



Office of the Under Secretary of Defense Research and Engineering Advanced Capabilities

Commanders Brief: Defense Standardization Program Virtual Conference

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OUSD(R&E) Mission



Ensure Technological Superiority for the U.S. Military

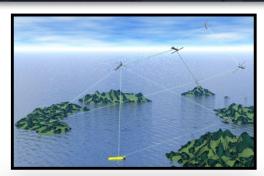
- Set the technical direction for the Department of Defense (DoD)
- Champion and pursue new capabilities, concepts, and prototyping activities throughout the DoD research and development enterprise

Bolster Modernization

- Pilot new acquisition pathways and concepts of operation
- Accelerate capabilities to the Warfighter

Advanced Capabilities—Engineering

- Propagate Engineering Best Practices
- Solve Engineering Problems
- Connect the Engineering Community







"What I've learned is that in order to get the most out of the federal government's technology ecosystem to drive innovation ... you need to be better coordinated across all aspects of the ecosystem,"

— Acting Under Secretary Kratsios, August 2020



Modernization Priorities



"We cannot expect success fighting tomorrow's conflicts with yesterday's weapons or equipment."

National Defense Strategy

- 5G
- Autonomy
- Biotechnology
- Cyber
- Directed Energy
- Fully Networked Command, Control, and Communications

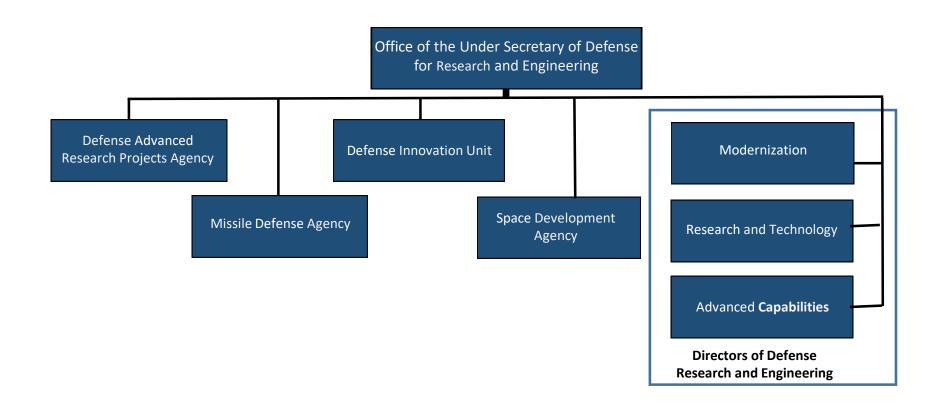
- Hypersonics
- Machine Learning / Artificial Intelligence
- Microelectronics
- Quantum Science
- Space

For each modernization priority, a Portfolio Manager (Assistant Director) is responsible for establishing the DoD-wide, mission-focused strategy and execution plan.



OUSD(R&E) Overview

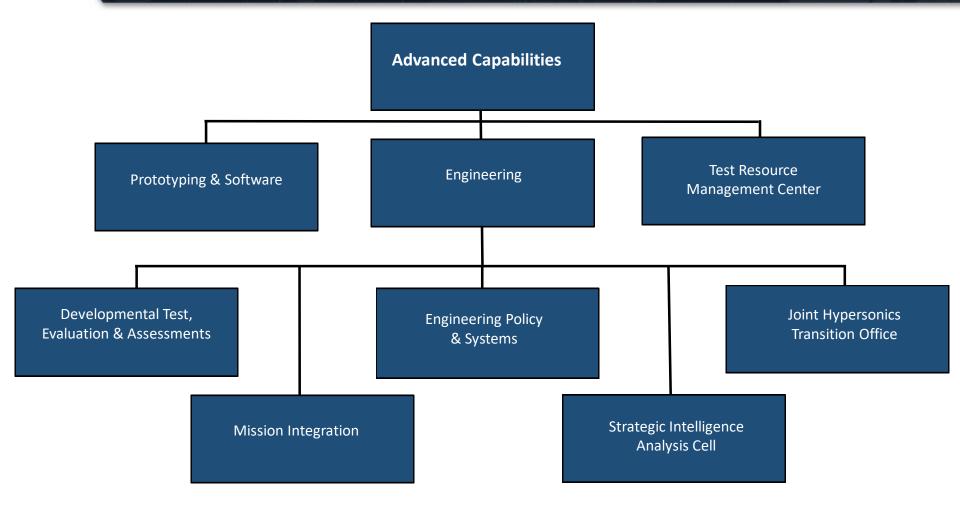






Advanced Capabilities/Engineering Org Chart



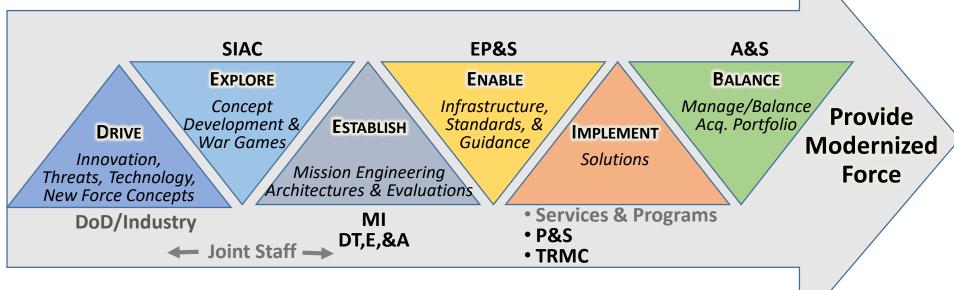




Aligning Modernized Force Development







Streamline and align development efforts along a unifying Mission Architecture to more rapidly provide a Modernized Force



Engineering Policy & Systems



 Mission: Establish, maintain, and propagate state-of-the-art engineering practice for the Department of Defense

Focus Areas:

- Organize communities of practice that connect the engineering community to solve crosscutting engineering challenges
 - Examples: Digital Engineering, Modular Open Systems Approach, Reliability & Maintainability, Standardization, Parts Management, Modeling & Simulation
- Create Engineering and Test & Evaluation policy, guidance, and standards that propagate best practices
 - Examples: DoD 5000.uj (Engineering), DOD 5000.uf (Test & Evaluation), Defense Acquisition Guidebook chapters
- Advance competencies and define the education, training, experience, and proficiency standards to develop the Engineering and Test & Evaluation workforces that are essential for warfighting success
 - Examples: Acquisition Workforce Transformation Task Forces for Engineering and Test & Evaluation, Workforce competency analysis for Production, Quality & Manufacturing and Software Engineering
- Provide engineering expertise to support OUSD(R&E) modernization priorities
 - Examples: Technology development and prototyping, Independent Technical Risk Assessments





Questions



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