

Fact Sheet: Domestic Nuclear Detection Office

Release Date: 04/20/05 00:00:00

As part of the national effort to protect the nation from radiological and nuclear threats, the Domestic Nuclear Detection Office (DNDO) is being established as a national office staffed by representatives from several federal, state, and local government agencies. The office will reside within the Department of Homeland Security (DHS) and the DNDO director will report to the Secretary of Homeland Security.

The DNDO will provide a single accountable organization with dedicated responsibilities to develop the global nuclear detection architecture, and acquire, and support the deployment of the domestic detection system to detect and report attempts to import or transport a nuclear device or fissile or radiological material intended for illicit use.

The mission of the office addresses a broad spectrum of radiological and nuclear protective measures, but is focused directly on nuclear detection. This includes establishing strong linkages across multiple Departments and levels of government for:

- the development of the global nuclear detection architecture;
- the acquisition and support-to-deployment of the domestic detection system;
- the enhancement of effective sharing and use of nuclear detection-related information and intelligence;
- the coordination of nuclear detection research and development to continually improve detection capability; and
- the establishment of procedures and training for the end users of equipment developed and deployed through the new office.

Interagency, Federal, State, and Local Cooperation

To fully carry out the responsibilities of this initiative, close cooperation and coordination between Homeland Security, the Department of Energy, the Department of Defense, the Department of State, the Federal Bureau of Investigation (FBI), State, territorial, tribal, and local governments, and the private sector is necessary. Many of these government organizations are jointly staffing the DNDO, and the DNDO will also coordinate and cooperate closely with other federal agencies as appropriate.

The DNDO is an essential part of a multi-layered defense strategy to protect the Nation from a terrorist nuclear or radiological attack. No single layer alone is capable of providing one hundred percent effectiveness in detecting and interdicting nuclear materials intended for illicit use, and the overseas components of this strategy are aimed first at securing nuclear materials and detecting their movements overseas, playing a vital role in providing layers of protection closest to the points of potential origination of threat materials. The DNDO seeks to integrate these crucial overseas programs with the domestic nuclear detection system and with all nuclear detection efforts undertaken by Federal, State, territorial, tribal, and local governments, and the private sector.

The DNDO will conduct both evolutionary (near term, requirements-driven) and transformational (long term, high-payoff) research, development, test, and evaluation (RDT&E) programs to improve the Nation's capabilities for detection, identification and reporting of radiological and nuclear materials. By integrating these RDT&E programs with operational support responsibilities, the DNDO will ensure that all technologies will be appropriately deployed with training materials and well-developed operational response protocols.

Additionally, the DNDO will enhance the effective sharing and use of nuclear detection-related information and intelligence, and will integrate this data with information from all mission-related detection systems to provide a greater overall awareness.

Domestic Nuclear Detection Office Programming

The DNDO will develop, acquire and support the deployment of a domestic nuclear detection system to detect and report any attempt to import or transport a nuclear explosive device, fissile material, or radiological material intended for illicit use.

In pursuit of this mission, the DNDO will:

- develop the global detection architecture and ensure linkages across Federal, State, territorial, tribal and local agencies;
- enhance the effective sharing and use of nuclear detection-related information and intelligence;
- maintain continuous awareness by analyzing information from all mission-related detection systems;
- conduct aggressive evolutionary and transformational research and development programs to improve probability of detection by integrating and deploying current technologies and improving those capabilities over time;
- enhance the nuclear detection efforts of Federal, State, territorial, tribal, and local governments, and the private sector to ensure a coordinated response; and
- establish standards, response protocols, and training across the Federal, State, territorial, tribal, and local levels to

- establish standards, response protocols, and training across the Federal, State, territorial, tribal, and local levels to ensure that detection leads to timely response actions.

DNDO Organization

Office of the Director: Responsible for the execution of all DNDO mission areas. The Director will ensure the development of an integrated global and domestic nuclear detection architecture; ensure the acquisition, support, and deployment of the domestic nuclear detection system; lead research and development (R&D) coordination; and ensure protocols are developed to seamlessly progress from detection through alarm resolution to search and response.

Office of System Engineering: Responsible for the development of an integrated global detection architecture and a comprehensive system engineering master plan.

Office of Systems Development and Acquisition: This office provides the central focus for operationally-driven systems research, development, and, ultimately, acquisition and transition of systems to deployment.

Office of Assessments: This office is responsible for establishing an operational test and evaluation program to ensure that required technical performance is achieved, and that operational protocols and procedures are effective.

Office of Transformational Research and Development: This office will identify technology opportunities and execute programs designed to dramatically improve the detection capability and overall system performance.

Office of Operations Support: This office will establish and operate a real-time situational awareness and support capability by monitoring the status of, and collecting information from, both overseas and domestic detection systems. Operational support services will include the development of protocols and standards as well as a technical support infrastructure or reachback to ensure appropriate expertise is in place to support prompt resolution of alarms.

Global impact

Though the DNDO is principally focused on domestic detection, its coordinating work will enhance U.S. efforts overseas through the design of a global nuclear detection architecture implemented under current agency responsibilities. Equally, while detection technologies developed by DNDO will be directed primarily by operational requirements for domestic application, many technologies developed will have direct application to overseas detection programs.

###

April 20, 2005