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# DEFENSE TECHNOLOGY DEVELOPMENT

## Technology Transition Programs Support Military Users, but Opportunities Exist to Improve Measurement of Outcomes

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Highlights

Highlights of GAO-13-286, a report to congressional committees

### Why GAO Did This Study

DOD and Congress recognize that technology innovation sometimes moves too slowly from the lab to the field. Programs have been created in DOD to help facilitate the transition of new technologies. The conference report accompanying the fiscal year 2012 National Defense Authorization Act directed GAO to undertake a body of work that will provide a holistic assessment of DOD's S&T enterprise. This report reflects the results from GAO's first review, which focuses on technology transition. Generally, when technologies have been sufficiently matured in the S&T environment, the technologies are available to transition to a military user. GAO's specific objectives were to (1) determine what DOD programs are dedicated to facilitating technology transition, (2) assess the outcomes of these transition programs, and (3) identify practices among the programs that may facilitate technology transition. GAO conducted interviews with and collected information from each technology transition program to identify their selection, management, and assessment practices, as well as project outcomes.

### What GAO Recommends

GAO recommends that DOD require programs to track and measure project outcomes to document transition results and benefits from transition, as well as assess programs to identify opportunities for more widespread use of existing transition management tools. DOD generally concurred with these recommendations and stated that it will initiate actions to address potential opportunities for improvement identified in the report.

View GAO-13-286. For more information, contact Michael J. Sullivan at (202) 512-4841 or sullivanm@gao.gov.

### What GAO Found

GAO identified 20 technology transition programs—managed by the Office of the Secretary of Defense (OSD) and the military departments—that provide structured mechanisms and funding to facilitate technology transition. All of the programs GAO reviewed are consistent in providing opportunities to transition technologies from the science and technology (S&T) environment to a user, such as a weapon system acquisition program or the warfighter in the field. To help speed the delivery of technologies to users, most transition programs target fairly mature technologies, which are suitable for final stages of development and demonstration. Collectively, the programs GAO reviewed obligated about $7.9 billion in Department of Defense (DOD) research, development, test, and evaluation funding for fiscal years 2010 through 2012 to support technology transition.

Most programs that GAO assessed track whether their projects were completed and successfully transitioned to intended users. On average, programs reported a historical transition rate of over 70 percent for projects. The vast majority of these projects resulted in technologies transitioning to acquisition programs or directly to the warfighter. However, about one-quarter of the projects transitioned to other organizations, such as test and evaluation centers, for further development. Prior GAO work found that tracking technology transitions and the impact of those transitions, such as cost savings or deployment of the technology in a product, provides key feedback that can inform the management of programs. For the most part, transition programs that GAO reviewed do not track projects beyond transition, which limits their ability to know and report final outcomes for transitioned technologies and the associated benefits realized from those technologies.

As GAO has reported in the past, effective selection and management processes as well as tools are needed to ensure that new technologies can be successfully transitioned to military users. GAO found that OSD's and the Military Departments' technology transition programs make use of these practices to varying degrees. Most programs have formal review processes to determine whether candidate projects have sufficiently mature technologies, are in demand by users, and have schedules and costs that fit within the programs' criteria. Once selected, projects require effective management to ensure risks are minimized and transition commitments are confirmed. Many program officials indicated that regular stakeholder communication during project execution is important to ensure projects stay on track and transition commitments are sustained. Moreover, many program officials identified the use of formal management tools, such as technology transition agreements, as key mechanisms to help hold stakeholders accountable and facilitate technology transition.