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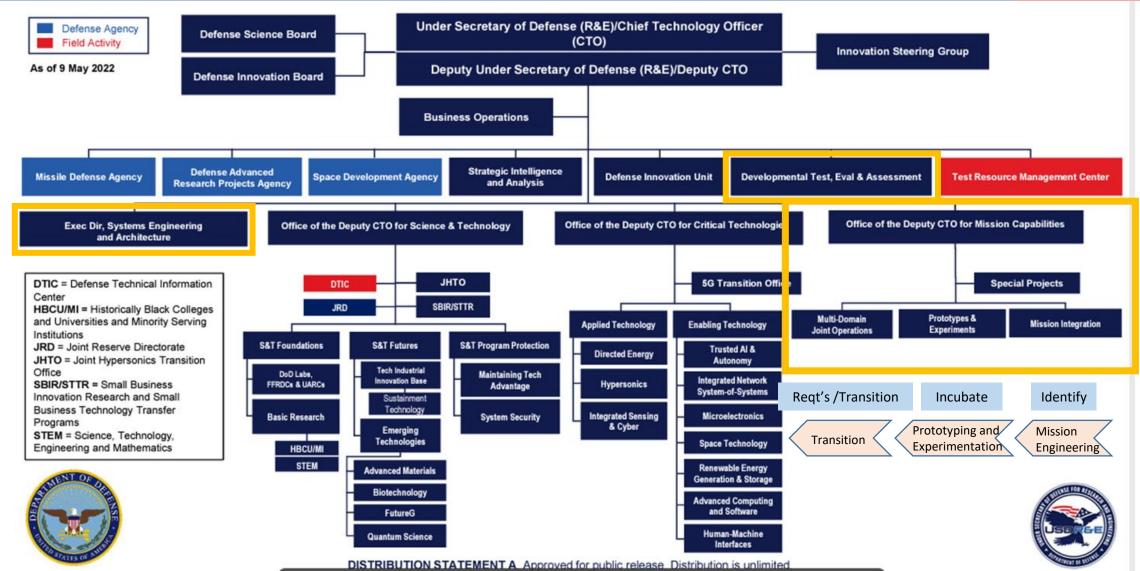
OUSD(R&E) Technology Transition and Engineering Initiatives

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OUSD(R&E) Organizational Structure





Rapid Defense Experimentation Reserve (RDER)

The Secretary of Defense established RDER to:

- Focus multi-Component experimentation in a structured, multi-year campaign of learning.
- Proposed experiments based on alignment to Joint missions and potential to yield demonstrable warfighting utility in the near-term.
- Demonstrations and experiments will be conducted at key exercise venues (INDOPACOM Focused).
- Successful demonstrations and experiments can be quickly transitioned to the Components for fielding as new systems or approaches.



"RDER will drive efforts to compete with peer and near-peer adversaries through the development of capabilities that support the Joint Warfighting Concept (JWC) including, but not limited to, fires, command and control, logistics, and capabilities that will drive information advantage." – Deputy Secretary of Defense Dr. Kathleen Hicks

RDER will bring five benefits to DoD:

- 1. Accelerate Joint Warfighting Capability
- Expand International Partnerships and Multi-lateral engagement
- 3. Focus Service experimentation to enable the JWC
- 4. Quickly demonstrate and assess innovative ideas
- Provide feedback to future Warfighting concept development









Scope of Mission Engineering

Mission Engineering (ME) – An interdisciplinary approach and process encompassing the entire technical effort to analyze, design, and integrate current and emerging operational needs and capabilities to achieve desired mission outcomes. (from the draft ME Guide 2.0) **R&E Technology Roadmaps Technologies to RDER Concepts Close Gaps Technology Demonstrations Capability Gaps DoD Prototypes Evaluate Solution Trades** Off-the-shelf items Joint Warfighting Concept (JWC) **Mix & Mission Efficacy** Inform & Recommend Requirements **Capability Gap Assessments (CGA) Architecture implications** Mission maturation **Joint Emergent & Urgent Operational Mission** roadmaps Needs **Engineering Capability Integration** Concept development & **Emergent & Urgent Operational Needs** Maturation Previous Studies, Analyses, and **Experimentation Events**

> **Capability Gaps Define Analysis Focus**

Characterize Mission & Operations

Inform & Recommend Mission Solution(s)



- Technology roadmaps
- **Prototype decisions**
- Investment decisions



Characterize Mission & Operations



Evaluate Solution Trades / Mix & Mission Efficacy



Inform & Recommend Mission Solution(s)



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BACKUP



Policy Changes for Portfolio Management

Legislative direction is driving changes to the acquisition, requirements, and budgeting processes to focus on delivering *integrated mission capability*, not just individual programs.

