Placed in the wrong hands, stolen and disused nuclear and radiological materials can be smuggled and used in acts of terrorism and mass disruption. The Office of Nuclear Smuggling Detection and Deterrence (NSDD) works with partners worldwide to develop and expand a global multilayered security network to prevent smuggling of illegal nuclear and radiological materials.

Multiple assets to counter nuclear smuggling and terrorism.

Smuggling occurs by land, air, and sea over official and unofficial borders. To create detection opportunities along these pathways, a multilayered and flexible approach is crucial. Through its NSDD Partnership, the Office collaborates with security and law-enforcement professionals around the globe to identify and incorporate multiple detection assets into a country’s existing security system, providing an effective layered approach to prevent nuclear smuggling. NSDD also supplies the training, materials, and global partnerships needed to enable partner countries to operate these systems independently and effectively.

Building a layered defense.

The NSDD Partnership works with its international partners to secure border crossings, airports, seaports, and rail crossings. The main technical tool to secure these pathways is the radiation detection system (RDS). These systems are integrated into existing checkpoint operations to provide automated and efficient round-the-clock scanning of people, vehicles, and cargo for the presence of radiation. Because traditional security tools such as metal detectors, X-ray scanners, and trained canines cannot detect radiation, RDSs are a necessary and effective tool to prevent smuggling across an international crossing point.

As tightened security along official routes forces smugglers to risk capture or to take more dangerous routes, the NSDD Partnership also provides mobile detection tools to add an additional layer of security within a country’s interior and in other locations. Mobile tools are routinely used:

- Along blue and green borders
- In response to information alerts or sting operations related to smuggling activity
- Near political boundaries where equipment installations are impractical or unauthorized
- At major public or other special events

Operation and training support.

NSDD provides partner access to in-depth educational programs on topics including operation and maintenance of RDSs, development of standard operating procedures and regulations, rapid asset mobilization planning, radiation detection investigative techniques, nuclear forensics, and a wide variety of customized tabletop and field training exercises.

Worldwide partnerships.

NSDD works to connect partners who can support one another on a regional level, and encourages regional cooperation through cross-border events, and exercises. NSDD collaborates with international organizations including INTERPOL, IAEA, European Commission, UN, and the Global Initiative to Combat Nuclear Terrorism (GICNT). NSDD draws upon the expertise of its National Laboratory scientists to optimize equipment functionality in a wide range of environments and also collaborates with the United States Department of State, Department of Homeland Security, Federal Bureau of Investigation, and Department of Defense, among others, to assist our partners in developing and sustaining their counter nuclear smuggling programs.

Tightening the global security net.

This multilayered approach to security is critical to successfully preventing nuclear smuggling. As long as the demand for nuclear and radiological materials exists, the international community must work together to put security measures in place. This multilayered security net acts as a force multiplier, with NSDD and its global network of partners and collaborators working together to prevent nuclear trafficking.

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