



Highlights of [GAO-04-653](#), a report to the Chairman, Subcommittee on Emerging Threats and Capabilities, Committee on Armed Services, U.S. Senate

## Why GAO Did This Study

Success in the war against terrorism requires the United States to effectively research, develop, and deploy technologies to detect and respond to the use of nuclear, biological, and chemical weapons. The Homeland Security Act of 2002 gave the Department of Homeland Security (DHS) the ability to use laboratories owned by the Department of Energy (DOE) to conduct research and development (R&D) of these advanced technologies. GAO was asked to determine (1) whether DHS has completed a strategic R&D plan and coordinated its efforts with other federal agencies, (2) how DHS plans to use DOE's laboratories to carry out its R&D, and (3) what controls DHS is establishing to monitor projects at DOE's laboratories.

## What GAO Recommends

GAO recommends that the Secretary of Homeland Security (1) complete a strategic R&D plan, (2) ensure that this plan is integrated with homeland security R&D conducted by other federal agencies, (3) develop criteria for distributing annual funding and for making long-term investments in laboratory capabilities, and (4) develop guidelines that detail how DOE's laboratories would compete for funding with private sector and academic entities. In commenting on the report, DHS agreed with our recommendation to complete a strategic R&D plan, but did not explicitly agree or disagree with our remaining recommendations.

[www.gao.gov/cgi-bin/getrpt?GAO-04-653](http://www.gao.gov/cgi-bin/getrpt?GAO-04-653).

To view the full product, including the scope and methodology, click on the link above. For more information, contact Gene Aloise at (202) 512-3841 or [aloisee@gao.gov](mailto:aloisee@gao.gov).

## HOMELAND SECURITY

# DHS Needs a Strategy to Use DOE's Laboratories for Research on Nuclear, Biological, and Chemical Detection and Response Technologies

## What GAO Found

DHS has not yet completed a strategic plan to identify priorities, goals, objectives, and policies for the R&D of homeland security technologies, and some gaps remain in its coordination with other federal agencies. According to DHS officials, the department has not completed a research strategic plan because it has spent much of the time since its March 2003 creation organizing the Science and Technology Directorate, developing policies and procedures, and hiring necessary staff. DHS has worked with some interagency R&D groups and has signed a memorandum of agreement with DOE establishing policies for resolving priority conflicts at DOE's laboratories, but gaps remain in its efforts to coordinate and establish partnerships with other agencies conducting homeland security R&D. Failure to complete a strategic plan and to fully coordinate its research efforts may limit DHS's ability to leverage resources and could increase the potential for duplication of research.

DHS's research program has concentrated on funding projects at five DOE laboratories. These five laboratories—Los Alamos, Sandia, Lawrence Livermore, Pacific Northwest, and Oak Ridge National Laboratories—received over 96 percent of the \$57 million DHS invested in research at DOE's laboratories in fiscal year 2003 and will receive almost 90 percent of the \$201 million for fiscal year 2004. At the time of our review, the remaining DOE laboratories would receive DHS R&D funding primarily through competition with the private sector and academia. Although federal acquisition regulations generally prohibit DOE's laboratories from competing with the private sector and academia for federal funding, some competition can occur under specific circumstances. For example, DOE's laboratories can respond to R&D solicitations with the private sector and academia for broad scientific study for advancing the state of the art or for increasing knowledge. Some DOE laboratory officials feel that if DHS focuses on short-term, applied research, their laboratories' ability to attract and retain top scientific talent and build and maintain laboratory facilities may be threatened. In response to concerns from Members of Congress and officials from DOE's laboratories, DHS announced in March 2004 that it would review its policies for working with DOE's laboratories. DHS officials have also agreed that it is necessary to make long-term investments in laboratory capabilities in order to create an enduring R&D complex for homeland security.

DHS is making progress developing the project management tools it will use to monitor project costs, milestones, and deliverables. Monthly reports will discuss project accomplishments and concerns that could affect the execution of the project. Quantitative performance metrics are also being developed for these monthly reports to gauge differences between budgeted and actual cost and schedules of R&D work performed. Also, DHS plans to conduct regular peer reviews of projects to assess how technical approaches being followed by R&D projects match DHS's requirements.