Integrated Defense Acquisition, Technology, and Logistics Life Cycle Management System

DoD Decision Support Systems Effective Interaction is Essential

Planning, Programming & Execution Process DEPSECDEF Oversight DoD 7000.14-R

Joint Capabilities Integration & Development System VCJCS Oversight CJCSI 3170.01 series

Defense Acquisition System USD(AT&L) Oversight DoD 5000.01

Following the Materiel Development Decision, the Milestone Decision Authority may authorize entry into the acquisition process at any point, consistent with phase-specific entrance criteria and statutory requirements

This chart is a classroom aid for Defense Acquisition University students. It provides a notional illustration of interfaces among three major decision support systems used to develop, produce and field a weapon system for national defense. Defense acquisition is a complex process with many more activities than shown here and many concurrent activities that cannot be displayed on a two-dimensional chart. Supporting information is on back of this chart. For more information, see the Defense Acquisition Portal (http://dap.dau.mil).

Phases

- **Materiel Solution Analysis Phase** — Complete Analysis of Alternatives to assess alternative materiel solutions to capability need, identify key technologies and estimate life cycle costs. Consider commercial-off-the-shelf and solutions from both large and small business. Identify materiel solution to capability need. Complete Technology Development Strategy.
- **Technology Development Phase** — Reduce technology risk, determine and mature appropriate set of technologies to integrate into full system, demonstrate critical technology elements on prototypes, and complete preliminary design. Identify an affordable program or increment of militarily useful capability, demonstrate technology in relevant environment, and identify and assess manufacturing risks. Provide for two or more competing teams producing prototypes of system and/or key system elements prior to or through Milestone B.
- **Engineering & Manufacturing Development Phase** — Develop a system or increment of capability; complete full system integration, develop affordable and executable manufacturing process; ensure operational supportability; reduce logistics footprint; implement human systems integration; design for producibility; ensure affordability; protect critical program information; and demonstrate system integration, interoperability, safety, and utility.
- **Production & Deployment Phase** — Achieve operational capability that satisfies mission needs. Low-rate initial production (limited deployment for software intensive systems with no development hardware) and full-rate production (full deployment for software intensive systems). Deliver fully funded quantity of systems and supporting material and services for program or increment to users.
- **Operations & Support Phase** — Execute support program that meets materiel readiness and operational support performance requirements and sustains systems in most cost-effective manner. Overlaps Production and Deployment Phase.

Milestones: MDD, MS A, MS B, Post-CDR A, MS C, FRP DR

Row labels (left margin)

- Joint Capabilities Integration & Development System (need-driven)
- Oversight & Review
- Contracting
- Major Products
- Logistics/Sustainment
- Defense Acquisition System (event-driven)
- Technical — Systems Engineering Test and Evaluation Supportability
- Financial Management
- Planning, Programming, Budgeting & Execution Process (annual-calendar-driven)

Initiate Evolutionary Acquisition Strategy — Evolutionary Acquisition Strategy

Total Life Cycle Systems Management

TLCSM

Cost Estimation Methods
Analogy — Parametric — Engineering — Actual Costs

Types of Funds
- RDT&E – Advanced Technology Development
- RDT&E – Advanced Component Development and Prototypes
- RDT&E – Systems Development & Demonstration
- RDT&E – Management & Support
- Procurement
- Operations and Maintenance

Appropriated Funds To Support Contracts
PMO POM Input — PMO Budget Estimate

Planning, Programming, Budgeting & Execution Process
- Military Departments and Defense Agencies: POM/Budget Formulation → POM/Budget Submit (July)
- Office of the Secretary of Defense and Joint Staff: Defense Planning & Programming Guidance → Integrated Program/Budget Review (August–November) → Decisions (November) → MBI (SECDEF Option) → DoD Budget (December); Fiscal Guidance (April); FYDP updated
- White House: Fiscal Guidance → OMB (January) → President's Budget to Congress (February, 1st Monday)
- National Military Strategy / National Defense Strategy / National Security Strategy (National Strategy Documents updated as necessary)
- Issue Nominations/Disposition
- DoD Testimony / DoD Appeals
- Congressional Budget Process (February – September): Budget Committees → Authorization Committees → Appropriation Committees → Authorization/Appropriation Acts Passed; Allocation; Apportionment

DAU — Defense Acquisition University