DoD Instruction 5000.02
8 December 2008

Operation of the Defense Acquisition System
Statutory and Regulatory Changes

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20 May 2009
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The Revised DoDI 5000.02

Topics:

- Changes in Defense Acquisition System: 2003 vs. 2008
- The Defense Acquisition System Phases
- New policy directed by Congress
- New or revised regulatory policy
- Enclosures
  - Statutory/Regulatory Requirements; IT Considerations; T&E; Resource Estimation; Human Systems Integration; Acquisition of Services; Program Management; Business Systems; Systems Engineering
Source of Changes

- Policy from numerous new/revised sections of Public Law since 2003 (some with multiple requirements)
- Approved policy appearing in over 25 policy memos and DoD responses to the GAO, IG, and Congress
- Reference to 10 updated or newly issued DoD publications
- Consideration of over 700 Defense Acquisition Policy Working Group (DAPWG) comments
First Acquisition Framework in 1971

- **Decision points:** 3
- **Phases:** 3
- **Milestone documents:** 1 (Decision Coordinating Paper (DCP))
Defense Acquisition Framework 2003

User Needs & Technology Opportunities

- Process entry at Concept Decision or Milestones A, B, or C
  - Entrance criteria met before entering phases
  - Evolutionary Acquisition (EA) or Single Step to Full Capability
  - EA is preferred

- Decision points: 6
- Phases: 5
- Milestone documents: 30+

Pre-Systems Acquisition
- Concept Refinement
  - Concept Decision
- Technology Development

Systems Acquisition
- System Development & Demonstration
  - System Integration
  - System Demonstration
  - Design Readiness Review
- Production & Deployment
  - LRIP
  - Full-Rate Prod & Deployment
- FRP Decision Review

Sustainment
- Sustainment
- Disposal
- FOC
- IOC

December 2008 v3
• The Materiel Development Decision precedes entry into any phase of the acquisition framework
• Entrance criteria met before entering phases
• Evolutionary Acquisition or Single Step to Full Capability

• Decision points: 6
• Phases: 5
• Milestone documents: 40+
Evolutionary Approach

DoD Strategic Guidance

Joint Operating Concepts
Joint Functional Concepts

Gap Analysis

Materiel Solution Analysis AoA

ICD MDD JROC

Technology Development

CDD1 JROC

EMD Increment 1 CPD1 JROC

DAB

Increment 2 CPD2 JROC

DAB

Increment 3 CPD3 JROC

DAB

Continuous Technology Development and Maturation

DoD Strategic Guidance

MDD

DoD

Joint Operating Concepts

Joint Functional Concepts

Technology Development

CDD1 JROC

EMD Increment 1 CPD1 JROC

CDD2 JROC

EMD Increment 2 CPD2 JROC

CDD3 JROC

EMD Increment 3 CPD3 JROC

Continuous Technology Development and Maturation

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CDD1 JROC

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CDD1 JROC

EMD Increment 1 CPD1 JROC

CDD2 JROC

EMD Increment 2 CPD2 JROC

CDD3 JROC

EMD Increment 3 CPD3 JROC

Continuous Technology Development and Maturation
Evolutionary Acquisition

From two processes... ➔ To one process...

• Incremental Development: End-state is known; requirements met over time in several increments

• Spiral Development: End-state is not known; requirements for increments dependent upon technology maturation and user feedback.

Capability delivered in increments, recognizing up front need for future capability improvements

• Each increment:
  - depends on mature technology
  - is a militarily useful and supportable operational capability
  - Successive Technology Development Phases may be needed to mature technology for multiple increments

No spirals!
"Following the Materiel Development Decision (MDD), the MDA may authorize entry into the acquisition management system at any point consistent with phase-specific entrance criteria and statutory requirements."
### Changes to Decision Points

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<tbody>
<tr>
<td>Concept Decision (CD)</td>
<td>Materiel Development Decision</td>
<td>MDD required prior to entering the process at any point</td>
</tr>
<tr>
<td>N/A</td>
<td>Post-PDR Assessment</td>
<td>MDA’s assessment of PM’s PDR Report (if PDR after MS B)</td>
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<tr>
<td>Design Readiness Review DRR</td>
<td>Post-CDR Assessment</td>
<td>MDA’s assessment of PM’s CDR Report</td>
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**Diagram Description:**
- **User Needs**
  - Materiel Solution Analysis
  - Technology Development
  - Engineering and Manufacturing Development
- **Technology Opportunities & Resources**
  - Materiel Development Decision
  - AoA
- **Changes to Decision Points**
  - PDR
  - Post PDR Assessment
  - CDR
  - Post CDR Assessment
- **Post-PDR Assessment**
  - FRP Decision Review
- **Post-CDR Assessment**
  - FRP Decision Review
- **System Acquisition**
  - Pre-Systems Acquisition
  - Systems Acquisition
  - Sustainment
Changes to Phases

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<tr>
<td>Concept Refinement (CR)</td>
<td>Materiel Solution Analysis</td>
<td>More robust AoA (result of changes to JCIDS)</td>
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<tr>
<td>Technology Development (TD)</td>
<td>Engineering &amp; Manufacturing Development (EMD)</td>
<td>Competitive prototyping</td>
</tr>
<tr>
<td>Systems Development &amp; Demonstration (SDD)</td>
<td>Engineering &amp; Manufacturing Development (EMD)</td>
<td>More robust system engineering</td>
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</table>
**Preliminary Design Review**

**Technology Development**

- **PDR Before Milestone B**
  - Planned for in Technology Development Strategy
  - PDR Report provided to MDA at MS B
  - Includes recommended requirements trades

**Engineering & Manufacturing Development**

- **Post PDR Assessment**
- **Post CDR Assessment**

**PDR After Milestone B**

- Planned for in Acquisition Strategy
- PDR Report provided to MDA prior to Post PDR Assessment
- Reflects requirements trades
- At Post PDR Assessment, MDA considers PDR report; determines action(s) required to achieve APB objectives and issues ADM
EMD Work Efforts

- Integrated System Design
- System Capability & Manufacturing Process Demonstration

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<tr>
<td>System Integration</td>
<td>Integrated System Design</td>
<td>Establishment of Product Baseline for all Configuration Items</td>
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<tr>
<td>System Demonstration</td>
<td>System Capability &amp; Manufacturing Process Demonstration</td>
<td>Manufacturing processes effectively demonstrated; production-representative article(s) demonstrated in intended environment; T&amp;E assesses improvements to mission capability and operational support based on user needs.</td>
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</table>
When consistent with technology development phase objectives, associated prototyping activity, and the MDA approved TDS, the PM shall plan a Preliminary Design Review (PDR) before Milestone B. PDR planning shall be reflected in the TDS and shall be conducted for the candidate design(s) to establish the allocated baseline (hardware, software, human/support systems) and underlying architectures and to define a high-confidence design. All system elements (hardware and software) shall be at a level of maturity commensurate with the PDR entrance and exit criteria. A successful PDR will inform requirements trades; improve cost estimation; and identify remaining design, integration, and manufacturing risks. The PDR shall be conducted at the system level and include user representatives and associated certification authorities. The PDR Report shall be provided to the MDA at Milestone B and include recommended requirements trades based upon an assessment of cost, schedule, and performance risk.

Post-PDR Assessment (P-PDR A). If a PDR has not been conducted prior to Milestone B, the PM shall plan for a PDR as soon as feasible after program initiation. PDR planning shall be reflected in the Acquisition Strategy and conducted consistent with the policies specified in paragraph 5.d.(6). Following PDR, the PM shall plan and the MDA shall conduct a formal Post-PDR Assessment. The PDR report shall be provided to the MDA prior to the assessment and reflect any requirements trades based upon the PM’s assessment of cost, schedule, and performance risk. The MDA will consider the results of the PDR and the PM’s assessment, and determine whether remedial action is necessary to achieve APB objectives. The results of the MDA's Post-PDR Assessment shall be documented in an ADM.
The purpose of the EMD phase is to develop a system or an increment of capability; complete full system integration (technology risk reduction occurs during Technology Development); develop an affordable and executable manufacturing process; ensure operational supportability with particular attention to minimizing the logistics footprint; implement human systems integration; design for producibility; ensure affordability; protect CPI by implementing appropriate techniques such as anti-tamper; and demonstrate system integration, interoperability, safety, and utility. The Capability Development Document, Acquisition Strategy, Systems Engineering Plan, and Test and Evaluation Master Plan shall guide this effort.

Integrated System Design. This effort is intended to define system and system-of-systems functionality and interfaces, complete hardware and software detailed design, and reduce system-level risk. Integrated System Design shall include the establishment of the product baseline for all configuration items.

System Capability and Manufacturing Process Demonstration. This effort is intended to demonstrate the ability of the system to operate in a useful way consistent with the approved key performance parameters and that system production can be supported by demonstrated manufacturing processes. The program shall enter System Capability and Manufacturing Process Demonstration upon completion of the Post-Critical Design Review Assessment and establishment of an initial product baseline. This effort shall end when the system meets approved requirements and is demonstrated in its intended environment using the selected production-representative article; manufacturing processes have been effectively demonstrated in a pilot line environment; industrial capabilities are reasonably available; and the system meets an agreed upon exit criteria and Milestone C entrance requirements.
Post-CDR Assessment

- Post-CDR Assessment replaces Design Readiness Review.
- Review considers whether, based on the Program Manager’s report, the program is able to provide capability consistent with the Acquisition Program Baseline approved at Milestone B.
- The MDA determines whether (1) an adjustment should be made, or (2) the program should be permitted to proceed without change.

“The MDA shall conduct a formal program assessment following system-level CDR. The system-level CDR provides an opportunity to assess design maturity as evidenced by measures such as: successful completion of subsystem CDRs; the percentage of hardware and software product build-to specifications and drawings completed and under configuration management; planned corrective actions to hardware/software deficiencies; adequate developmental testing; an assessment of environment, safety and occupational health risks; a completed failure modes and effects analysis; the identification of key system characteristics; the maturity of critical manufacturing processes; and an estimate of system reliability based on demonstrated reliability rates.”
“Evolutionary acquisition requires . . .

Technology development preceding initiation of an increment shall continue until the required level of maturity is achieved, and prototypes of the system or key system elements are produced . . .”

“The TDS and associated funding shall provide for two or more competing teams producing prototypes of the system and/or key system elements prior to, or through, Milestone B. Prototype systems or appropriate component-level prototyping shall be employed to reduce technical risk, validate designs and cost estimates, evaluate manufacturing processes, and refine requirements. . . .”
Configuration Steering Boards (CSB). The Acquisition Executive of each DoD Component shall establish a CSB with broad executive membership including senior representatives from the Office of the USD(AT&L) and the Joint Staff.

- The CSB shall meet at least once annually to review all requirements changes and any significant technical configuration changes for ACAT I and IA programs in development that have the potential to result in cost and schedule impacts to the program. Such changes will generally be rejected, deferring them to future blocks or increments. Changes shall not be approved unless funds are identified and schedule impacts mitigated.

- The PM, in consultation with the PEO, shall, on a roughly annual basis, identify and propose a set of de-scoping options, with supporting rationale addressing operational implications, to the CSB that reduce program cost or moderate requirements. The CSB shall recommend to the MDA (if an ACAT ID or IAM program) which of these options should be implemented. Final decisions on de-scoping option implementation shall be coordinated with the Joint Staff and
Test and Evaluation

- Integrated DT&E / OT&E activities
- Evaluations include comparison with current capability
- Evaluations conducted in the expected “mission context”
**User Need**
- JCIDS Capabilities-Based Assessment (CBA)
- Initial Capabilities Document (ICD)

**Technology Opportunities**
- All sources foreign & domestic
- Small Business Innovative Research (SBIR)
- Technology Projects: JCTDs, Coalition Warfare Program, Defense Acquisition Challenge Program, etc.

New terms/requirements in blue.
Materiel Development Decision

MDA:
- Approves AoA Study Guidance
- Determines acquisition phase of entry
- Identifies initial review milestone
- Designates Lead DoD Component
- Approves Acquisition Decision Memorandum (ADM)

Regulatory Requirements
- Initial Capabilities Document (ICD)
- AoA Study Guidance (AoA Plan due immediately following the MDD)

New terms/requirements in blue
Materiel Solution Analysis

**Purpose:** Assess potential materiel solutions

- **Enter:** Approved ICD and study guidance for conducting AoA.
- **Activities:** Conduct AoA, develop Technology Development Strategy (TDS) & draft CDD
- **Guided by:** ICD and AoA Plan
- **Exit:** Materiel solution to capability need in ICD recommended by lead Component conducting AoA, and phase specific exit criteria have been satisfied
**Milestone A**

**MDA approves:**
- Materiel solution
- Technology Development Strategy (TDS)
- Exit criteria for next phase
- Milestone A Certification (10 USC 2366a)

**Statutory & Regulatory Requirements**

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<td>Acquisition Information Assurance Strategy</td>
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<td>Systems Engineering Plan (SEP)</td>
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<td>Technology Development Strategy (TDS)</td>
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<td>Test &amp; Evaluation Strategy (TES)</td>
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A major defense acquisition program may not receive Milestone A approval, or Key Decision Point A approval in the case of a space program, until the MDA certifies, after consultation with the JROC on matters related to program requirements and military needs—

(1) That the system fulfills an approved initial capabilities document;

(2) That the system is being executed by an entity with a relevant core competency as identified by the Secretary of Defense under section 118b of Title 10, U.S. Code;

(3) If the system duplicates a capability already provided by an existing system, the duplication provided by such system is necessary and appropriate; and

(4) That a cost estimate for the system has been submitted and that the level of resources required to develop and procure the system is consistent with the priority level.
Technology Development

**Purpose:** Reduce technology risk, Demonstrate Critical Technology on Prototypes, Complete Preliminary Design

Enter: MDD approved materiel solution and TDS; funding for TD phase activities

**Activities:** Competitive prototyping; Develop RAM strategy; conduct Preliminary Design Review (PDR)

Guided by: ICD & TDS and supported by SE planning

Exit: Affordable increment of military-useful capability identified; technology demonstrated in relevant environment; manufacturing risks identified; PDR conducted for candidate solutions; system or increment ready for production within short time frame (normally less than 5 years for weapon systems)
MDA approves:

- Program Initiation (for most programs)
- Entry into **EMD**
- Acquisition Strategy
- Acquisition Program Baseline
- LRIP quantities
- Exit criteria for next phase
- **Type of Contract**
- **Milestone B Certification (10 USC 2366b)**
  - New terms/requirements in *blue*
- ADM
**MS B: Documentation**

All programs except where noted (see encl. 4, DoDI 500.02)

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<td>• Information Support Plan (ISP)</td>
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<td>• Analysis of Alternatives (AoA) (update)</td>
<td>• Industrial Base Capabilities (MDAP)</td>
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<tr>
<td>• Acquisition Strategy</td>
<td>• Item Unique Identification Impl Plan (SEP annex)</td>
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<td>• Affordability Assessment</td>
<td>• Live Fire T&amp;E Waiver</td>
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<td>• Acquisition Program Baseline</td>
<td>• Life Cycle Sustainment Plan (LCSP)</td>
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<td><strong>Alternate Live Fire T&amp;E Plan</strong></td>
<td>• LRIP Quantities (ACAT I &amp; II)</td>
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<td>• Benefit Analysis &amp; Determination</td>
<td>• Manpower Estimate (MDAP)</td>
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<td>• Capability Development Document (CDD)</td>
<td>• Market Research</td>
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<td>• MDA Assessment of compliance with Chemical, Biological, Radiological, and Nuclear Survivability Requirements</td>
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<td>• Net-Centric Data Strategy (in ISP)</td>
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<td>• Operational Test Agency OT&amp;E Report</td>
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<td>• Competition Analysis</td>
<td><strong>Preliminary Design Review Report</strong></td>
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<td>• Program Protection Plan (PPP)</td>
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<td>• Replaced System Sustainment Plan (MDAP)</td>
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<td>• Cost Analysis Requirements Description (CARD) (MDAP &amp; MAIS)</td>
<td>• Selected Acquisition Report (SAR) (MDAP)</td>
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<td><strong>Corrosion Prevention Control Plan</strong></td>
<td>• Spectrum Supportability Determination</td>
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<td>• Data Management Strategy (in acquisition strategy)</td>
<td><strong>Systems Engineering Plan (SEP)</strong></td>
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<td>• Economic Analysis (MAIS)</td>
<td>• System Threat Assessment Report (STAR) (ACAT I)</td>
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<td>• Exit Criteria</td>
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<td>• Test &amp; Evaluation Master Plan (TRA)</td>
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<td>Independent Technology Readiness</td>
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MDA Certifies at Milestone B

1) Program is Affordable When Considering Unit Cost and Total Acquisition Cost During FYDP

2) Program is Affordable When Considering Ability of DOD to Accomplish Program's Mission Using Alternative Systems

3) Reasonable Cost and Schedule Estimates have been Developed

4) Funding is Available to Execute Development and Production Through the Period Covered by the FYDP

5) Appropriate Market Research has been Conducted

6) DoD Completed an Analysis of Alternatives

7) JROC has Accomplished Its Duties

8) Technology Demonstrated in a Relevant Environment

9) Program Demonstrates High Likelihood of Accomplishing Its Intended Mission

10) Program Complies with all Relevant DoD Policies, Regulations, and Directives
**Purpose:** Develop a system or increment of capability, develop an affordable manufacturing process, minimize logistics footprint.

- **Enter:** Mature Technology; Approved Requirements; Full Funding in FYDP
- **Activities:** Define System of System Functionality & Interfaces, Complete Detailed Design, System-Level PDR (as needed)/CDR, Establish Product Baseline,
- **Guided by:** CDD, Acq Strategy, SEP & TEMP
- **Exit:** Complete System Level

**Enter:** Post-CDR Assessment and Establishment of initial Product Baseline

- **Activities:** Developmental Testing (DT) Assesses Progress Against Technical Parameters, and Operational Assessments (OA) Against CDD
- **Guided by:** CDD, Acq Strategy, SEP & TEMP
- **Exit:** System Demonstrated in Intended Environment using production-representative articles;
MDA Approves:

• Updated Acquisition Strategy and Acquisition Program Baseline

• Entry into LRIP for systems that require a LRIP, into production or procurement for systems that do not require LRIP, or into limited deployment for MAIS programs or software intensive systems with no production components

• Exit criteria for LRIP if appropriate

• Acquisition Decision Memorandum
### MS C: Documentation
#### Requirements

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*New terms/requirements in blue*
**Production & Deployment**

**Purpose:** Achieve an operational Capability that satisfies mission needs

- **Enter:** Acceptable performance in DT & OA; mature software; no significant manufacturing risks; approved CPD; *refined integrated architecture*; acceptable interoperability and operational supportability; demonstration of affordability; fully funded; phased for rapid deployment.

- **Activities:** IOT&E, LFT&E and Interoperability Testing of Production-Representative Articles; IOC possible

- **Guided by:** Acq Strategy & Life Cycle Sustainment Plan

- **Exit:** Full Operational Capability; Deployment Complete

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- **Enter:** Beyond LRIP & LFT&E Reports (OSD T&E/LFT&E programs) Submitted to Congress

- **Activities:** Full-Rate Production; Fielding and Support of Fielded Systems; IOC/FOC

- **Exit:** System Operationally Effective, Suitable and Ready for Full-Rate Production

New terms/requirements in *blue*
Full Rate Production Decision Review

MDA Approves:

- Full-rate production
- Updated Acquisition Strategy
- Updated Acquisition Program Baseline
- Exit criteria, if appropriate
- Provisions for evaluation for post-deployment performance
- Acquisition Decision Memorandum (ADM)
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<tr>
<td><strong>Title 40/Clinger-Cohen Act (CCA) Compliance</strong></td>
</tr>
<tr>
<td><strong>Title 40/Clinger-Cohen Act Certification (MAIS) CIO</strong></td>
</tr>
<tr>
<td><strong>Confirmation of CCA Compliance (all non-MAIS IT)</strong></td>
</tr>
<tr>
<td><strong>Component Cost Estimate (CCE)</strong></td>
</tr>
<tr>
<td><strong>Exit Criteria</strong></td>
</tr>
<tr>
<td><strong>IT and NSS Joint Interoperability Test Certification (all IT including NSS)</strong></td>
</tr>
<tr>
<td><strong>IOT&amp;E Completed ACAT I and II (conventional weapons systems for use in combat)</strong></td>
</tr>
<tr>
<td><strong>Independent Cost Estimate (ACAT I) (if MDA requests)</strong></td>
</tr>
<tr>
<td><strong>Life Cycle Sustainment Plan (LCSP)</strong></td>
</tr>
<tr>
<td><strong>Live Fire T&amp;E Report (OSD LFT&amp;E Programs)</strong></td>
</tr>
<tr>
<td><strong>Manpower Estimate (MDAP)</strong></td>
</tr>
<tr>
<td><strong>Military Equipment Valuation (part of Acquisition Strategy)</strong></td>
</tr>
<tr>
<td><strong>Operational Test Agency OT&amp;E Report</strong></td>
</tr>
<tr>
<td><strong>Post Implementation Review</strong></td>
</tr>
<tr>
<td><strong>Programmatic Environmental Safety &amp; Occupational Health Evaluation (PESHE)</strong></td>
</tr>
</tbody>
</table>

- **Cost Analysis**: For AIS systems, FRPDR is the Full Deployment Decision Review Description (CARD) (MDAP & MAIS)  
- **Data Management Strategy (part of Acquisition Strategy)**  
- **Economic Analysis**  

*New terms/requirements in blue*
Purpose: Execute a support program that meets materiel readiness and operational support performance requirements, and sustains the system in the most cost-effective manner over its total life cycle.

Life Cycle Sustainment
- **Entrance**: Approved CPD; approved LCSP; successful FRP Decision
- **Activities**: Performance-Based Life-Cycle Product Support (PBL) planning, development, implementation, and management; initiate system modifications as necessary; continuing reviews of sustainment strategies
- **Guided by**: Acquisition Strategy/LCSP

Disposal
- **Activities**: Demilitarize and Dispose of Systems IAW Legal and Regulatory Requirements, Particularly Environmental Considerations and Explosives Safety
- **Guided by**: Programmatic Environment, Safety, and Occupational Health
New Policy Directed by Congress

• Military Equipment Valuation (accounting for military equipment)

• MDA Certification at Milestones A & B

• Cost type contract for EMD Phase requires written determination by MDA

• Lead Systems Integrator Restrictions

• Replaced System Sustainment Plan

• Configuration Steering Boards (CSBs)
New Policy Directed by Congress

• New MAIS Reporting Requirements
• “Time-Certain” IT Business Systems Development
• Defense Business Systems Oversight
• MDA assessment of compliance with chemical, biological, radiological, and nuclear survivability (CBRN) requirements at Milestones B and C
New Policy Directed by Congress

- Detailed Acquisition of Services Policy
- Independent management reviews (Peer Reviews) for supplies and services contracts
- Interim Beyond LRIP Report
- DOT&E’s Role in Testing Force Protection Equipment / Non-Lethal Weapons
- Nunn-McCurdy breach / APB Revision Procedure
New or Revised Regulatory Policy

- Detailed Systems Engineering Policy
- Program Support Reviews (PSRs)
- Integrated Test & Evaluation
- Restricted use of performance requirements that do not support KPPs
- Comparison with current mission capabilities during OT&E
- Assessment of Operational Test Readiness (AOTR)
- Life-Cycle Sustainment Plan (LCSP)
- Cost of energy in AoA and resource
New or Revised Regulatory Policy

- Contract Incentives Strategy
- Contracting for Operational Support Services
- Approval of Technology Development Strategy prior to Release of final RFP for Technology Development Phase
- Approval of Acquisition Strategy prior to release of final RFP for EMD or any succeeding phase.
- Reliability, Availability, and Maintainability (RAM) strategy
- Data Management Strategy
Enclosures to DoDI 5000.02

1 References
2 Procedures
3 ACAT and MDA
4 Statutory and Regulatory Information and Milestone Requirements
   Table 5. EVM Implementation Policy
   Table 6. APB Policy
   Table 7. Unique Decision Forums
5 IT Considerations
6 Integrated T&E
7 Resource Estimation
8 Human Systems Integration
9 Acquisition of Services
10 Program Management
11 Management of Defense Business Systems
Questions

The Acquisition Warrior
BACK-UP SLIDES
Changes to Encl 5, IT Considerations

• “Title 40/CCA” replaces term CCA. Subtitle III of Title 40, US Code was formerly known as Division E of the Clinger-Cohen Act

• Table E.4.T1 slightly modified for readability

• Added:
  - Investment Review Board (IRB) role as “OIPT” for MAIS and MDAP business systems
  - Time-Certain Acquisition of IT Business Systems (No MS A approval unless can achieve IOC within 5 years)
  - Defense Business System Management Committee (DBSMC) Certification approval for business systems with modernization funding over $1 million – prior to any milestone or FRP approval
  - DoD CIO notification to Congress 60 days before any MDA cancels or significantly reduces size of MAIS fielded or has received MS C approval

• Revised: USD(Comptroller) certification for Defense
Changes to Encl 6, Test & Evaluation

• PM, in concert with user and test community, must provide safety releases to developmental and operational testers prior to any test using personnel

• Systems that provide capabilities for joint missions must be tested in joint operational environment

• Embedded instrumentation must be developed to facilitate training, logistics support and combat data collection

• Joint Interoperability Test Command (JITC), “regardless of ACAT” will provide interoperability test certification memoranda to J-6
Changes to Encl 6, Test & Evaluation

• OUSD(AT&L), Dir Systems Software and Engineering will conduct an independent Assessment of Operational Test Readiness (AOTR) for ACAT ID and special interest programs designated by USD(AT&L). CAE will consider AOTR prior to making determination of materiel readiness for IOT&E

• OSD T&E Oversight List categories: developmental testing, operational testing or live fire testing. Programs on list designated for OT or live fire testing will be considered same as MDAPs or covered programs and subject to all provisions of Title 10, US Code and DoDI 5000.02
Changes to Encl 7, Resource Estimation

• PMs must use Cost and Software Data Reporting System to report data on contractor costs and resource usage

• CARD must be in sync with other program documents, and at MS B CARD must reflect results of the PDR.

• Fully burdened cost of delivered energy must be used in trade-off analysis for all tactical systems with end items that create a demand for energy

• Following areas of assessment added to AoA:
  - Alternative ways to improve the energy efficiency of DoD tactical systems consistent with mission and cost effectiveness
Changes to Encl 8, Human Systems

• Mix of military, DoD civilian, and contractor support to operate, maintain and support (including training) system must be determined based on Manpower Mix Criteria and reported in Manpower Estimate

• Economic analyses to support workforce mix decisions must use tools that account for all variable and fixed costs, compensation and non-compensation costs, current and deferred benefits, cash and in-kind benefits

• Details on Environment, Safety and Occupational Health (ESOH) moved to new...
Changes to Encl 9, Acquisition of Services

• Planning for acquisition of services must consider:
  - Requirements development and management
  - Acquisition planning
  - Solicitation and contract award
  - Risk management
  - Contract tracking and oversight
  - Performance evaluation

• Special procedures for IT services that cost over $500M, all services that cost over $1B, and special interest programs designated by ASD(NII), USD(AT&L) or their designees:
  - Senior officials/decision authorities must be notified prior to issuing final solicitation (briefing or written)
  - ASD(NII)/DoD CIO notifies USD(AT&L) of any proposed acquisition of IT services over $1B
  - Review by ASD(NII)/USD(AT&L) initiates review of acquisition strategy – final RFPs cannot be released
Changes to Encl 9, Acquisition of Services

- Policy extended to services acquired after program achieves Full Operational Capability (FOC), if those services were not subject to previous milestones.

- Policy does not apply to R&D activities, or services that are approved part of an acquisition program managed IAW DoDI 5000.02.

- Senior Officials and decision authorities may apply policy to R&D services at their discretion.

- SAEs are Senior Officials for acquisition of services.

- USD(AT&L) is Senior Official for acquisition of services for Components outside of military departments – he may delegate decision authority to commanders/directors of these components.

- Independent management reviews (Peer Reviews) required for contracts of $1B or more.
<table>
<thead>
<tr>
<th>Category</th>
<th>Threshold</th>
<th>Decision Authority</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acquisitions &gt; $1B</td>
<td>Any services acquisition with total estimated cost of $1B or more</td>
<td>USD(AT&amp;L) or designee</td>
</tr>
<tr>
<td>IT Acquisitions &gt; $500M</td>
<td>IT services with total estimated cost of $500M or more</td>
<td>ASD(NII)/DoD CIO or as designated</td>
</tr>
<tr>
<td>Special Interest</td>
<td>Designated by USD(AT&amp;L), ASD(NII)/DoD CIO, or any Mil Dept Senior Official</td>
<td>USD(AT&amp;L) or Senior Officials</td>
</tr>
<tr>
<td>Services Category I</td>
<td>Services estimated to cost $250M or more</td>
<td>Senior Officials or as designated</td>
</tr>
<tr>
<td>Services Category II</td>
<td>Services estimated to cost $10M or more, but less than $250M</td>
<td>Senior Officials or as designated</td>
</tr>
<tr>
<td>Services Category III</td>
<td>Services estimated to cost more than simplified acq threshold, but less than $10M</td>
<td>Senior Officials or as designated</td>
</tr>
</tbody>
</table>

All dollars in FY 2006 constant year dollars.
Changes to Encl 10, Program Management

• Requires PMs for ACAT II and other significant non-major programs to be assigned for not less that 3 years.

• Program Management Agreements (PMAs) implemented to establish “contract” between PM and acquisition and resource officials

• Provides that waivers for PM/PEO experience and certifications “should be strictly avoided.”

• Provides for USD(AT&L) waiver for PEO’s to assume other command responsibilities

• Adds US-ratified materiel international standardization agreements to consideration for international cooperative programs
Encl 11, Mgt of Business Systems

- Applies to “defense business systems” modernizations with total modernization or development funding exceeding $1 million.
  - Defines Defense Business System as an information system, other than a national security system, operated by, for, or on behalf of DoD, including financial management systems, mixed systems, financial data feeder systems, and IT and information assurance infrastructure.
  - Defense Business Systems support activities such as acquisition, financial management, logistics, strategic planning and budgeting, installations and environment, and human resource.
• Funds cannot be expended until the Defense Business System Management Committee (DBSMC) approves Investment Review Board Certification (IRB) that the system:

- Is in compliance with the enterprise architecture; or Is necessary to achieve a critical national security capability or address a critical requirement in an area such as safety or security; or Is necessary to prevent a significant adverse impact on a project that is needed to achieve an essential capability
1. PM completes economic viability review & other plans/analysis as requested by the PCA
2. PCA validates info from PM, forwards certification request to appropriate IRB
3. IRB reviews request, IRB chair recommends appropriate approval authority, signs certification memo and requests DBSMC approval
4. CA sends signed certification memo to DBSMC for approval
5. DBSMC Chair approves certification and sends decision to the PM through the PCA.
6. PM requests MDA conduct milestone review
• Systems Engineering Plan (SEP) required at each milestone
• MDA is approval authority for the SEP
• For programs where USD(AT&L) is MDA, and programs on the DT-only portion of OSD T&E Oversight List, SEPs must be submitted to Director, Systems and Software Engineering 30 days prior to DAB/ITAB review
• PEOs must have lead systems engineer – oversees SE across PEOs portfolio; reviews SEPs; assesses performance of subordinate systems engineers with PEO and PM
• Event-driven technical reviews required – with SMEs independent of program, unless waived by MDA
• Requires configuration management to establish and control product attributes and the technical baseline
• ESOH risk management required to be integrated with overall SE process; Programmatic ESOH Evaluation (PESHE) required of all programs regardless of ACAT
• NEPA and EO 12114 (Environmental Effects Abroad of Major Federal Actions) analysis required of PM, approved by CAE
• Addresses PM support of Mishap Accident Investigations
• Requires Corrosion Prevention Control Plan for ACAT I programs at MS B and C
• Requires PMs to employ modular open systems approach to design
• Data Management Strategy (DMS) required to assess long-term technical data needs of the system