



Highlights of [GAO-GAO-10-883T](#), a testimony before the Committee on Homeland Security and Governmental Affairs, U.S. Senate

## Why GAO Did This Study

In April 2005, a Presidential Directive established the Domestic Nuclear Detection Office (DNDO) within the Department of Homeland Security (DHS) to enhance and coordinate federal, state, and local efforts to combat nuclear smuggling abroad and domestically. DNDO was directed to develop, in coordination with the departments of Defense, Energy, and State, an enhanced global nuclear detection system of radiation detection equipment and interdiction activities. (DNDO refers to this system as an architecture.) DNDO is to implement the domestic portion of the architecture. Federal efforts to combat nuclear smuggling have largely focused on established ports of entry, such as seaports and land border crossings, and DNDO has also been examining nuclear detection strategies along other pathways.

Over the past 7 years, GAO has issued numerous recommendations on nuclear or radiological detection to the Secretary of Homeland Security, most recently in January 2009. This testimony discusses the status of DHS efforts to (1) complete the deployment of radiation detection equipment to scan all cargo and conveyances entering the United States at ports of entry, (2) prevent smuggling of nuclear or radiological materials via the critical gaps DNDO identified, and (3) develop a strategic plan for the global nuclear detection architecture. GAO's testimony is based on prior work that was updated by obtaining DHS documents and interviewing DHS officials.

View [GAO-GAO-10-883T](#) or key components. For more information, contact Gene Aloise at 202-512-3841 or [aloise@gao.gov](mailto:aloise@gao.gov).

## COMBATING NUCLEAR SMUGGLING

### DHS Has Made Some Progress but Not Yet Completed a Strategic Plan for Its Global Nuclear Detection Efforts or Closed Identified Gaps

#### What GAO Found

DHS has made significant progress in both deploying radiation detection equipment and developing procedures to scan cargo and conveyances entering the United States through fixed land and sea ports of entry for nuclear and radiological materials since GAO's 2006 report. While DHS reports it scans nearly 100 percent of the cargo and conveyances entering the United States through land borders and major seaports, it has made less progress scanning for radiation (1) in railcars entering the United States from Canada and Mexico; (2) in international air cargo; and (3) for international commercial aviation aircraft, passengers, or baggage.

DHS efforts to prevent the smuggling of nuclear and radiological materials into the United States through gaps DNDO identified in developing the nuclear detection architecture remain largely developmental since GAO's 2009 report. The gaps DHS identified include land border areas between ports of entry into the United States, international general aviation, and small maritime craft such as recreational boats and commercial fishing vessels. These gaps are important because of their size, volume of traffic, and the difficulty of deploying available radiological and nuclear detection technologies. DHS's actions to address these gaps consist primarily of efforts to develop, test, and deploy radiation detection equipment; conduct studies or analyses to identify and address particular threats or gaps; develop new procedures to guide scanning for radiation; and develop and learn from pilot programs.

DHS does not yet have a strategic plan for the global nuclear detection architecture, but DHS officials said they began working on a plan earlier this year and expect to complete it by fall 2010—2 years after GAO last recommended this to DNDO—and more than 7 years after we first identified the need for a comprehensive plan in October 2002. The lack of a strategic plan has limited DHS's efforts to complete such an architecture, because although each agency with a role in combating nuclear smuggling has its own planning documents, without an overarching strategic plan, it is difficult to address the gaps and move to a more comprehensive global nuclear detection strategy. DNDO's 4-year effort to develop an advanced radiation detection monitor is an example of the consequences of not having a strategic plan and not reaching consensus on such a plan with other federal agencies. In GAO's view, the proposed deployment of this monitor distracted DNDO from its mission to fully deploy the architecture and close the gaps it identified. Also, in 2006 GAO recommended that the decision to deploy this monitor be based on an analysis of both benefits and costs—which GAO later estimated at over \$2 billion—and a determination of whether any additional detection capability provided by the monitor was worth its additional cost. DNDO proceeded with ASP testing without fully completing such an analysis. Further, DNDO focused this monitor deployment effort on replacing components of the architecture where a radiation detection system was already in place—at established ports of entry—and shifting its focus away from closing the gaps it identified in the architecture.