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DEPARTMENT OF HOMELAND SECURITY

Oversight And Coordination of Research and Development Should Be Strengthened

GAO Accountability * Integrity * Reliability

Highlights

Highlights of GAO-12-837, a report to congressional requesters

Why GAO Did This Study

Conducting R&D on technologies for detecting, preventing, and mitigating terrorist threats is vital to enhancing the security of the nation. Since its creation, DHS has spent billions of dollars researching and developing technologies used to support its missions including securing the border, detecting nuclear devices, and screening airline passengers and baggage for explosives, among others. Within DHS, S&T conducts R&D and is the component responsible for coordinating R&D across the department, but other components, such as the Coast Guard and DNDO, also conduct R&D to support their respective missions. GAO was asked to identify (1) how much DHS invests in R&D and the extent to which DHS has policies and guidance for defining R&D and overseeing R&D resources and efforts across the department, and (2) the extent to which R&D is coordinated within DHS to prevent overlap, fragmentation, or unnecessary duplication. GAO reviewed information on DHS R&D budgets, contracts, and DHS spending on R&D at DOE national laboratories for fiscal years 2010 through 2012. GAO also reviewed DHS R&D plans and project documentation, and interviewed DHS headquarters and component officials.

What GAO Recommends

GAO recommends that DHS develop policies and guidance for defining, reporting and coordinating R&D activities across the department; and that DHS establish a mechanism to track R&D projects. DHS concurred with GAO's recommendations.

View GAO-12-837. For more information, contact David C.Maurer at (202) 512-9627 or maurerd@gao.gov.

What GAO Found

The Department of Homeland Security (DHS) does not know the total amount its components invest in research and development (R&D) and does not have policies and guidance for defining R&D and overseeing R&D resources across the department. According to DHS, its Science & Technology Directorate (S&T), Domestic Nuclear Detection Office (DNDO), and U. S. Coast Guard are the only components that conduct R&D and, according to GAO's analysis, these are the only components that report budget authority, obligations, or outlays for R&D activities to the Office of Management and Budget (OMB) as part of the budget process. However, GAO identified an additional $255 million in R&D obligations by other DHS components. For example, S&T reported receiving $50 million in reimbursements from other DHS components to conduct R&D. Further, 10 components obligated $55 million for R&D contracts to third parties and $151 million to Department of Energy (DOE) national laboratories for R&D-related projects, but these were not reported as R&D to OMB. According to DHS, it is difficult to identify all R&D investments across the department because DHS does not have a department wide policy defining R&D or guidance directing components how to report all R&D spending and activities. As a result, it is difficult for DHS to oversee components' R&D efforts and align them with agency wide R&D goals and priorities. Developing specific policies and guidance could assist DHS components in better understanding how to report R&D activities, and better position DHS to determine how much the agency invests in R&D to effectively oversee these investments.

S&T has taken some steps to coordinate R&D efforts across DHS, but the department's R&D efforts are fragmented and overlapping, which increases the risk of unnecessary duplication. R&D at DHS is inherently fragmented because S&T, the Coast Guard, and DNDO were each given R&D responsibilities in law, and other DHS components may pursue and conduct their own R&D efforts as long as those activities are coordinated through S&T. S&T uses various mechanisms to coordinate its R&D efforts including component liaisons, component R&D agreements, joint R&D strategies, and integrated R&D product teams composed of S&T and component officials. However, GAO identified 35 instances of overlap among contracts that DHS components awarded for R&D projects. For example, S&T and the Transportation Security Administration both awarded overlapping contracts to different vendors to develop advanced algorithms to detect the same type of explosive. While GAO did not identify instances of unnecessary duplication among these contracts, DHS has not developed a policy defining who is responsible for coordinating R&D and what processes should be used to coordinate it, and does not have mechanisms to track all R&D activities at DHS that could help prevent overlap, fragmentation, or unnecessary duplication. For example, S&T did not track homeland security-related R&D activities that DHS components contracted through DOE national laboratories from fiscal year 2010 through 2013; thus, it could not provide information on those contracts. Developing a policy defining the roles and responsibilities for coordinating R&D, and establishing coordination processes and a mechanism to track all R&D projects could help DHS mitigate existing fragmentation and overlap, and reduce the risk of unnecessary duplication.