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DEFENSE TECHNOLOGY DEVELOPMENT

Management Process Can Be Strengthened for New Technology Transition Programs

GAO Accountability·Integrity·Reliability

Highlights

Highlights of GAO-05-480, a report to Congressional Committees

Why GAO Did This Study

The Department of Defense (DOD) and Congress both recognize that Defense technology innovations sometimes move too slowly from the lab to the field. Three new programs have been recently created in DOD to help speed and enhance the transition of new technologies. A report accompanying the fiscal year 2003 National Defense Authorization Act required GAO to review two of these programs—the Technology Transition Initiative (TTI) and Defense Acquisition Challenge Program (DACP). The first is designed to speed transition of technologies from DOD labs to acquisition programs and the second is designed to introduce cost-saving technologies from inside and outside DOD. We were also asked to review the Quick Reaction Fund, which is focused on rapidly field testing promising new technology prototypes. We assessed the impact the programs had on technology transition and the programs' selection, management and oversight, and assessment practices.

What GAO Recommends

GAO recommends that DOD develop data and measures that can be used to assess short- and long-term impacts of the programs and take other actions to strengthen selection, management and oversight. DOD agreed with our recommendations as they related to the DACP and TTI programs, but does not believe they apply to the Quick Reaction Fund program.

www.gao.gov/cgi-bin/getrpt?GAO-05-480.

To view the full product, including the scope and methodology, click on the link above. For more information, contact Mike Sullivan at (937) 258-7915 or sullivanm@gao.gov.

What GAO Found

The ability to spur and leverage technological advances is vital to sustaining DOD's ability to maintain its superiority over others and to improve and even transform how military operations are conducted. The three new transition programs we reviewed are all appropriately targeted on what has been a critical problem in this regard—quickly moving promising technologies from the laboratory and commercial environment into actual use. Moreover, by tailoring processes and criteria to focus on different objectives, whether that may be saving time or money or broadening the industrial base, DOD has had an opportunity to experiment with a variety of management approaches and criteria that can be used to help solve transition problems affecting the approximately $69 billion spent over the past 3 years on later stages of technology development.

However, it is too soon for us to determine the impact the three new DOD technology transition programs are having. At the time of our review, the programs—the TTI, DACP, and Quick Reaction Fund—had completed only 11 of 68 projects funded in fiscal years 2003 and 2004; of those, only 4 were providing full capability to users. Additionally, the programs have limited measures to gauge success of individual projects and return on investment. Nonetheless, reports from the programs have pointed to an array of benefits, including quicker fielding of technological improvements, cost savings, and the opportunity for DOD to tap into innovative technologies from firms that are new to defense work. Some sponsored technologies are bringing benefits to warfighters, such as a small, unmanned aircraft that can detect chemical and biological agents, and a device the size of an ink pen that can be used to purify water on the battlefield or in disaster areas. Furthermore, DOD officials credit the programs with giving senior leaders the flexibility to rapidly address current warfighter needs and for highlighting smaller technology projects that might otherwise be ignored.

Long-term success for the programs likely will depend on how well the programs are managed and overseen. The programs must have effective processes for selecting the best projects, and management and oversight processes that will catch potential problems early. Thus far, of the three programs, the DACP has adopted the most disciplined and structured process for selecting and managing projects, and has encountered few problems managing projects. However, the program has had some difficulties processing the large number of proposals it receives. The TTI has also established selection criteria and processes, but it is unclear the extent to which it is reaching its intended audience and has had less success in tracking its projects. The Quick Reaction Fund has the least structured processes of the three programs—a deliberate approach seen as providing the flexibility needed to field innovations rapidly. It has had some difficulty selecting, managing and tracking projects.