



Developmental Test & Evaluation

OUSD(AT&L)/DDR&E

Chris DiPetto

12th Annual NDIA Systems Engineering Conference



Agenda



- **DT&E Title 10 USC overview**
- **Organization**
- **DDR&E imperatives**
- **What Title 10 means for DT&E within DoD**
- **Initial Vectors**
- **Challenges**
- **Initiatives**
- **Summary**



Our Guidance

- **Defense Budget Recommendation Statement**
Secretary of Defense Robert M. Gates, April 06, 2009
 - *reaffirm our commitment to take care of the all-volunteer force*
 - *rebalance this Department's programs*
 - *institutionalize and enhance our capabilities to fight the wars we are in today and the scenarios we are most likely to face in the years ahead,*
 - *provide a hedge against other risks and contingencies*
 - *fundamental overhaul of our approach to procurement, acquisition, and contracting*
- **Economic Club of Chicago**
Secretary of Defense Robert M. Gates, July 16, 2009
 - *What is needed is a portfolio of military capabilities with maximum versatility across the widest possible spectrum of conflict*



DT&E in Title 10, USC

No

- **DT&E Primary Responsibilities**

- Policy and guidance for the conduct of DT&E in the DoD
- Defining Performance Criteria
- DT&E approval of the TEMP for each MDAP
- Assessing the DT&E activities of each MDAP
- Advocacy, oversight, and guidance to acquisition DT&E workforce
- Assessing the DT&E organizations and capabilities of the military departments

- **Annual Report to Congress (with Director, SE)**

- The extent to which MDAPs are meeting test objectives
- The organizations and capabilities of the DoD for DT&E

The DDT&E is the principal advisor to the Secretary of Defense and the Under Secretary of Defense for Acquisition, Technology, and Logistics on developmental test and evaluation in the Department of Defense



Acquisition Concerns



THE USUAL SUSPECTS:

Cost, Schedule, Performance

- **Over budget**
 - GAO: 96 active MDAPs are \$300B over initial estimates
- **Late to need**
 - Getting capability to the user to meet urgent needs
- **Programs failing Operational Test**
 - Suitability issues
 - Late discovery



Weapon Sys Acq Reform Act

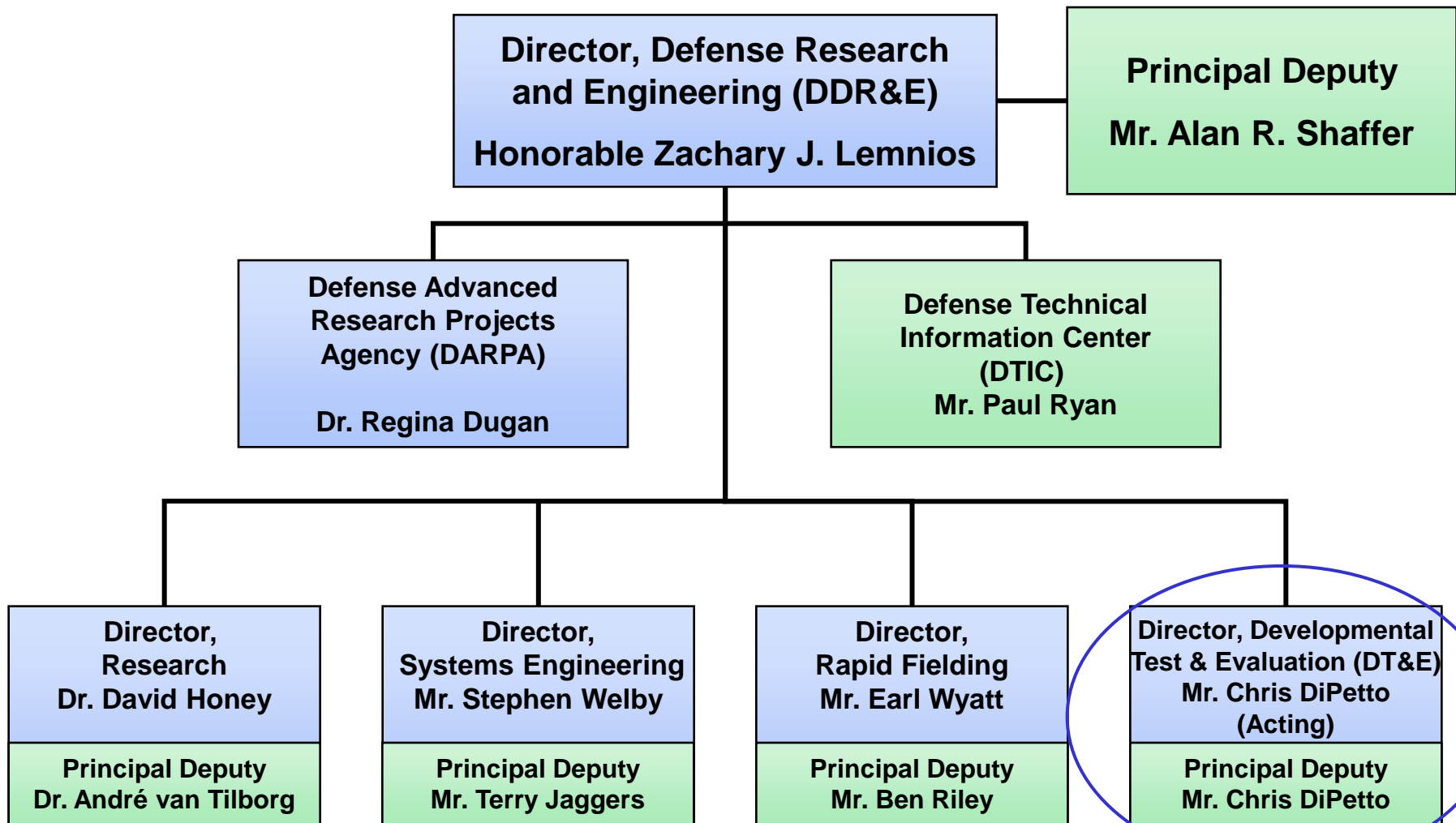


“.... the key to successful acquisition programs is getting things right from the start with sound systems engineering, cost-estimating and **developmental testing** early in the program cycle...” .

Senator Carl Levin

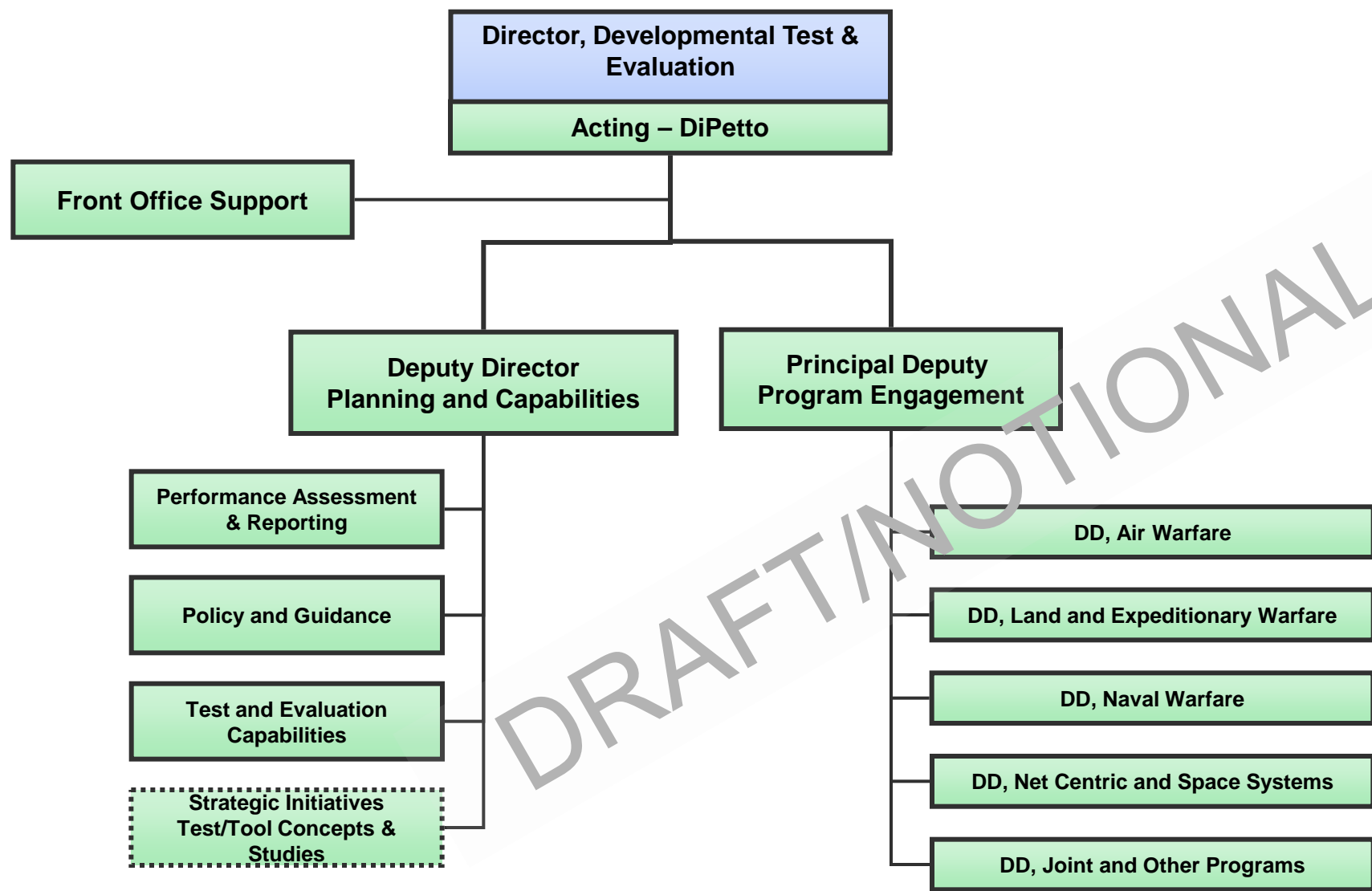


DDR&E Organization





D,DT&E Draft Org Chart





DDR&E Imperatives



- Accelerate delivery of technical capabilities to win the current fight: **Rapid Fielding**
- Prepare for an uncertain future.
- **Reduce the cost, acquisition time and risk of our major defense acquisition programs.**
- Develop world class science, technology, engineering, and mathematics capabilities for the DoD and the Nation.

“One dollar of waste in our defense budget is a dollar we can’t spend to support our troops or prepare for future threats or protect the American people.”

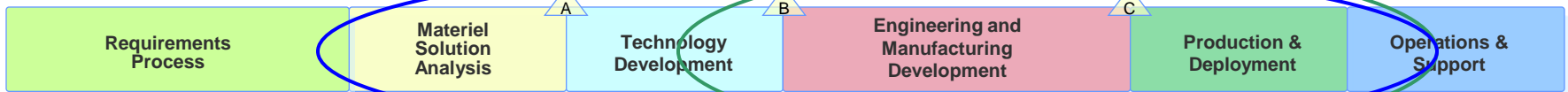
***Robert M. Gates
Secretary of Defense***



What this Means for DT&E in DoD

2009 and Beyond: Establish D,DT&E and focus on Programs

- T&E consideration during program formulation
- TEMP focus: risk (scope of DT&E etc), assessment criteria
- Integrated Test
- Technology Maturity and Integration risk
- Oversight of program performance relative to TEMP and SEP criteria
- DT&E-driven Assessment of Operational Test Readiness
- Independent DT assessment to MDA (read voice at the DAB)



2003 – 2008:

Systems Engineering focus on Program Execution

- Integrated SE and DT&E
- TEMP focus on evaluation framework
- Published AT&L policy letters instantiated in DoDI 5000.02
- Overhauled and enriched DAWIA curriculum
- OSD Systems Engineering T&E assessments



Initial Vectors



Reconstitute the DT&E Organization

Principal advisor to the SecDef and USD(AT&L) on DT&E

- **Build foundations for program engagement**
Reinstitute meaningful and effective T&E oversight of MDAPs
 - Establish measurable performance criteria (TES & TEMP)
- **Capability assessments**
Evaluate Component plans
 - How are the components positioned (resource-wise) for DT&E?
 - For contracting, planning, and execution of DT&E
- **Annual report on MDAPs**
 - Analogous to D,OT&E annual report

Right test, right information, right decision.



Challenges



- **Interaction with DT&E organizations within the program management framework**
 - No DT&E analog to OTA
 - NAVAIR-like APEO/APM relationships
 - Role of government in DT&E
- **Early DT&E involvement in program formulation to reduce acquisition cost, risk, and cycle time**
 - DDR&E assessment of technology readiness
 - Accurate cost and resource estimates
 - Correct staffing, experience, and training
 - Correct T&E capabilities (with TRMC)

***“I reject the notion that we have to waste billions of taxpayer dollars to keep this nation secure.”
- President Obama***



Initiatives



- **Collaborative DT&E reviews tailored to program lifecycle phase**
 - What information should the DT&E community provide the MDA?
- **Integrated Testing**
 - Now DoD policy
- **Reliability**
 - Policy changes in 5000 and 3170 series
 - Contract language, assessment scorecards
- **Workforce**
 - DDR&E STEM imperative, in-sourcing, 852
- **T&E integration in DDR&E technology imperatives & rapid fielding**
 - DDR&E rapid capability development study
 - What's the goal:
 - Capabilities & limitations
 - Safety



Summary



- **The importance of effective DT&E planning, execution, and reporting is recognized, valued and now prescribed in public law**
- **The OSD/DT&E has a voice in the acquisition process**
 - TEMP review and approval
 - Independent, T&E - based risk assessments to the MDA for each MDAP
 - Annual report

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TEMP at OSD dot MIL



Questions





Backup





What this Means for DT&E in DoD



D,DT&E provides independent risk assessments to the Milestone Decision Authority based on assessments of DT&E planning, resourcing, and execution for each MDAP

- **Policy & Guidance**

- Collaborative development of integrated T&E and Joint T&E policy and guidance
- Emphasis on development, tracking, and reporting of performance criteria

- **Capability Assessment**

- Functional leader for T&E career field
- DT&E planning, execution, and reporting
- Collaboration with TRMC on DT&E capabilities

- **Program Oversight**

- T&E consideration during program formulation
- Technological maturity and integration risk of critical technologies
- Scope of DT&E and integrated T&E planning
- T&E schedule and resource adequacy
- Program performance relative to TEMP and SEP criteria
- Assessment of Operational Test Readiness



Acquisition Concerns



THE USUAL SUSPECTS:

Cost, Schedule, Performance

- **Programs failing Operational Test**
 - Suitability
 - Late discovery
- **Requirements – are they testable, well written?**
 - Early involvement
- **Risk**
 - Is the T&E planning/resourcing adequate to assess performance?
 - How does the T&E community inform acquisition decisions?
- **Resources**
- **Expertise -**