

GAO Highlights

Highlights of [GAO-16-460](#), a report to the Subcommittee on Energy and Water Development, Committee on Appropriations, U.S. Senate

Why GAO Did This Study

International nuclear and radiological smuggling threatens national security. According to the Department of Homeland Security, detecting and interdicting these materials as far away from the United States as possible increases the probability of successfully deterring nuclear and radiological smuggling into the United States. To help interdict these materials, NNSA's NSDD program has partnered with 59 countries to provide radiation detection equipment and support. GAO was asked to review key aspects of the NSDD program.

This report examines (1) NSDD's plans for completing key activities and achieving its goals, (2) selected partner countries' use of NSDD-provided equipment to detect or interdict nuclear or radiological material, and (3) NSDD's challenges. GAO reviewed NSDD documents, interviewed officials, and visited a nonprobability sample of 19 sites, including land border crossings, airports, and seaports in three countries—Azerbaijan, Bulgaria, and Georgia—selected on the basis of the number and types of sites, their potential as nuclear smuggling routes, and program expenditures, among other factors.

What GAO Recommends

GAO recommends that NNSA direct NSDD to improve its program plan by more clearly articulating when and how it will complete key activities and achieve its goals. NNSA agreed with this recommendation and is taking action to address it.

View [GAO-16-460](#). For more information, contact David C. Trimble at (202) 512-3841 or trimbled@gao.gov.

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COMBATING NUCLEAR SMUGGLING

NNSA's Detection and Deterrence Program Is Addressing Challenges but Should Improve Its Program Plan

What GAO Found

The National Nuclear Security Administration's (NNSA) Nuclear Smuggling Detection and Deterrence (NSDD) program has developed a program plan that includes four 5-year goals to guide its efforts; however, NSDD cannot measure its progress toward completing key activities and achieving these goals because its program plan does not fully incorporate leading practices for program management. Leading practices include having measurable outcome-oriented goals, goals for all key activities, performance measures that align with these goals, and details for how and when key activities will be completed and goals achieved. However, NSDD's goals are not all measurable, some describe actions rather than outcomes, and they do not fully address all of the program's key activities. In addition, its performance measures are not aligned with these goals, and its program plan does not detail how it will complete key program activities or achieve its goals. Absent a program plan incorporating these leading practices, NSDD may not be able to determine when it has accomplished its mission and risks continuing to deploy equipment past the point of diminishing returns.

In each of the three selected partner countries GAO visited—Azerbaijan, Bulgaria, and Georgia—law enforcement officers and government officials attributed multiple cases of successful detection, deterrence, and interdiction of smuggled nuclear and radiological materials to the use of NSDD-provided radiation detection equipment. For example, one of these countries has been involved with 21 such smuggling cases over the past 10 years, with over 50 convictions made as a result. Moreover, some cases in these countries have involved the detection and interdiction of highly enriched uranium, which can be used to develop a nuclear weapon.

NSDD faces an unusual set of challenges in performing its work, many largely outside of its control. Nonetheless, the program is taking actions to mitigate the effects of these challenges. For example, NSDD officials cited changing conditions in partner countries as a key challenge. In particular, NSDD officials noted that the conflict between the Ukrainian government and separatist groups that began in 2014 has led to the destruction of 29 radiation portal monitors, and NSDD officials do not know whether the program will be able to fix or replace them and, if so, when. To mitigate this challenge, NSDD plans to deploy additional radiation detection equipment at key locations outside the conflict area.

Damage to a Site in Ukraine with Installed Radiation Portal Monitors



Note: The arrows identify the still-standing but damaged radiation portal monitors.

Source: Nuclear Smuggling Detection and Deterrence program (images). | GAO-16-460