
  - IPL; LL; WOT; DCR; JUON; 7500
- **SERVICEs**
  - JCDs
  - Vision/Concepts
  - Service challenges
- **Joint Staff**
  - OA Studies
  - Concepts
- **JFCOM**
  - Transformational Issues
  - Joint Experimentation

**Semi-annual Repeatable Process**

**JROC**
- Approved Gaps
- Priorities

**Most Pressing Military Issues**
SUMMARY

• The strategic environment has changed
  - Deliberate process to deliver an adaptable force
  - Process evolved from requirements driven to capabilities based
    - Translate guidance/policy into Joint Force capability
  - Early insights by senior leaders enhance acquisition stability
    - Realistic requirements to meet warfighter needs
  - MPMI provides the focusing construct
    - Top-down guidance to solve pressing military issues