Mission-Focused and Industry-Driven Rapid Acquisition

In the face of global conflicts and threats, ranging from non-state actors to peer adversaries, the DoD must prioritize delivering new capabilities that ensure U.S. superiority and decisive advantage across the competition-to-conflict spectrum, while moving beyond platforms and approaches that have limited transformation across the DoD.

Unfortunately, there is a long-standing consensus that it takes too long and costs too much to deliver new warfighting capabilities. Specifically, the Department of Defense (DoD) and Intelligence Community (IC) are not integrating advanced technological solutions into warfighting and operational capabilities as rapidly and effectively as needed to address the dynamic threat environment of today and tomorrow. A key factor contributing to this gap is the lack of alignment and synchronization between the DoD/IC and industry, particularly with the new generation of defense tech innovators as well as non-traditional dual-use companies. This has led to increased funding for the Defense Innovation Unit, greater use of Other Transactions (OT) across the DoD, and calls for major acquisition reform.

MITRE is hosting "Breaking Barriers in Defense Acquisition" on May 7th and 8th to bring together government and industry voices tackling acquisition's toughest challenges. Participants will deliver recommendations for capability-driven acquisition pathways, software-intensive systems for increased lethality, rapid acquisition for autonomous systems, scaling commercial and manufacturing innovation, and creating the environment for a thriving Allied industrial base. Together, we have the opportunity to redefine how industry and government interact throughout the acquisition lifecycle.

Core to the approach of breaking down barriers in acquisition is the alignment of commercial industry technical capability and development with identified mission gaps to effectively align resources to address the right parts of the right problem with the right solution, ultimately reducing the time from warfighter gap to contract award.

Where to start?

Critical missions and investing in capabilities that improve mission performance. With limited funds and time, focus on new capabilities that will make a difference in priority missions. Basing acquisitions on analysis of current and projected military capabilities to execute in priority threat scenarios drives investments on warfighter priorities and solution specifications driven by pragmatic battlefield demands.

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Key Questions

- How can industry and government accelerate deployment of innovative capabilities for mission success?
- How can proposed legislation and policies combined with effective use of existing authorities speed acquisition?
- How can access to tools, platforms, and data lower barriers for rapid commercial and dual-use technology adoption to enable warfighter lethality?

Mission effectiveness through mission engineering, transforming traditional systems engineering. Mission Engineering emphasizes the engineering analysis and design of integrated systems of systems spanning current and future capabilities to develop cohesive kill chains across the enterprise to help DoD increase military mission success and do more than just fill acquisition requirements.

Enable innovation & disruption.

Lower barriers to entry for industry. Provide access to information. tools, and digital platforms to adequately engage industry early and continuously in meaningful ways to identify and evolve proposed solutions. Engaging multiple industry teams increases the diversity of innovative approaches to improving mission success. For example, by offering industry access to mission analytic data on open platforms for experimentation and assessment, industry can assess the impact of novel approaches in the context of the complex constraints of the systems of systems operational environment early in the development lifecycle. This analytical capability represents the holistic context to address the right parts of the right problem to propose and evolve solutions to mission gaps based on the right mission alignment with commercial solutions, dual-use technology, or novel capabilities, and it incentivizes competition.

Efficiency & speed. Turn proposed solutions into prototyping and experimentation to demonstrate technical viability. Move directly from proposed solutions which show mission benefit to working prototypes and experimentation. Prototype design iteration will be based on analysis and experimentation results, leading to rapid deployment to get capability to the warfighter. Enable access to digital and physical infrastructure to test in realistic environments.

Mission effectiveness. Leverage prototype results to drive development and rapid deployment. Using the prototypes as the basis for development, deploy systems to gain operational experience while moving into production. Needs arising from rapid deployment can be addressed in block or software upgrades and assessed based on standing mission analysis capabilities. Enable access to operational environments and warfighters to receive real-time feedback.

Iteration & alignment. Deploy a small government team of engineers and warfighters with industry to conduct ongoing assessments based on feedback and analysis. By forming an integrated government and industry team, the review process can be streamlined with decisions made based on analysis and experimentation results.

Accelerate fielding of commercial solutions. Partner closely with industry to put innovative and useful solutions

in the hands of warfighters. Innovation bridging efforts can help to translate mission needs to small and innovative businesses.

Robust supply chains and commercial production. Address

policies that challenge the U.S. ability to have a robust native industry and secure supply chain to ensure we can scale production before and during conflict. Invest in manufacturing to drive innovation in materials and processes, including automation and additive manufacturing to enable more costeffective and efficient production lines.

Don't re-invent. Where technology is mature, available, or requires only minor adaptation, use it by leveraging DoD's contractual flexibility under current regulations. Focus efforts on enabling rapid integration with legacy and new systems as commercial technology evolves.

Demystify and speed acquisition.

Acquisition policy provides existing authorities to deliver operational capabilities quickly, but the workforce often lacks experience and understanding of how to use these methods. Focus training and education on upskilling the workforce to maximize the use of Commercial Solutions Openings (CSO), OT, and rapid prototyping to acquire capabilities.

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Join the event with senior defense and acquisition officials, industry experts, private capital funders, tech innovators, small defense suppliers, congressional staffers, policymakers, think tanks, and media representatives. **Help transform the blueprint for acquisition**.

Contact us at breakingbarriers@mitre.org

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