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Good morning Chairman Lieberman, ranking member Collins, and distinguished members of the Committee. It is my pleasure to appear before you today to discuss DHS's efforts to increase our security and reduce the overall risk of nuclear terrorism, by making nuclear terrorism a prohibitively difficult undertaking for our adversaries.

Few would disagree that the detonation of a nuclear device in a U.S. city would have devastating consequences. I don't need to itemize damage and casualty estimates for you. Preventing nuclear terrorism has been and remains one of the Department's top priorities.

But, DHS cannot meet this challenge alone: other federal departments and agencies are engaged in this effort, as are state and local law enforcement agencies, foreign governments, and international organizations, such as the International Atomic Energy Agency (IAEA). We must do more to synchronize and integrate our efforts so that gaps are filled, unnecessary redundancy is avoided, and vulnerabilities are minimized.

President Obama has made preventing nuclear terrorism a top priority through his consistent, strong support for the Global Initiative to Combat Nuclear Terrorism, United Nations Security Council Resolution 1540, Proliferation Security Initiative, emphasis on bolstering the Nuclear Nonproliferation Treaty, and his hallmark Nuclear Security Summit held in April of this year. In his April 2009 speech in Prague, the President affirmed that terrorist acquisition of a nuclear weapon is the "most immediate and extreme threat to global security." DHS stands committed to its responsibilities to help prevent such an attack.

GLOBAL EFFORTS TO COMBAT NUCLEAR TERRORISM

Committing an act of nuclear terrorism is not a simple task; it requires access to a sufficient quantity of fissile nuclear material – the core of a nuclear bomb. We believe that the only feasible way this could be achieved by a non-state organization is through theft or diversion from existing stockpiles. The stockpiles in question consist primarily of weapons components or materials from states with nuclear weapons, as well as highly enriched uranium (HEU) and plutonium used in some civil applications, such as fuel for specialized reactors. It would also necessitate financial, technical, and logistical resources to construct or modify the device (in most cases), transport it to the target, perhaps across multiple international borders and by various modes of conveyance, and detonate; all without being detected. Nevertheless, this is no time to remain static in our efforts.

The United States has led the world in countering the nuclear terrorism threat, starting with preventing acquisition of nuclear material through several landmark programs. The Nunn-Lugar Cooperative Threat Reduction (CTR) program, operated by the Department of Defense (DOD), aims to secure or eliminate weapons of mass destruction (WMD) and related materials around the world. There is a broad range of additional U.S. programs designed to minimize the risk of nuclear terrorism. For example, the Department of Energy's (DOE) Global Threat Reduction Initiative (GTRI) addresses the research and test reactor fuel issue by assisting foreign nations with transitioning these reactors to low enriched uranium fuel that cannot be used in a nuclear weapon.

Under GTRI, considerable quantities of HEU originally obtained from the United States have been repatriated. In addition, the DOE's Materials Protection, Control and Accounting Program (MPC&A) serves as an important line of defense in increasing security and reducing the overall risk of nuclear terrorism by working cooperatively with international partners to secure and eliminate potentially vulnerable nuclear weapons and weapons-usable material. The MPC&A Program emphasizes improvements in physical protection, protective forces, material control and accounting, nuclear security culture, and creating an infrastructure that supports these programs. The President announced in his Prague speech a "new international effort to secure all vulnerable nuclear material around the world within four years." The GTRI and MPC&A programs help to minimize the amount of fissile nuclear material available globally by securing, relocating, and removing nuclear material that might otherwise be stolen or diverted for terrorist purposes.

But, against a determined adversary no effort is 100 percent effective and nuclear materials may indeed escape national control. Smuggling of nuclear materials has occurred - only in small quantities that we know of thus far - but smuggling remains a grave concern and very high priority. The Weapons of Mass Destruction Proliferation Prevention Initiative (PPI) is an element of DOD's CTR program. The PPI aims to avert or interdict smuggling of WMD materials and related components, addressing vulnerabilities through increased security along borders. DOE's Second Line of Defense (SLD) program works around the world to strengthen the capability of foreign governments to deter, detect, and interdict illicit trafficking in nuclear and other radioactive materials across international borders and through the global maritime shipping system. SLD has two parts, the Core Program and the Megaports Initiative. The Core Program installs radiation detection equipment at borders, airports, and strategic ports in Russia, other FSU States, in Eastern Europe, and other key countries. The Megaports Initiative provides radiation detection equipment to key international seaports to screen cargo containers for nuclear and other radioactive materials regardless of the container destination.

The Proliferation Security Initiative (PSI) is a global effort that aims to apply intelligence, diplomatic, law enforcement, military, and other tools at our disposal to interdict shipments of weapons of mass destruction (WMD), their delivery systems, and related materials to and from nation states and non-state actors of proliferation concern. The PSI relies on cooperative actions by states that are consistent with national legal authorities and relevant international law and frameworks. Launched by President Bush in May 2003, this successful program today has the support of 98 countries around the world.

We don't assume overseas programs, however robust, will completely stem the threat. While DHS supports overseas activities with our expertise, our primary domain is the United States and its territories, and the approaches to the United States by sea, air and land. We are working diligently to protect the U.S. against this threat.

DHS's lead Component specifically focused on combating nuclear terrorism is the Domestic Nuclear Detection Office (DNDO). I am happy to announce that DNDO has a newly appointed Director. I know that the Committee is keenly interested in DNDO programs,

especially the Advanced Spectroscopic Portal (ASP) program. While ASP is certainly important, there is much more to DNDO than ASP, which I will address later in the testimony.

One of DNDO's core mandates is to develop a Global Nuclear Detection Architecture (GNDA). The GNDA is a risk-informed, multilayered network to detect illicit radiological and nuclear materials or weapons. This involves developing and deploying effective detection solutions within the U.S. and abroad, maintaining situational awareness, and sharing critical information related to detection.

DHS's jurisdictional authority and responsibility for these pathways extends beyond nuclear smuggling: DHS agencies are responsible for interdicting a range of illicit smuggling and trafficking activities across U.S. borders. To secure the U.S. borders from threats from abroad while expediting the safe flow of lawful travel and commerce, DHS pursues the goals of effectively securing U.S. air, land, and sea borders, safeguarding lawful trade and travel, and disrupting and dismantling transnational criminal organizations. The focus of these efforts includes narcotics, weapons, bulk cash, and human smuggling and trafficking, in addition to nuclear materials. While concern with cross-border criminal activity does not rise to that associated with smuggling of a nuclear device, transnational criminal and terrorist organizations may seek to smuggle a range of high-value goods and people across U.S. borders, including organization leaders, large quantities of bulk cash, highly valuable weapons and weapons technology, and experts in various types of criminality.

These steady-state transborder efforts, while not specifically aimed at nuclear smuggling, may provide the knowledge and expertise necessary to successfully interdict an attempt to smuggle a nuclear weapon into the United States. Overlaid on this steady-state transborder security activity is the threat-focused interagency nuclear terrorism prevention effort, which includes the programs and capabilities of our interagency partners, DHS operational Components described below, and others that are identified in the GNDA.

DHS EFFORTS TO COUNTER NUCLEAR TERRORISM

When DHS was formed, the Department inherited agencies that possessed clear homeland security roles. Among those agencies were the United States Coast Guard (USCG), the Immigration and Naturalization Service (which included the Border Patrol), and the United States Customs Service. The latter two agencies are now three: U.S. Immigration and Customs Enforcement (ICE), U.S. Customs and Border Protection (CBP), and U.S. Citizenship and Immigration Services (USCIS). These agencies brought with them significant authorities and capabilities to detect and interdict transport of nuclear weapons materials and the people potentially involved, and to enforce U.S. laws. In addition, the Transportation Security Administration (TSA) was formed within the Department of Transportation after September 11, 2001, and later transferred to DHS.

The U.S. Coast Guard

As the principal federal agency responsible for maritime safety and security, the Coast Guard protects vital economic and security interests of the United States, including the safety and security of the maritime public, the global transportation system and the integrity of our maritime borders. The Coast Guard's layered defense against nuclear terrorism threats begins far from the nation's shores and includes inspection of foreign ports and vessels, employment of cutters, aircraft and boats offshore and in the nation's ports, and deployable specialized forces with global reach. The Coast Guard's unique authorities provide unparalleled access to maritime infrastructure and potential threats both offshore and in port. The Coast Guard conducts daily inspections and boardings to ensure vessels comply with maritime law and safety standards, applicable U.S. law and regulations, and control procedures for access to the nation's ports. All Coast Guard vessel boardings and inspection teams are equipped with nuclear/radiological detectors, with more than 72,000 boardings and 15,000 facility inspections conducted each year. The Coast Guard also has access to over 5,000 facilities for enforcement of safety and security requirements, with each boarding and inspection team playing a role in the nuclear detection architecture.

A. Detection Capabilities and Capacity

Maintaining a chemical, biological and radiological (CBR) detection capability in the nation's maritime approaches is critical to domestic defense. The Coast Guard's National Security Cutter provides maritime domain command and control, including management of vessels and air traffic control, in a CBR-contaminated environment. The National Security Cutter employs the Collective Protection System (CPS), which creates a contaminant-free environment within the ship so that the crew may operate without specialized personnel protective equipment.

All major Coast Guard cutters are equipped with specialized CBR personal protective equipment for exposure to chemical and some biological agents. Major cutters are also equipped with decontamination systems intended to mitigate exposure to radiological fall-out, persistent and semi-persistent chemical agents, and biological weapons.

In 2003, the Coast Guard implemented a Maritime Radiation Detection Program to provide all Coast Guard boarding and inspection teams with human portable radiation detectors designed to identify and interdict radiological threats as far offshore as possible and to expand boardings to counter the small vessel threat. These capabilities are sustained and strengthened by partnerships with other federal, state, local, private and international organizations as part of a layered approach to security that leverages technology and partnerships to enhance detection – consistent with the goals of DHS's Small Vessel Security Strategy.

The Coast Guard works closely with DNDO, DOE, CBP and other federal agencies to ensure that its program aligns with and contributes to ongoing efforts toward building a layered, integrated defense against nuclear terrorism threats.

Current Coast Guard radiological/nuclear detection capability includes more than 5,000 personal radiation detectors (PRDs), more than 800 radioisotope identification devices (RIIDs), and more than 200 wide-area radiological search systems. Coast Guard radiation

detection/identification equipment has been deployed to 210 cutters, 190 boat stations, 35 Sectors, 12 Maritime Safety and Security Teams (MSST), the Maritime Security Response Team (MSRT), two Tactical Law Enforcement Teams, three national Strike Force (NSF) Teams, and 60 other operational/training units. DNDO is also working to develop and acquire the next generation of RIIDs and PRDs for the Coast Guard.

The Coast Guard Maritime Law Enforcement Academy provides training in basic and advanced radiological detection and triage, and Coast Guard boarding teams have reach-back capacity for isotope interpretation and alarm resolution.

The Coast Guard's MSRT and MSSTs provide the nation with unique maritime capabilities for nuclear/radiological detection and identification, personnel protection, and self-decontamination in both routine and hostile situations. MSRT capabilities are designed and implemented to integrate with follow-on forces.

The Coast Guard NSF provides DHS with the capability for maritime chemical, biological, radiological or nuclear (CBRN)/hazardous materials incident response and mitigation. The NSF – which provides detection, identification, personnel protection, surface and self decontamination, hazardous material packaging, and mobile command and control during post incident response – supports federal-on-scene-coordinators in the coastal zone and inland.

B. Partnerships

The Coast Guard supports continued integration of DHS efforts to deter, detect, prevent or respond to and recover from nuclear or radiological incidents. Improved unity of effort across the U.S. government requires enhanced integrated planning. The Coast Guard leads the interagency Maritime Operational Threat Response process, which supports operations including interdiction of suspected nuclear/radiological materials.

Coast Guard nuclear detection equipment development, acquisition and sustainment are achieved through a joint acquisition strategy with DNDO that relies on DNDO centralized funding for acquisition and testing of Coast Guard maritime radiation detection systems. The Coast Guard and DNDO are developing a radiological/nuclear module for the Coast Guard's Maritime Security Risk Analysis Model (MSRAM), which will enable the Coast Guard and DNDO to assess, analyze, and manage risk from direct radiological/nuclear attacks, exploitation attacks, and transfer scenarios. The Coast Guard and DNDO also conducted maritime small vessel standoff radiation detection testing of vessel-mounted sensor systems.

U.S. Customs and Border Protection (CBP)

CBP has the lead responsibility for implementing the Department's border security mission, which includes detecting and preventing terrorists and terrorist weapons from entering the United States. CBP currently employs a layered enforcement strategy at ports of departure and ports of entry to prevent the importation of nuclear materials, assembled nuclear devices, or the materials that could potentially be used to assemble a nuclear device. CBP's nuclear

terrorism prevention activities occur at ports of entry, between the ports of entry, and even in overseas locations such as at passenger preclearance locations, or as part of the Container Security Initiative (CSI), outlined below. CBP and ICE also conduct enforcement activities to prevent criminals and terrorists from obtaining financial or material support for nuclear proliferation through outbound enforcement efforts.

A. *Non-intrusive Inspection and Radiation Detection Technology*

The deployment of large-scale Non-Intrusive Inspection (NII) imaging systems and radiation detection equipment has made a tremendous contribution to CBP's ability to help secure the supply chains that bring goods into the United States from around the world. NII technology serves as a force multiplier that allows officers to detect possible anomalies between the manifested contents of a conveyance and the scanned image that could lead to preventing its exploitation by terrorist groups, the discovery of WMD materials or devices and other contraband.

CBP has aggressively deployed NII and Radiation Portal Monitor (RPM) technology. Prior to 9/11, not a single RPM, and only 64 large-scale NII systems were deployed to our country's borders. Currently, CBP has a total of 269 large-scale NII systems deployed nationwide. To date, CBP has used the deployed NII systems to conduct over 43 million examinations, resulting in over 9,200 narcotic seizures, with a total weight of over 2.8 million pounds, and over $34.7 million in undeclared currency seizures. CBP also employs the Automated Targeting System (ATS), a computerized risk assessment system. This system identifies commerce deemed to represent elevated threats that require a more intensive inspection.

As of August of this year, CBP has deployed a total of 1,426 RPMs to our nation's ports of entry. Since the inception of the RPM program in 2002, CBP has scanned over 438 million conveyances for the presence of illicit radiological materials and resolved over 2.7 million radiation alarms. Deployed RPMs currently enable CBP to scan 100 percent of all containerized cargo arriving in the United States by land and 99.4 percent by sea. CBP, in partnership with DNDO, has deployed 495 RPMs at Northern border land ports of entry; 392 RPMs at Southern border land ports of entry; 453 RPMs at seaports; 50 RPMs at mail facilities and 36 RPMs to other locations, such as training facilities. Funded by the American Recovery and Reinvestment Act of 2009, CBP has begun deploying the first integrated NII and RPM system.

B. *Container Security Initiative, Secure Freight Initiative, and Customs-Trade Partnership Against Terrorism*

The Container Security Initiative (CSI) extends our nation's zone of security by targeting, with our foreign counterparts, containers that may be used to conceal terrorist weapons before they leave foreign ports of lading. CSI strengthens the nation's security by forging relationships and liaisons with foreign customs counterparts to facilitate communication and coordination, establishing security criteria for identifying high-risk containers based on advance information, pre-screening containers at the earliest possible point, and using technology to quickly pre-screen high-risk containers.

To date, foreign nations representing 58 ports that ship directly to the United States have agreed to participate in CSI, and teams of CBP Officers have been deployed overseas to target and screen containers destined for the United States. More than 80 percent of U.S.-bound containerized cargo currently passes through a CSI port. To date, over 40,000 examinations of high-risk shipments have taken place overseas at CSI locations.

The Secure Freight Initiative (SFI) is an effort to build upon existing port security measures by enhancing the U.S. government's ability to scan containers for nuclear and radiological materials in seaports worldwide and to better assess the risk of inbound containers. This initiative is the culmination of DHS's work with other federal departments and agencies, foreign governments, the trade community, and vendors of cutting-edge technology. SFI provides carriers of maritime containerized cargo greater confidence in the security of the shipment they are transporting, and increases the likelihood of an uninterrupted and secure flow of commerce.

SFI deploys networks of radiation detection, provided by the Department of Energy, our partner in SFI, and imaging equipment at two overseas pilot ports. CBP will prioritize future deployments of scanning systems to locations of strategic importance by identifying seaports where non-intrusive imaging and radiation detection data would be most practical and effective in deterring the movement of WMD via containerized cargo. The additional scan data provided by SFI will enhance DHS's risk-based and layered approach to securing maritime containerized cargo. DHS will continue to work with Congress to enhance the safety of our nation's ports and the security of incoming cargo.

The Customs-Trade Partnership Against Terrorism (C-TPAT) is a voluntary government-industry initiative to build cooperative relationships that strengthen and improve the overall international supply chain and U.S. border security. C-TPAT recognizes that CBP can provide the highest level of cargo security only through close cooperation with the ultimate owners of the international supply chain: importers, carriers, consolidators, licensed customs brokers and manufacturers. C-TPAT allows CBP to designate certain companies as low-risk, based on the company's past Customs compliance history, security profile and the validation of a sample international supply chain. C-TPAT has conducted domestic and foreign site visits to physically review companies' security best practices and weaknesses along their international supply chains. By extending our zone of security to point of origin, C-TPAT allows for better risk management and targeting and allows CBP to allocate appropriately inspectional resources. There are currently 9,965 certified C-TPAT members.

C. *National Targeting Center – Cargo and the Advanced Targeting System*

As part of CBP's layered targeting strategy, the National Targeting Center – Cargo (NTC-C) proactively analyzes advance cargo tactical and strategic information using the ATS before shipments reach the United States. ATS provides uniform review of cargo shipments for identification of the highest threat shipments, and presents data in a comprehensive, flexible format to address specific intelligence threats and trends. National targeting rule sets have been implemented in ATS to provide threshold targeting for national security risks for all modes of

transportation—sea, truck, rail, and air. ATS is a decision support tool for CBP officers working in the NTC-C and in Advanced Targeting Units at our ports of entry and CSI ports abroad.

Once NTC-C has analyzed the advanced information using ATS and other tools, intelligence briefs are created and disseminated to officers in the field. This information is used by CBP and other agencies to support enforcement actions, such as seizures and arrests.

NTC-C has established partnerships and liaisons with other agencies, both domestically and abroad. Partnerships with ICE, the Drug Enforcement Administration, the Financial Crimes Enforcement Network, the Department of Commerce, and the Department of Health and Human Services promote information sharing and the exchange of best practices, while collaboration with foreign governments results in seizures and detection of threats at our borders and in foreign ports.

Transportation Security Administration (TSA)

TSA is an intelligence-driven agency that employs a risk-based strategy to secure U.S. transportation systems from the evolving terrorist threat, working closely with stakeholders in aviation, rail, transit, highway, and pipeline sectors, as well as the partners in the law enforcement and intelligence community. To achieve this mission, TSA has a dedicated workforce of over 50,000, protecting every domestic commercial airport and strengthening security in all transportation modes.

TSA works in close partnership with other DHS Components, such as DNDO, CBP, the Coast Guard and the Science and Technology Directorate to address the nuclear and radiological threat in the transportation sector and enhance the Department's capabilities to increase security and reduce the overall risk of the United States.

To enhance its ability to detect potential nuclear or radiological threats in transportation systems within the United States, in cooperation with DNDO, TSA has established 10 dedicated Visible Intermodal Prevention and Response (VIPR) teams equipped with human portable nuclear detection systems. TSA also recently stood up an additional 15 VIPR teams which are currently equipped with similar capabilities. Nationwide, VIPR teams enhance security in all transportation modes, including rail and mass transit systems. VIPR teams work with local transportation security and law enforcement officials to supplement existing security resources, provide deterrent presence and detection capabilities, and introduce an element of unpredictability to disrupt potential terrorist planning activities.

TSA collaborates with CBP to implement the requirements of the SAFE Port Act to deploy radiation detection capabilities to U.S. ports of entry to scan international air cargo with RPMs to prevent the illicit importation of nuclear and radiological materials into the United States. TSA also partners with CBP in instances where domestic cargo may be co-located with international cargo. CBP and TSA are working to establish a Memorandum of Understanding to provide an official framework for information sharing and regulatory assistance.

Collaborating with DNDO and the Department of Justice, TSA was a founding partner of the Southern Regional Radiological Pilot Program (SRRPP) to improve domain awareness and transportation security at the Port of Charleston, South Carolina. From April 2005 to December 2008, SRRPP partners successfully tested and evaluated radiation detection technologies, practices, and response procedures to prepare for, deter, and respond to radiological and/or nuclear terrorist threats. Upon completion of the project, TSA transferred ownership of the radiation detection devices and supporting equipment to DNDO.

TSA works closely with DNDO through formally chartered DHS/TSA Integrated Product Teams and frequent collaboration to help identify technologies and systems that will be most useful and effective in detecting nuclear materials and devices in the transportation system. TSA's knowledge of transportation systems is essential to identify gaps in capabilities and requirements for further coordinated research and development.

TSA's experience in developing and deploying explosives detection systems is particularly helpful because technologies and systems for detection of improvised nuclear devices are sometimes similar to those for improvised explosives device (IED) detection. For example, DNDO and TSA are assessing the use of the same vehicle inspection portal systems for detection of both vehicle-borne IEDs and improvised nuclear devices, and are collaborating to ensure commonality of development and system components to the maximum extent possible. This approach should prevent duplication of effort and reduce overall system costs over time.

TSA and DNDO are also exploring a collaborative field experiment and pilot program to test DNDO products in surface and multimodal transportation locations. The goal of the field tests is to seek information that could lead to product design improvements and to test production-representative or low rate initial production systems under operational conditions. As part of the research and development (R&D) and field testing collaboration, TSA and DNDO would establish operational protocols for use of the systems and for actions resulting from detection of a threat.

In the general aviation sector, TSA is dedicated to DHS-wide strategic efforts to prevent the introduction of nuclear or radiological threat materials through international general aviation. TSA's experts in general aviation security and airports work collaboratively with DNDO to establish joint plans and prevent duplication of effort in international general aviation.

TSA also establishes and enforces security-related regulations and requirements to ensure the adequacy of security measures for all transportation modes. On November 26, 2008, TSA issued regulations affecting freight rail shippers, receivers, and carriers of rail security-sensitive materials (RSSM) which includes a rail car containing a highway route-controlled quantity of a Class 7 (radioactive) material. The rule requires freight rail carriers and certain facilities handling rail security-sensitive materials to designate a rail security coordinator, report tank car location and shipping information to TSA upon request, report significant security concerns, and implement custody and control requirements in transit and at the shipping and receiving locations. Additionally, as required by the Implementing Recommendations of the 9/11 Commission Act, TSA is developing regulations that will require all freight rail carriers of

RSSM to provide security training for freight railroad employees and to conduct vulnerability assessments and develop security plans.

On June 26, 2008, TSA provided carriers with voluntary security measures for the highway transportation of specific hazardous materials defined as Highway Security-Sensitive Materials (HSSM). HSSM includes International Atomic Energy Agency Code of Conduct Category 1 and 2 materials including Highway Route Controlled quantities of radioactive materials. TSA is presently working to incorporate these guidelines in security regulations.

In addition, TSA is in the process of formalizing its collaboration with the U.S. Nuclear Regulatory Commission and the Department of Transportation through a Memorandum of Understanding concerning the security of radioactive material while in transport. The purpose of this memorandum is to delineate clear lines of authority, roles and responsibility and promote communications, efficiency, and non-duplication of effort through cooperation between the parties in the area of transportation security based on existing legal authorities and core competencies.

The Office of Intelligence & Analysis

The DHS Office of Intelligence & Analysis (I&A) provides strategic intelligence assessments tailored to meet the information needs of DHS components and state, local, tribal, territorial and private sector stakeholders. I&A also prepares actionable, operational and strategic intelligence assessments on threat actors, their claims and plans to attack the United States with nuclear materials. These analyses support DNDO's implementation of the domestic portion of the GNDA. I&A also participates and organizes other Intelligence Community (IC) participation in the threat elicitation process for departmental risk assessments related to nuclear and radiological terrorism, supports DNDO and other DHS components by acting as a conduit to the larger IC and represents DHS's interests in relevant IC forums.

I&A produces tailored nuclear and radiological threat-related products designed to support state and local officials and DHS front-line personnel. Examples include a reporting guide designed to assist fusion centers during a nuclear or radiological crisis and a series of reference aids designed to educate first responders and field personnel about high-risk radiological materials. I&A's input supports nuclear and radiological risk assessments that help leaders focus their resource, consequence-management and training activities for maximum effect.

Immigration and Customs Enforcement (ICE)

ICE conducts counter-proliferation investigations that concentrate on the illegal export of U.S. munitions list items and controlled technologies used in nuclear programs, along with any violations of U.S. sanctions programs. One of the most effective tools ICE special agents use to protect the United States is "Project Shield America" (PSA). PSA is an industry outreach initiative whereby agents conduct presentations with manufacturers, distributors, and/or exporters of strategic commodities that are believed to be targeted for procurement by terrorist

organizations, rogue countries that support them, as well as countries identified as weapons proliferators.

In addition to ICE's lead in identifying, disrupting and dismantling nuclear procurement networks, ICE collaborates with CBP on CSI, through which CBP has stationed multi-disciplinary teams overseas to work with host government counterparts to target and pre-screen containers at foreign seaports and to develop additional investigations to prevent the import of WMD into the United States via shipping containers. In addition, more than 200 ICE agents assigned to the FBI Joint Terrorism Task Forces (JTTFs) and would be part of the FBI led investigation to disrupt any such plot.

Currently, ICE administers and participates in numerous programs that address the trafficking of nuclear devices and materials as well as other WMD. ICE partners with the State Department in the Export Control Related Border Security (EXBS) program, designed to develop the capabilities of foreign law enforcement in the detection of WMD, missile system, and conventional weapon proliferation. In support of the CSI program, ICE currently has 15 agents assigned overseas and three foreign-service national investigators. ICE also has agents assigned to 63 foreign attaché offices to support counter-proliferation investigation and enforcement efforts. Finally, ICE has an active intelligence requirements program that coordinates with other agency and intelligence community collection managers in order to ensure that ICE receives timely and accurate WMD and nuclear proliferation intelligence.

Domestic Nuclear Detection Office

On April 15, 2005, the President signed National Security Presidential Directive-43 and Homeland Security Presidential Directive-14 directing the Secretary of Homeland Security, in coordination with the Secretaries of State, Defense, and Energy, and the Attorney General, to establish a jointly-staffed, national-level Domestic Nuclear Detection Office (DNDO) within the Department. Subsequently, the SAFE Port Act of 2006 formally codified the DNDO and added a presidentially-appointed Director.

DNDO's mandate is to improve the nation's capability to detect and report unauthorized attempts to import, possess, store, develop, or transport nuclear or radiological material for use against the nation, and to further enhance this capability over time. With assistance and participation from a wide variety of U.S. Government departments and agencies, DNDO synchronizes and integrates inter-agency efforts to develop technical nuclear detection capabilities, characterizes detector system performance, ensures effective response to detection alarms, integrates nuclear forensics efforts, coordinates the global detection architecture and conducts a transformational research and development program for advanced technology to detect nuclear and radiological materials.

Advanced Spectroscopic Portal (ASP)

In 2005, DNDO embarked on an aggressive program to develop the next generation radiation portal monitor to address key detection gaps. The ASP program set a schedule without sufficiently accounting for technical risk, which has caused a number of delays. We have accepted many of the GAO's recommendations and have substantially improved program

management and oversight. Under the leadership of the Under Secretary of Management, the Department has developed Acquisition Directive 102-01, which gives us greater insight into all acquisition programs in the Department, and which we have leveraged to significantly improve the ASP program.

The ASP program is approaching a key decision milestone. DNDO and CBP are currently working together to resume field testing. Upon successful completion, DHS will finalize the cost-benefit analysis and proceed to the Acquisition Review Board (ARB). The ARB will make its recommendation to the Secretary on ASP certification. We continue to believe that if certification is realized, the ASP deployment will be a major improvement in border security against nuclear threats without impeding the flow of commerce.

It is important to note that we will seek certification for the ASP in secondary scanning only. While we have always considered the possibility of the ASP serving in primary or secondary scanning, we now believe, based on test results and a preliminary cost-benefit analysis, that limiting deployments to secondary scanning is justified.

In addition to ASP, DNDO engages in a broad range of other nuclear-detection programs. For example, under its mandate to develop a GNDA, DNDO has created a world-class development and testing program for radiation detection systems. DNDO has also developed programs supporting federal, state, and local agencies and other governments within its core competence of nuclear detection, and is coordinating U.S. government technical nuclear forensics efforts.

Since its inception in 2005, DNDO has established the U.S. government's premier radiological and nuclear detection system test and evaluation organization. DNDO has conducted 48 separate test and evaluation campaigns at more than 20 experimental and operational venues. These test campaigns were planned and executed using rigorous, reproducible, and peer-reviewed processes. Tested detection systems include pagers, handhelds, portals, backpacks, mobiles, boat-mounted, and spreader bar-mounted detectors as well as next generation radiography technologies. The results from DNDO's test campaigns have informed federal, state, local, and tribal operational users on the technical and operational performance of radiological and nuclear detection systems, supporting selection of the most suitable equipment and effective concepts of operations to help keep the nation safe from the nuclear terrorist threat.

DNDO has also completed construction and put into operation the state-of-the-art Radiological and Nuclear Countermeasures Test and Evaluation Complex at the recently renamed Nevada National Security Site to allow testing against significant threat quantities of special nuclear material. DNDO also established the Rail Test Center at the Port of Tacoma, Wash., to conduct testing in an operational port environment. DNDO's testing expertise and experience is sought by interagency partners, such as DOE and DoD, and international partners such as the United Kingdom, Canada, Israel, European Union, and the IAEA.

To support basic research and the long-term development of systems with increased capabilities, DNDO is conducting R&D investigations for advanced high-performance handheld systems; advanced passive standoff detection technologies; improved detection through

networked and distributed detection systems; and better detector materials, as well as R&D for improved material attribution and radiochemistry.

Underlying these efforts is our work to ensure a continued pipeline for human capital development and basic research, executed through DNDO's partnership with the National Science Foundation for the Academic Research Initiative. To date, the Academic Research Initiative has awarded 36 grants to 32 universities.

Moreover, building upon partnerships with federal, state, and local stakeholders, DNDO has worked to improve domestic radiological and nuclear detection capabilities within our borders. Through the Southeast Transportation Corridor Project, DNDO forged a regional partnership with nine states and the District of Columbia to identify the most effective methodologies and locations for the deployment of fixed, mobile and handheld detectors at interstate weigh stations in each jurisdiction. In 2007, DNDO launched the Securing the Cities (STC) Initiative, beginning with a 3-year pilot in the New York City region, to provide the analytical tools and technical support to develop regionally-based detection strategies aimed at preventing radiological and nuclear attacks. DNDO also established the West Coast Maritime Pilot to work with authorities in Washington's Puget Sound and the San Diego area to design, field, and evaluate a radiological and nuclear detection architecture (specific to each selected region) that reduces the risk of threats that could be illicitly transported on recreational craft or small commercial vessels. Additionally, DNDO established the Mobile Detection Deployment Program to provide a domestic detection equipment package for federal, state and local authorities to augment their incident response teams for pre-planned activities such as National Special Security Events. Since 2005, DNDO has piloted and fielded fifteen training courses and effectively trained over 15,000 law enforcement officers and public safety professionals in preventive radiological and nuclear detection operations. In addition, DNDO, through its Joint Analysis Center, supports federal, state and local officials in adjudicating detection alarms.

We have also supported other U.S. global efforts to counter nuclear terrorism. For example, DNDO provides essential support to the President's Global Initiative to Combat Nuclear Terrorism. Under this framework, in 2009, DNDO coordinated the international development of the *Model Guidelines Document for Nuclear Detection Architectures*, which promotes the development of national nuclear detection architectures and capabilities to combat the illicit trafficking of nuclear and radioactive materials, weapons and components. Since its release in 2009, the document has received a positive response from international and domestic partners. Furthermore, the IAEA will likely include this document in its Nuclear Security Series publications that promulgate recommendations and guidance level documents to all 151 IAEA member states.

DNDO has also coordinated the U.S. government technical nuclear forensics efforts. The National Technical Nuclear Forensics Center (NTNFC), established in 2007, serves as a national-level "system integrator" for joint planning, exercising, and evaluating our national capabilities, while investing in technical capability advancement. The NTNFC also led the interagency effort to develop the national Strategic Five-Year Plan for Improving the Nuclear Forensics and Attribution Capabilities of the United States, which was signed by the President and submitted to Congress in April. DHS recognizes the deterrent value of an effective forensics

and attribution capability – U.S. declaratory policy emphasizes that any nation or group that enables a terrorist to acquire nuclear devices or materials will be held accountable. Robust forensics and attribution capabilities help to underwrite this policy.

Of course, DNDO works closely with other DHS components to implement the domestic portion of the GNDA, as previously described in relevant component sections.

The Global Nuclear Detection Architecture (GNDA)

The GNDA is a global, integrated, defense-in-depth approach that synchronizes and integrates numerous detection programs across the interagency. GNDA is a major component of DHS efforts to increase security and reduce the overall risk of nuclear terrorism. It is "global" in that it includes both U.S. systems and those of other countries as well as the sharing of information among those systems. It seeks "nuclear" material and weapons but is designed to also find radioactive material to help protect against nuclear and radiological terrorism. It "detect[s]" by way of radiation-sensing and radiography instruments as well as by non-instrument means, such as ongoing law-enforcement operations, and observation and reporting of suspicious behavior. But the GNDA is more than deployed technologies. The DHS and interagency programs that make up the GNDA address distinct layers where detection, deterrence, and interdiction opportunities exist from the point of origin of nuclear material to transit routes, potential entry points and even movement within the United States. Efforts to improve security at the source, namely DOD and DOE programs, are the root of any effort to reduce the risk of nuclear terrorism and are considered in any analysis of the effectiveness of the GNDA.

Several interrelated elements make the GNDA function: awareness of nuclear threats; a multi-layered structure of detection systems; a well-defined and carefully coordinated network of relationships among them; and guidance for governing the architecture's design and evolution over time. Detection may be achieved in a number of ways, including technologies to sense emissions from radioactive materials, technologies for NII, and other technical means, such as ultrasound or weight measurement. Perhaps most important, however, is the non-technical, human factor – alert agents who notice anomalies and suspicious activities and initiate further investigation and interdiction.

As stated earlier, several critical international programs of DOD and DOE, both managed wholly by our federal partners, and joint programs, like SFI, help fill the external layer of the GNDA. The domestic portion of the GNDA is made up of programs and initiatives covering borders and the nation's interior. Efforts at land, sea and air points of entry continue to improve coverage and capability while new efforts to provide detection capabilities at non-POE sites have been initiated.

In 2005, DNDO determined the baseline detection architecture. However, we did not develop a strategic plan to guide the implementation of a new architecture. DNDO is now working with DHS Components and interagency partners to develop such a strategic plan to establish goals for the various elements of the GNDA. DNDO has established an interagency Assistant Secretary-level committee to provide guidance and oversight for development of the strategic plan, which will articulate what the GNDA must accomplish, and guide its development and implementation.

DNDO will complement the GNDA Strategic Plan with a revised annual report on the Joint Interagency Review of the GNDA, required by Congress, which will provide a means to document and track progress to assist DNDO and the interagency in developing and refining the GNDA. It will also link the federal organizational roles and responsibilities to the GNDA goals to inform resource decisions in order to achieve those objectives. The GNDA strategic plan and annual report will be jointly produced and agreed upon by the interagency, enabling the U.S. government to implement the GNDA in a coordinated manner.

WAY FORWARD

In the last five years, the Department has matured; our understanding of the threat has matured; we have conducted substantial research; we have developed and tested technologies and explored operational constraints; we have initiated disciplined acquisition programs, and trained and deployed competent people. We have made significant progress, but we recognize we have a long road ahead.

As noted above, the Department recently completed its first Quadrennial Homeland Security Review. The QHSR describes a homeland security enterprise of federal, State and local agencies engaged in daily watchfulness over our land, air, sea, and borders, investigating suspicious persons, vehicles and cargo, checking visas and identity, enforcing laws, and monitoring for threats. Overlaid on this complex of steady-state security activity is a threat-focused interagency nuclear terrorism prevention effort.

To meet this challenge, the Department has established a Nuclear Terrorism Working Group, staffed by the heads of key Components in the Department. The Working Group meets regularly to: closely examine departmental roles and activities contributing to nuclear terrorism prevention; work with DNDO to develop nuclear terrorism prevention strategies; engage our Science and Technology Directorate apparatus to apply its skills to the problem; and plan how our operational components will meet these challenges on the ground.

The GNDA is DHS's primary means to increase security and reduce the overall risk related to nuclear terrorism. We will develop a strategic plan for the GNDA in careful coordination with other U.S. government departments and agencies and with our international partners.

Our goal is to make nuclear terrorism a prohibitively difficult undertaking for our adversaries. We will look strategically at all means the Department has at its disposal to achieve security for the United States against nuclear terrorism. The target should not be the nuclear material or device alone: we must also target our adversary. A strategic approach should not focus entirely on the detection of nuclear materials or weapons, but must take advantage of other parts of our security apparatus. .

I also stated earlier that we must work together, and we must integrate our efforts so that gaps are filled, unnecessary redundancy is avoided and vulnerabilities are eliminated. It is

imperative that federal departments and agencies synchronize and integrate efforts in the fight against nuclear terrorism. Without cooperation, the GNDA is an architecture in name only – conceptual, but not effectual. There is no room for turf battles here. We will succeed together, or we will fail together. To that end, a key measure of success should be the degree of cooperation and integration of federal programs to counter nuclear terrorism. DHS was given the job to lead development of the GNDA and facilitate cooperation, and I am pleased to say that cooperation is improving, but we know we must continue to reach out to our partners.

The responsibility to increase security and reduce the overall risk of nuclear terrorism is not owned by any one office, or department, or even government. It must be a collective effort of freedom-loving peoples committed to the protection of those freedoms here and abroad. Thank you and I look forward to the Committee's support in this endeavor, and am happy to take any questions you may have.