



Defense

Report: DOD needs new strategy to regain technological edge

By Sean D. Carberry

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The United States is facing growing cyber and electronic warfare threats, and the Department of Defense needs to develop a new "optionality strategy" in order to regain its technical advantage over military adversaries, a new report says.

The Center for a New American Security spent two years evaluating the decline in U.S. military technical superiority and released its findings and recommendations in "Future Foundry: A New Strategic Approach to Military-Technical Advantage."

The report echoes concerns raised by senior officials in recent years that the U.S. has not kept pace with adversaries in adopting and adapting new technologies to empower warfighters in increasingly contested electronic domains.

The report doesn't break any new ground in identifying the reasons why the DOD has lost its edge – citing the growth of commercially available technology, too much focus on requirements, an acquisition system designed for large weapons systems, a risk-averse culture, lack of political will in the executive branch and Congress -- but rather it focuses on how to reframe and respond to the problem.

"The DoD must view military-technical challenges as a strategic issue requiring fundamental change," the report states. "Defining military-technical superiority in terms of acquisition reform, process, procedures, and organizational structure -- even though those are critical elements for success -- undersells the importance of the challenge and may fail to drive action at the highest decisionmaking levels."

The authors, Ben FitzGerald, director of the Technology and National Security Program at CNAS, research associate Alexandra Sander and researcher Jacqueline Parziale, concede that while the optimal solution is to reframe the challenges as a strategy, "there is no recent historical evidence to suggest it is likely."

"In the absence of effective DoD leadership, Congress likely will continue to act as a change agent, attempting to force reform through legislation," the report says. "Such efforts will be better than no change at all, but Congress could better facilitate progress by dictating the outcomes it desires, rather than assigning specific solutions."

CNAS argues DOD should adopt a new strategic approach and set new policy to expand the range of military and technical options, while incentivizing industry to innovate.

CNAS contends that DOD does not need to scrap its existing acquisition system that is designed around military-unique systems such as tanks or submarines. But it needs to develop an "additional acquisition pathway, designed specifically to prototype new systems and adapt [commercial off-the-shelf] and [modifiable off-the-shelf] technologies into deployable, limited-production programs."

"Congress must work alongside the DoD to support the implementation of an additional acquisition pathway and address dysfunctional political, legislative, and budgetary obstacles that worsen military-technical outcomes," the report says.

In addition to DOD and congressional reforms, the report describes a role for industry as well. The report says that the DOD must reduce barriers to entry for small, innovative tech firms and better communicate to industry the potential advantages of partnering with the military.

At the same time, the authors say, "while industry will continue to be constrained by misaligned strategic and business incentives, it can take action in the absence of DoD leadership to create more ideal market conditions that support viable businesses and technological superiority."

For example, traditional defense contractors can serve as a conduit to the DOD for new technologies and companies. Also, industry can focus more on modularity in product design to support "increased agility and adaptability in the face of high speeds of technological change and the demands of varied threat environment," the report says. "Defense specialists can further benefit from capitalizing on systems-of-systems engineering methods, digital manufacturing, cloud services, and open source software."

The report acknowledges that "it will take years to build and implement portfolios with the diversity that the DoD needs," which is why the DOD "must establish necessary processes now, in anticipation of future budgetary flexibility."

CNAS also lays out a priority list of recommendations for the first 100 days of the new administration, including more institutional support of recent innovation hubs like the Defense Innovation Unit Experimental.

As is often the case with a report like this, the 42-page study is comprehensive on the "why" and "what" aspects of reforms needed. The question it doesn't clearly answer is *how* to take the reforms -- many of which are not particularly new -- and overcome barriers and inertia to finally turn them into actions.

About the Author

Sean Carberry is a former FCW staff writer who focused on defense, cybersecurity and intelligence.