



Testimony  
Before the Subcommittee on  
Cybersecurity, Infrastructure  
Protection, and Security Technologies,  
Committee on Homeland Security,  
House of Representatives

---

For Release on Delivery  
Expected at 2:00 p.m. ET  
Tuesday, July 29, 2014

# COMBATING NUCLEAR SMUGGLING

## Past Work and Preliminary Observations on Research and Development at the Domestic Nuclear Detection Office

Statement of David C. Trimble, Director  
Natural Resources and Environment

# GAO Highlights

Highlights of [GAO-14-783T](#), a testimony before the Subcommittee on Cybersecurity, Infrastructure Protection, and Security Technologies, Committee on Homeland Security, House of Representatives

## Why GAO Did This Study

Preventing terrorists from using nuclear or radiological material to carry out an attack in the United States is a top national priority. Within DHS, DNDO's mission is to (1) improve capabilities to deter, detect, respond to, and attribute attacks, in coordination with domestic and international partners, and (2) conduct R&D on radiation and nuclear detection devices. GAO has reported on progress and challenges in DNDO's efforts since 2006 and is currently reviewing DNDO's planning and prioritization of its R&D investments.

This testimony discusses GAO's past work on DNDO's efforts to develop the GNDA and deploy radiation detection equipment and DHS's efforts to coordinate R&D across the agency, as well as preliminary observations from GAO's ongoing review of DNDO's research directorate's efforts to (1) manage its R&D investments to align with critical mission needs and (2) coordinate its R&D efforts internally, with other federal research agencies, and with end users of the technology it develops.

To conduct its ongoing review, GAO analyzed DHS documents and data related to how DNDO plans and prioritizes its R&D program, and interviewed officials on coordinating R&D.

GAO is not making any new recommendations in this statement. As GAO continues to complete its ongoing work, it will consider the need for any new recommendations as appropriate. DHS provided technical comments, which were incorporated as appropriate.

View [GAO-14-783T](#). For more information, contact David C. Trimble at (202) 512-3841 or [trimbled@gao.gov](mailto:trimbled@gao.gov).

July 2014

## COMBATING NUCLEAR SMUGGLING

### Past Work and Preliminary Observations on Research and Development at the Domestic Nuclear Detection Office

#### What GAO Found

GAO has reported on the Department of Homeland Security's (DHS) Domestic Nuclear Detection Office's (DNDO) since 2006. GAO has identified challenges and made recommendations in the following areas:

- **DNDO's efforts to develop the Global Nuclear Detection Architecture (GNDA):** In 2008, GAO recommended that DHS develop a strategic plan to guide the development of the GNDA, a framework for 74 independent programs, projects, or activities to detect and interdict nuclear smuggling. In 2010, DHS issued a plan and GAO reviewed this plan and found that it generally addressed GAO's recommendations.
- **DNDO's efforts to replace radiation detection equipment:** GAO has found challenges in DNDO's efforts to develop and deploy radiation portal monitors, which scan for nuclear or radiological materials at ports of entry. GAO has made several recommendations throughout the history of these efforts, and DNDO has taken actions that have generally been responsive.
- **DHS's efforts to coordinate research and development (R&D) across the agency.** In 2012 and 2013, GAO made recommendations to help DHS oversee its R&D investments and efforts, and in particular its border and maritime R&D efforts. GAO's recommendations focused on strengthening coordination and defining R&D across the agency. DHS concurred with GAO's recommendations and described actions it plans to take in response.

Preliminary observations from GAO's ongoing review are that DNDO has taken steps to manage R&D and assess project outcomes, but that it may not be able to demonstrate how agency investments align with critical mission needs. DNDO officials told GAO that they discuss how research projects may contribute to critical mission needs but that they do not document these discussions. Once research projects are complete, DNDO officials told GAO they evaluate the success of individual research projects, but DNDO does not have a systematic approach to ensure its overall R&D investments address gaps in the GNDA. As a result, DNDO may not be able to demonstrate to key stakeholders—including oversight organizations and potential users of new technologies—that its R&D investments are aligned with critical mission needs.

GAO's ongoing work indicates that DNDO officials have taken some steps to coordinate R&D efforts internally, with other federal agencies, and with end users, but preliminary analysis shows that not all of DNDO's end users are satisfied with DNDO's communication. DNDO directorates work closely to identify critical mission needs, and DNDO collaborates with other federal research agencies to leverage expertise. However, DNDO's end users varied in their satisfaction with DNDO's efforts to coordinate with them. Officials from two end user agencies told GAO that coordination was working well; however, officials from the largest end user agency stated that they were generally dissatisfied with DNDO's coordination because DNDO's research directorate does not provide them information directly and, in some cases, found that project requirements would not meet the agency's operational needs. This is consistent with GAO's 2010 finding that inadequate communication caused DNDO to pursue scanning technology that would not meet the operational requirements of the end user if it were deployed.

---

Chairman Meehan, Ranking Member Clarke, and Members of the Subcommittee:

I am pleased to be here today to discuss our past work on the Department of Homeland Security's (DHS) Domestic Nuclear Detection Office (DNDO) and our preliminary observations on DNDO's management and coordination of its research and development (R&D) investments as you consider the reauthorization of DNDO. Preventing terrorists from using nuclear or radiological material to carry out an attack in the United States is a top national priority. Terrorists could use these materials to make an improvised nuclear device or a radiological dispersal device (also called a "dirty bomb"). The detonation of a nuclear device in an urban setting could cause hundreds of thousands of deaths and devastate buildings and physical infrastructure for miles. While not as damaging, a radiological dispersal device could nonetheless cause hundreds of millions of dollars in socioeconomic costs as a large part of a city would have to be evacuated—and possibly remain inaccessible—until an extensive radiological decontamination effort was completed. A key element of the strategy for protecting the homeland from the consequences of nuclear or radiological terrorism is the Global Nuclear Detection Architecture (GNDA), a multilayered framework encompassing 74 independent programs, projects, or activities by the federal government and its partners to detect and interdict nuclear smuggling in foreign countries, at the U.S. border, and inside the United States.<sup>1</sup>

Within DHS, DNDO is responsible for improving the nation's capabilities to deter, detect, respond to, and attribute attacks, in coordination with domestic and international partners.<sup>2</sup> To accomplish this, DNDO is organized into directorates that support elements of its mission. Three of these directorates are relevant to my testimony today: (1) the Architecture and Plans Directorate, which analyzes gaps in the GNDA and develops strategies and plans for the GNDA in coordination with its partners; (2) the Product Acquisition and Deployment (Acquisition) Directorate, which is responsible for developing, acquiring, and deploying radiation detection

---

<sup>1</sup>U.S. government partners include state, tribal, and local governments, the private sector, and international partners.

<sup>2</sup>DNDO was established in 2005 by National Security Presidential Directive (NSPD)-43/Homeland Security Presidential Directive (HSPD)-14 and codified in statute by the Security and Accountability for Every Port Act of 2006 (SAFE Port) Act, Pub. L. No. 109-347 § 501, 120 Stat. 1884, 1932 (codified as amended at 6 U.S.C. § 591).

---

equipment to support the efforts of federal, state, and local agencies that use radiation detection equipment to carry out their mission; and (3) the Transformational and Applied Research (TAR) Directorate, which conducts R&D of radiation and nuclear detection devices and furthers the development of technologies to support the domestic component of the GNDA. DNDO established the TAR Directorate in 2006 to identify, explore, develop, and demonstrate scientific and technological approaches that meet one or more of the following criteria: address gaps in the GNDA; improve the performance of domestic radiological and nuclear detection systems and enabling technologies; or increase the operational efficiency of detection technology for domestic end users: primarily DHS' Customs and Border Protection (CBP), but also Coast Guard, Transportation Security Administration (TSA), and state and local law enforcement. DNDO's TAR Directorate makes R&D investments based on competitive awards to researchers in government laboratories, academia, and private industry for basic and applied R&D efforts. From fiscal year 2008 through fiscal year 2013, the TAR Directorate obligated approximately \$328 million for about 205 projects focused on basic research, technology prototypes, software development, and computer modeling for the detection of radioactive and nuclear materials, among other things. The TAR Directorate's total budget, including R&D, for fiscal year 2014 was \$71.1 million.

My testimony today is based on reports we issued from March 2006 to September 2013, as well as preliminary observations from our ongoing review for this Subcommittee of the TAR Directorate's efforts to plan, prioritize, and assess outcomes of its R&D program. Specifically, my statement today discusses our past work on DNDO's efforts to develop the GNDA and deploy radiation detection equipment and DHS's efforts to coordinate R&D across the agency, as well as preliminary observations from our ongoing review of the TAR Directorate's efforts to (1) manage its R&D investments to align with critical mission needs and (2) coordinate its R&D efforts internally, with other federal research agencies, and with the end users of the technology it develops.

Detailed information on our scope and methodology for our prior work can be found in the reports cited throughout this statement. To develop our preliminary observations on the TAR Directorate's efforts to manage and coordinate its R&D investments, we reviewed agency documents that identify critical mission needs for R&D and the TAR Directorate's process for planning and prioritizing R&D investments. We also obtained data from the TAR Directorate's project database that contained information on all ongoing and completed research projects funded from fiscal year 2008

---

through 2013, which we used to determine the total number of TAR Directorate research projects and obligations allocated during this period. To assess the reliability of the data, we interviewed the TAR Directorate officials responsible for maintaining the database and determined the data were reliable for providing background information on the TAR Directorate's projects. Our review does not include the TAR Directorate's nuclear forensics portfolio because projects in that portfolio are not selected using the same planning and prioritization process as projects in the TAR Directorate's other research areas. We interviewed the Assistant Directors of the TAR Directorate, the Architecture and Plans Directorate, and the Acquisition Directorate. We also interviewed the TAR Directorate's research managers on the TAR Directorate's process for identifying critical mission needs, selecting research topics and projects, managing and evaluating research areas, coordinating R&D, and aligning R&D investments with critical mission needs. We also interviewed officials at federal agencies with a R&D component and potential end users of technology developed under DNDO's R&D program to understand how DNDO coordinates the planning of R&D. Specifically, we interviewed officials at the Department of Defense's (DOD) Defense Threat Reduction Agency and the Department of Energy's (DOE) National Nuclear Security Administration (NNSA) and end users at DHS' CBP, the Coast Guard, and TSA to understand their involvement in DNDO's R&D planning, prioritization, and evaluation process. We shared the information on our preliminary findings with officials from DNDO, CBP, Coast Guard, TSA, the Defense Threat Reduction Agency, and NNSA. DNDO and the Defense Threat Reduction Agency officials provided technical comments, which we incorporated, as appropriate. We expect to issue a final report on this work in December 2014.

The work upon which this testimony is based was conducted in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

---

## DNDO's Efforts to Develop the GNDA and Deploy Radiation Detection Equipment, and DHS's Efforts to Coordinate R&D

We have reported on progress and challenges in DNDO's efforts to develop the GNDA and deploy radiation detection equipment since 2006 and have recently reported on DHS's efforts to coordinate R&D across the agency.<sup>3</sup>

Regarding DNDO's efforts to develop the GNDA, in July 2008,<sup>4</sup> when DNDO was in the early stages of this work, we found that DNDO, in collaboration with other federal agencies, had made progress by identifying critical gaps in domestic efforts to prevent and detect radiological and nuclear smuggling but had not clearly articulated a long-term plan for expanding radiological and nuclear detection capabilities to close those gaps. As a result, we recommended that DHS develop a strategic plan to guide the development of the GNDA and, in January 2009, further recommended that DHS develop a strategic plan for the domestic part of the global nuclear detection strategy.<sup>5</sup> DHS has taken actions on these recommendations by issuing an interagency GNDA strategic plan in December 2010 and an implementation plan about 1 year later.<sup>6</sup> In July 2011 and July 2012, when we reviewed these actions, we found that they generally addressed our recommendations.<sup>7</sup> However, in July 2012, we testified that it remained difficult to identify priorities among the components of the domestic part of the GNDA.

---

<sup>3</sup>See, for example GAO, *Combating Nuclear Smuggling: DHS Has Made Progress Deploying Radiation Detection Equipment at U.S. Ports-of-Entry, but Concerns Remain*, [GAO-06-389](#) (Washington, D.C.: Mar. 22, 2006); *Nuclear Detection: Preliminary Observations on the Domestic Nuclear Detection Office's Efforts to Develop a Global Nuclear Detection Architecture*, [GAO-08-999T](#) (Washington, D.C.: July 16, 2008); and *Department of Homeland Security: Oversight and Coordination of Research and Development Should Be Strengthened*, [GAO-12-837](#) (Washington, D.C.: Sept. 12, 2012).

<sup>4</sup>[GAO-08-999T](#).

<sup>5</sup>GAO, *Nuclear Detection: Domestic Nuclear Detection Office Should Improve Planning to Better Address Gaps and Vulnerabilities*, [GAO-09-257](#) (Washington, D.C.: Jan. 29, 2009).

<sup>6</sup>The GNDA strategic plan was an interagency effort jointly developed by the Departments of Homeland Security, Energy, Defense, Justice, and State; the intelligence community; and the Nuclear Regulatory Commission.

<sup>7</sup>GAO, *Combating Nuclear Smuggling: DHS has Developed a Strategic Plan for its Global Nuclear Detection Architecture, but Gaps Remain*, [GAO-11-869T](#) (Washington, D.C.: July 26, 2011) and *Combating Nuclear Smuggling: DHS has Developed Plans for Its Global Nuclear Detection Architecture, but Challenges Remain in Deploying Equipment*, [GAO-12-941T](#) (Washington, D.C.: July 26, 2012).

---

Regarding DNDO's efforts to deploy radiation detection equipment, our past work has found challenges in DNDO's efforts to develop and deploy radiation portal monitors, which scan for nuclear or radiological materials at ports of entry, at U.S. border crossings, and seaports.<sup>8</sup> As we reported in July 2012, deployed portal monitors are reaching the end of their expected service lives, and DNDO, with input from CBP, will need to make decisions about whether to refurbish or replace them.<sup>9</sup> We have reported, since March 2006, on programs to replace existing portal monitors with more advanced versions and have made several recommendations concerning these efforts, most of which DNDO has implemented.<sup>10</sup> In September 2010, we found that inadequate communication between DNDO and CBP contributed to DNDO pursuing the deployment of a system to use radiography to scan cargo for nuclear materials without fully understanding that it would not fit within existing inspection lanes at ports of entry and would slow down the flow of commerce through these lanes, causing significant delays.<sup>11</sup> At that time, DNDO and CBP officials said they were communicating much more routinely and that, in their view, it would be unlikely that the communication problems we identified would reoccur. DNDO decided to cancel the acquisition of the system and limit any further work on demonstrating the potential capability of the technology to research and development efforts, highlighting the importance of effective coordination even in the R&D phases of a system.

Regarding DHS's efforts to coordinate across its components that conduct R&D, in September 2013 we reviewed the extent to which DHS and its components, including DNDO, coordinated border and maritime

---

<sup>8</sup>See, for example, GAO, *Combating Nuclear Smuggling: Additional Actions Needed to Ensure Adequate Testing of Next Generation Radiation Detection Equipment*, [GAO-07-1247T](#) (Washington, D.C.: Sept. 18, 2007); *Combating Nuclear Smuggling: DHS Improved Testing of Advanced Radiation Detection Portal Monitors, but Preliminary Results Show Limits of the New Technology*, [GAO-09-655](#) (Washington, D.C.: May 29, 2009); and *Combating Nuclear Smuggling: Recent Testing Raises Issues About the Potential Effectiveness of Advanced Radiation Detection Portal Monitors*, [GAO-10-252T](#) (Washington, D.C.: Nov. 17, 2010).

<sup>9</sup>[GAO-12-941T](#).

<sup>10</sup>[GAO-06-389](#).

<sup>11</sup>GAO, *Combating Nuclear Smuggling: Inadequate Communication and Oversight Hampered DHS Efforts to Develop an Advanced Radiography System to Detect Nuclear Materials*. [GAO-10-1041T](#) (Washington, D.C.: Sept. 15, 2010).

---

R&D efforts within DHS and among other federal agencies.<sup>12</sup> We found that DNDO has mechanisms for coordinating its R&D efforts that vary depending on the maturity of the technology. Specifically, the TAR Directorate did not always interact directly with DHS' operational components because it worked with less mature technologies. We also found, among other things, that DHS had taken actions to develop departmental policies to better define and coordinate R&D but that work remained to be done at the agency level to ensure border and maritime R&D efforts are mutually reinforcing and are being directed toward the highest priority needs. We made recommendations to help ensure that DHS effectively manages and coordinates its border and maritime R&D efforts. DHS concurred with our recommendations and described actions it plans to take in response. In September 2012, we reviewed the management and coordination of R&D at DHS among the Science and Technology Directorate, Coast Guard, DNDO and other components and found that DHS did not have a department-wide policy defining R&D or guidance directing components how to report R&D activities and investments.<sup>13</sup> We made recommendations to help ensure that DHS effectively oversees its R&D investments and efforts and reduces fragmentation, overlap, and the risk of unnecessary duplication. As of July 2014, DHS had taken some steps to address two of our recommendations, including establishing a definition of R&D and guidance for coordinating R&D across the agency. However, work remains to be done to address our remaining recommendation to create a mechanism to track existing R&D projects and their associated costs across the department.

---

<sup>12</sup>GAO, *Department of Homeland Security: Opportunities Exist to Better Evaluate and Coordinate Border and Maritime Research and Development*, [GAO-13-732](#) (Washington, D.C.: Sept. 25, 2013).

<sup>13</sup>[GAO-12-837](#).



---

## The TAR Directorate's R&D Investments May Not Align with Critical Mission Needs

Our preliminary observations from our ongoing analysis are that DNDO's R&D component, the TAR Directorate, has taken steps to manage R&D and to assess project outcomes, but it may not be able to demonstrate how its R&D investments align with critical mission needs. Each year, the DNDO Architecture and Planning Directorate identifies critical mission needs based on an analysis of gaps in the GNDA and provides this information to the TAR Directorate. According to TAR Directorate officials, research managers within the directorate consider these needs to identify the topics for that year's competitive awards for new basic and applied research. After they select which research projects to fund, TAR Directorate officials write contracting documents that guide the goals and milestones of the projects and regularly review the progress of their ongoing research projects. According to TAR Directorate officials, they (1) consider the potential for the research to contribute to resolving gaps in the GNDA at each step of planning and selecting research projects and (2) discuss this potential with officials from the other DNDO directorates, the Defense Threat Reduction Agency, and NNSA, but they do not document these discussions. Once research projects are completed, TAR Directorate officials told us they take steps to evaluate the outcomes of individual research projects by, for example, requiring researchers to complete deliverables that describe how the research performed compared with the initial goals for the project that were outlined in the contract.<sup>14</sup>

However, our preliminary observations are that the TAR Directorate has limited information to demonstrate how its R&D investments align with critical mission needs. TAR Directorate officials stated that they understand how projects are intended to make progress on gaps in the GNDA based on the information contained in the contract deliverables of individual projects but acknowledged that it would be difficult for non-scientists who are not fully involved in a project to understand how projects address these gaps based on this information alone. Further, TAR Directorate officials stated that the directorate does not have a systematic approach for evaluating its overall R&D program or a mechanism for (1) tracking the longer-term outcomes of individual

---

<sup>14</sup>Our review of the TAR Directorate's R&D projects from fiscal year 2008 through fiscal year 2013 showed that examples of outcomes for completed projects included transferring resulting technology to private industry for commercialization, transitioning knowledge gained to a new TAR Directorate-funded R&D project for further development, or determining that the technology was not feasible.

---

projects and (2) measuring how those outcomes may contribute to addressing gaps in the GNDA. TAR Directorate officials told us that the scientific community is small enough that they are usually able to continue to follow their funded research after a project ends. TAR Directorate officials also told us they have made efforts to disseminate the results of individual projects by posting articles on DHS's website and discussing successes at conferences. With limited information on how R&D investments are intended to make progress on gaps in the GNDA, and without a process for assessing and reporting on the results of its R&D program as a whole against those gaps, the TAR Directorate may not be able to demonstrate to key stakeholders—including oversight organizations and potential users of new technologies—that its R&D investments are aligned with critical mission needs. We plan to continue our audit work on this issue and will present our findings in more detail in our final report, with any related suggestions for improvement, which we expect to issue in December 2014.

---

## The TAR Directorate Has Taken Steps to Coordinate Its R&D but May Face Communication Challenges with Some End Users

Our preliminary observations from our ongoing analysis are that the TAR Directorate has taken steps to coordinate its R&D efforts internally, with other federal research agencies, and with end users of the technologies it develops, but the TAR Directorate may face communication challenges with one of its key end users. As the TAR Directorate plans and manages its R&D investments, agency officials we interviewed stated that TAR Directorate officials take steps to coordinate within DNDO, across agencies with similar missions, and with potential end users of resulting technology as follows:

- **Within DNDO:** Our preliminary observation is that TAR Directorate officials work closely with officials from DNDO's Architecture and Plans Directorate and the Acquisition Directorate to identify critical mission needs based on gaps in the GNDA. For example, according to interviews with officials from all three DNDO directorates, officials from the three directorates participate in and provide feedback to the TAR Directorate during individual project reviews at key milestones and at annual research reviews. In addition, the three directorates coordinate an annual DNDO Industry, Academia, and Lab Engagement Day, formerly known as "industry days" where officials from all three directorates discuss ways to enhance existing radiation detection devices and develop new technologies with members of industry, academia, DOE national laboratories, and others. According to DNDO documents, TAR Directorate officials also share data and results from R&D efforts to inform the acquisition decisions made by

---

the Architecture and Plans Directorate and the Acquisition Directorate. Officials from DNDO's Architecture and Plans Directorate and Acquisition Directorate told us that their level of involvement with TAR Directorate officials is effective and provides them with a common understanding of how DNDO's R&D investments are aligned with critical mission needs.

- **Across agencies with similar research missions:** Our preliminary observation from our ongoing review is that the TAR Directorate coordinates regularly with the Defense Threat Reduction Agency and NNSA on both a program and individual project level. According to officials from the TAR Directorate, the Defense Threat Reduction Agency, and from NNSA, this coordination is intended to leverage expertise and decrease the opportunity for duplication of research efforts while each agency invests in areas to meet its mission needs. For example, these officials told us that representatives from these agencies meet regularly to discuss their R&D goals, ongoing projects, and topics for soliciting new research.<sup>15</sup> The officials said that the representatives also participate in each other's proposal review processes, as well as project review meetings once funded projects meet key milestones. Officials from the Defense Threat Reduction Agency and from NNSA told us that collaboration with the TAR Directorate works well and keeps them informed about the status and results of relevant research. We plan to continue our audit work on this issue and will present our findings in more detail in our final report, which we expect to issue in December 2014. We reported in June 2014 on collaboration between the Architecture and Plans Directorate and NNSA on an effort to research, develop, and test a new technology for a radiological tracking device and found that although the agencies had been meeting quarterly, this mechanism did not always help them collaborate and draw on each agency's expertise.<sup>16</sup>

---

<sup>15</sup>DNDO has a memorandum of understanding with DOD's Defense Threat Reduction Agency, DOE's NNSA, and the Office of the Director of National Intelligence to coordinate national nuclear detection R&D programs, which, according to officials from all three agencies, guides these efforts.

<sup>16</sup>See GAO, *Nuclear Nonproliferation: Additional Actions Needed to Increase the Security of U.S. Industrial Radiological Sources*, [GAO-14-293](#) (Washington, D.C.: June 6, 2014). According to TAR Directorate officials, the effort to research, develop, and test a radiological tracking device was not a project within the TAR Directorate.

- 
- **With potential end users:** Our preliminary observation is that the TAR Directorate has an indirect mechanism for coordinating with potential end users of the technology that the directorate develops during the planning phases of research projects. TAR Directorate officials told us that, rather than communicate directly with end users, staff in the Architecture and Plans Directorate discuss technology requirements and operational needs with end users as part of the Architecture and Plans Directorate's work coordinating the GNDA, and these staff relay the information back to the TAR Directorate. Once a project starts, TAR Directorate officials told us they meet directly with end users by inviting end users to project review meetings at key milestones, such as technology demonstrations.

In the course of our ongoing work, however, we found that end users' satisfaction with this level of coordination with the TAR Directorate varied. For example, officials from TSA told us that they are generally satisfied with this relationship because they are most interested in acquiring available radiation detection equipment and do not have the technical expertise to engage directly with the TAR Directorate's research efforts. In addition, officials from the Coast Guard told us their indirect relationship with the TAR Directorate works well because it is based on a defined strategy that outlines the Coast Guard's short-term and long-term technology requirements, and the Coast Guard currently has three detailees working at DNDO who are able to communicate the unique needs of the Coast Guard. However, officials from CBP, which is DHS's largest end user of radiation detection technologies, told us they are generally dissatisfied with the level of interaction with TAR. Specifically, CBP officials stated that they typically do not learn about the TAR Directorate's projects until after the project requirements are written and research contracts are issued and, in some cases, has found that project requirements would not meet CBP's operational needs if the technology were deployed at ports of entry. CBP officials told us they would prefer to work directly with TAR Directorate officials at all stages of the research process to gain a better understanding of the TAR Directorate's research goals and to help ensure that its R&D projects align with CBP's operational needs.

As noted above, in September 2010, we found that poor communication with CBP hampered DNDO's ability to develop an advanced system for

---

detecting nuclear materials.<sup>17</sup> In May 2013, we also found that DNDO's analysis of lessons learned that it conducted after it cancelled an advanced portal monitor program stated that effective outreach, communication, and buy-in from the end user are critical to successful acquisitions.<sup>18</sup> We plan to continue our audit work on this and other issues and will present our findings in more detail and any related suggestions for improvements in our final report, which we expect to issue in December 2014.

---

Chairman Meehan, Ranking Member Clarke, and Members of the Subcommittee, this completes my prepared statement. I would be pleased to respond to questions that you may have at this time.

---

## GAO Contact and Staff Acknowledgments

If you or your staff members have any questions about this testimony, please contact me at (202) 512-3841, or [trimbled@gao.gov](mailto:trimbled@gao.gov). Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this statement. Individuals making key contributions to this statement include Ned Woodward, Assistant Director; Michelle Cooper, Analyst-in-Charge; Aryn Ehlow; Jane Eyre; and Alison O'Neill. Key contributors for the earlier work that supports this testimony are listed in each product.

---

<sup>17</sup>[GAO-10-1041T](#).

<sup>18</sup>GAO, *Combating Nuclear Smuggling: Lessons Learned from Cancelled Radiation Portal Monitor Program Could Help Future Acquisition*, [GAO-13-256](#) (Washington, D.C.: May 13, 2013).

---

---

This is a work of the U.S. government and is not subject to copyright protection in the United States. The published product may be reproduced and distributed in its entirety without further permission from GAO. However, because this work may contain copyrighted images or other material, permission from the copyright holder may be necessary if you wish to reproduce this material separately.

---

---

## GAO's Mission

The Government Accountability Office, the audit, evaluation, and investigative arm of Congress, exists to support Congress in meeting its constitutional responsibilities and to help improve the performance and accountability of the federal government for the American people. GAO examines the use of public funds; evaluates federal programs and policies; and provides analyses, recommendations, and other assistance to help Congress make informed oversight, policy, and funding decisions. GAO's commitment to good government is reflected in its core values of accountability, integrity, and reliability.

---

## Obtaining Copies of GAO Reports and Testimony

The fastest and easiest way to obtain copies of GAO documents at no cost is through GAO's website (<http://www.gao.gov>). Each weekday afternoon, GAO posts on its website newly released reports, testimony, and correspondence. To have GAO e-mail you a list of newly posted products, go to <http://www.gao.gov> and select "E-mail Updates."

---

## Order by Phone

The price of each GAO publication reflects GAO's actual cost of production and distribution and depends on the number of pages in the publication and whether the publication is printed in color or black and white. Pricing and ordering information is posted on GAO's website, <http://www.gao.gov/ordering.htm>.

Place orders by calling (202) 512-6000, toll free (866) 801-7077, or TDD (202) 512-2537.

Orders may be paid for using American Express, Discover Card, MasterCard, Visa, check, or money order. Call for additional information.

---

## Connect with GAO

Connect with GAO on [Facebook](#), [Flickr](#), [Twitter](#), and [YouTube](#). Subscribe to our [RSS Feeds](#) or [E-mail Updates](#). Listen to our [Podcasts](#). Visit GAO on the web at [www.gao.gov](http://www.gao.gov).

---

## To Report Fraud, Waste, and Abuse in Federal Programs

Contact:

Website: <http://www.gao.gov/fraudnet/fraudnet.htm>

E-mail: [fraudnet@gao.gov](mailto:fraudnet@gao.gov)

Automated answering system: (800) 424-5454 or (202) 512-7470

---

## Congressional Relations

Katherine Siggerud, Managing Director, [siggerudk@gao.gov](mailto:siggerudk@gao.gov), (202) 512-4400, U.S. Government Accountability Office, 441 G Street NW, Room 7125, Washington, DC 20548

---

## Public Affairs

Chuck Young, Managing Director, [youngc1@gao.gov](mailto:youngc1@gao.gov), (202) 512-4800 U.S. Government Accountability Office, 441 G Street NW, Room 7149 Washington, DC 20548

