# Defense Acquisition: The Speed Imperative Slow Defense Acquisitions Cost Lives

The alarming pace of technology innovation among our potential adversaries is fast outstripping our own. Unless we make a dramatic shift now in how we develop and field advanced capabilities for our military, there may soon be regions of the globe where the United States is not the preeminent military power, endangering our national security and costing lives on the battlefield.

## A Case for Action

In September 2016, Popular Science reported that the China Electronics Technology Group developed and tested a single-photon quantum radar system powerful enough to detect items invisible to conventional radar within 100km—a range that "[beat] out American and German competition by 500 percent. This is a significant claim to make, as a quantum radar would theoretically be able to detect stealth aircraft at long ranges." Whether the claim is true or bogus, the pace of technology innovation among our potential adversaries represents a significant challenge.

This is more than a technology issue; it is an acquisitions issue. The way the Department of Defense (DoD) buys equipment has a direct impact on how well warfighters are prepared to defend themselves and achieve their missions. The "should schedule" movement is a simple acquisitions concept to motivate and incentivize faster delivery and agility. It is an important key to accelerating defense acquisition and regaining the country's innovation edge. However, achieving this kind of speed requires an investment not only in money, but also in changing mindsets about success and failure.

## Understanding the Problem

The notoriously slow and burdensome system we use to develop and buy equipment for our warfighters was designed during the Cold War. The people who work in it have very low risk tolerance. The system essentially assumes that major adversaries are even slower and more bureaucratic than we are. The system has reached a point, however, where it now threatens our national security.

Recently, leaders in the Pentagon and on the Hill have, rightfully, started to recognize this urgent and growing problem. Initiatives like the Secretary of Defense's Silicon Valley outreach (DIUx) are motivated by the alarmingly rapid deterioration of our technology edge and desperate need to "jump start" innovation and inject speed into our defense sector. However, to date these new efforts have been on a tiny scale. For example, all of these outreach pilots are resourced at less than 0.1 percent of our overall annual defense budget. It is time to dramatically scale up speed and innovation across the DoD acquisition enterprise.

Our ultimate goal in acquisitions should be to deliver capability to the warfighter more rapidly, but unfortunately today it takes too long to develop and field our systems.

-DEBORAH LEE JAMES, SECRETARY OF THE AIR FORCE



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### Areas of Opportunity for New Agency Leaders

So, what to do? We must embrace experimentation and learn how to "fail fast to succeed."

Whenever feasible, we must field capabilities quickly. Speed is key to adaptive and innovative systems—we must be able to keep pace with the rapid advance in technology, change as the adversary learns and adjusts, and adapt as our warfighters discover new ways to use innovations. We must have a "fail fast" mentality. Even if an attempted "80 percent solution" fails, often the best approach is to rapidly try something else. For this reason, rapid acquisition processes and programs are with us to stay and should be embraced by leadership.

Therefore, we suggest that instead of being the exception, rapid–fielding organizations like the Air Force's Rapid Capability Office should be the norm. Fast contracting mechanisms like Other Transactional Authority, where the government can have entities under contract within days and can stand up public/private partnerships, should be a regular part of how our Contracting Officers do business rather than the rarity they are today.

#### Main areas for action include the following:

 Make the "should schedule" movement a top priority in month one. As with the principles that supported the successful "should cost" initiative that has already saved over \$21 billion for the DoD, the new administration should move quickly to adopt the tenets of the "should schedule" movement.

- Within the first month, the administration should require that every acquisition program and service has a baseline schedule and an accelerated schedule with built-in government and contractor incentive structures if it is achieved. Currently, no such incentives exist in DoD programs.
- Recognize that making these changes across the Defense acquisition organization will be disruptive. Certainly some will object to changing the status quo. And when speed is emphasized there will be more "failures"—and our oversight and political processes are not very fault tolerant of that (look at innovators like SpaceX).
- Communicate to the key stakeholders both in and outside the DoD that change is imperative. If we don't move faster, the U.S. military will be the second or third most-powerful in the world, and our warfighters will bear the cost.

Ultimately, targeted reform for DoD acquisition can avoid the risks outlined in this brief. But it is important to recognize that our adversaries are agile and that U.S. military acquisitions must outgrow processes that date back to the Cold War if we are to successfully counter the threats facing our country today.

For further ideas about applying the guidance in this paper to your agency's particular needs, email federaltransition@mitre.org.

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