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Department of Defense (DoD) Countering Weapons of Mass Destruction (CWMD) Policy and Programs for Fiscal Year 2017

Subcommittee on Emerging Threats and Capabilities, Committee on Armed
Services, United States House of Representatives, One Hundred Fourteenth
Congress, Second Session

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Statement of Dr. Arthur T. Hopkins
Principal Deputy Assistant Secretary of Defense
Nuclear, Chemical, and Biological
Defense Programs

On
Department of Defense Countering Weapons of Mass Destruction Programs
Fiscal Year 2017

Before the
Emerging Threats and Capabilities Subcommittee
Committee on Armed Services
United States House of Representatives

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INTRODUCTION

Chairman Wilson, Ranking Member Langevin, and distinguished members of the Subcommittee, I appreciate the opportunity to testify on the United States (U.S.) Department of Defense's (DoD) efforts to counter threats posed by weapons of mass destruction (WMD), and to provide context on the President's Fiscal Year 2017 (FY17) budget request.

I serve as the Principal Deputy Assistant Secretary of Defense for Nuclear, Chemical, and Biological Defense Programs, and perform the duties of the Assistant Secretary. Our office provides oversight of the Department's nuclear weapons related programs, chemical and biological defense, chemical demilitarization, and the Defense Threat Reduction Agency (DTRA). We help to ensure that the Department's investments align with the Department's Countering Weapons of Mass Destruction (CWMD) strategy to prevent WMD acquisition, contain and reduce threats, and respond to crises. To perform this mission, the Department coordinates closely with numerous interagency and international partners

The President's FY17 budget request includes resources to reduce threats and protect warfighters in several areas. The Chemical and Biological Defense Program's (CBDP) budget request of \$1.19 billion will continue to develop capabilities to protect warfighters and support efforts to deter, prevent, mitigate, respond, and recover from chemical, biological, and radiological threats and their effects. Our Chemical Demilitarization budget request of \$551 million will support the safe, complete, and treaty compliant destruction of the U.S. chemical weapons stockpile. Our Nuclear Matters budget request of \$45.7 million will continue the development of policies that guide the safety and security of the nation's nuclear deterrent as well as for countering threats of nuclear terrorism and nuclear proliferation. The DTRA budget request of \$1.27 billion includes resources to address the full spectrum of WMD-related threats, including Cooperative Threat Reduction (CTR) programs and support to Combatant Commands in their efforts to identify and reduce threats globally. Lastly, our CWMD Systems budget request of \$53.8 million will accelerate development of innovative projects to enhance situational awareness of WMD activities globally.

DOMESTIC DEFENSE AGAINST BIOLOGICAL AND CHEMICAL THREATS

Biological Defense

Advancements in biology and chemistry as well as natural evolution can result in new biological agents and threats that the warfighter must be prepared to counter. The CBDP researches and develops capabilities in the areas of medical countermeasures (advanced vaccines and therapeutic drugs), advanced diagnostics, environmental detection, protective equipment, and hazard mitigation. The Department is part of a broad interagency effort known as the Public Health Emergency Medical Countermeasures Enterprise, which leverages our capabilities as well as the Department of Health and Human Services and the Department of Homeland Security to develop and deliver innovative medical countermeasures and effective therapeutics.

To support the development and manufacturing of these medical countermeasures and effective therapeutics, the Department has invested in a new, agile manufacturing capability through the Advanced Development and Manufacturing (ADM) facility in Alachua, Florida. DoD needs the facility to rapidly develop and produce vaccines for our unique population, on a smaller scale than those needed for the public health sector. We are pursuing novel manufacturing capabilities allowing for modular and flexible approaches to meet DoD needs and at the same time reducing sustainment costs. The DoD ADM facility is scheduled for completion in August 2016 and will help strengthen national capabilities to respond to emergencies and address threats to DoD personnel and U.S. citizens.

We continue to take proactive steps to improve the safe and secure handling of biological agents within the DoD. We recently published revised instructions that harmonize security guidance and comply with Executive Order 13546. In response to the inadvertent shipments of live *Bacillus anthracis* spores, as was briefed to this subcommittee on July 28, 2015, the Office of the Secretary of Defense commissioned an independent comprehensive review of DoD procedures for inactivation and viability testing of *Bacillus anthracis* spores. The review found that the protocols used for these operations were not based upon peer-reviewed and quality-assured science. Studies are underway to establish the needed scientific foundations utilizing experts from across the DoD. The DoD will utilize external experts from the CDC, other government agencies and academia as peer review to ensure that future protocols are adequate, appropriate and have a mutually agreed level of risk. Furthermore, DoD has restructured biosafety under an Army Executive Agent, who will facilitate the continued improvement of biosafety at DoD laboratories that handle biological select agents and toxins. In addition, the Army has completed a formal internal accountability investigation and is reviewing recommendations regarding personnel who were involved in the incident. We are confident that these steps will restore our capability to safely and securely perform vital research and development to protect the warfighter and our nation.

Chemical Defense

The Department has active programs that provide the capabilities required to respond to chemical threats in a layered approach that includes detection, physical protection, and medical countermeasures. We invest in detection equipment to identify chemical agents and provide situational awareness for response, and we provide protective equipment to shield against exposure. Our programs also support the development of responsive medical countermeasures.

The Department's development of chemical defense capabilities is a key part of an integrated national effort to address traditional and non-traditional threats. In this budget request, we continue to invest in physical science programs, conduct research, and develop technologies for a range of chemical defense capabilities, including detection, medical countermeasures, decontamination, and protection. The potential for proliferation of non-traditional agent (NTA) information, implications of operational use, and asymmetric impacts of employment on the force has motivated the acceleration of efforts to counter NTAs. Enhanced warning, protection, and countermeasures will save lives and enable flexible consequence management.

Concurrently, DoD continues to make significant progress in domestic chemical weapons destruction programs. Our office oversees programs to meet U.S. commitments under the Chemical Weapons Convention and eliminate the U.S. chemical weapons stockpile. In March of last year, the Department initiated agent destruction operations at the Pueblo, Colorado site using a supplemental destruction technology. Since then, almost all of the 560 munitions that were unsuitable for processing in the primary plant have been destroyed, equating to nearly two tons of agent.

While this is a significant milestone for the program, rapid progress will be made as operation of the Pueblo Chemical Agent-Destruction Pilot Plant (PCAPP) begins later this year. Construction of the PCAPP is complete and final activities to ensure the plant's readiness for safe agent destruction operations are underway. The PCAPP will be used to destroy nearly 780,000 mustard agent-filled projectiles and mortars.

Construction of the Blue Grass Chemical Agent-Destruction Pilot Plant (BGCAPP) is substantially complete. The BGCAPP is on track to begin destruction operations in April 2020. The BGCAPP will be used to destroy nearly 87,000 nerve agent-filled projectiles and rockets. A supplemental technology, called a Static Detonation Chamber (SDC), will be used to destroy all of the mustard-filled munitions stored at Blue Grass. Destruction operations using the SDC are scheduled to begin in mid-2017.

NUCLEAR THREAT REDUCTION

The President established an interagency Executive Committee that recently identified priorities for detecting nuclear proliferation. The Executive Committee will review and endorse interagency strategies to advance these priorities in detecting nuclear proliferation. DoD is heavily involved in this interagency process as part of the Executive Committee that will review and endorse interagency strategies to advance these priorities in detecting nuclear proliferation.

The fourth Nuclear Security Summit is planned for March of this year in Washington, D.C. Heads of state and international organizations will continue to build on previous actions to enhance measures to combat the threat of nuclear terrorism, protect nuclear materials, and prevent the illicit trafficking of nuclear materials. Our office has collaborated with partner nations to conduct tabletop exercises of all modes of nuclear material transportation, developed practical guides for transport security, and shared best practices with other states and international organizations. We have also partnered with international stakeholders to conduct international workshops for training industry and government personnel in the effective protection of nuclear materials. We will use FY17 resources to meet future Nuclear Security Summit commitments and enable the continued success of this work.

In coordination with the efforts of other U.S. Government (USG) departments and agencies and international partners, the Department's CTR Global Nuclear Security (GNS) program establishes and maintains nuclear security cooperation with several countries. For FY17, GNS plans to transport vulnerable nuclear or high-threat radiological materials from global partners to more secure locations with the support of the Department's military airlifts. The GNS program will partner with China in the development of a nuclear security Center of Excellence by

providing nuclear security training. GNS will work with Jordanian counterparts to develop capabilities to secure radiological materials in transit and at Jordan's research reactor, and provide maintenance training and equipment to ensure sustainment of these capabilities. GNS will also provide training and equipment to the Ukrainian National Guard nuclear response force units in order to enhance Ukraine's capability to detect the accidental or intentional loss, theft, or diversion of nuclear and high-threat radiological materials, interdict those materials, and return those materials to regulatory control.

Our FY17 budget request also includes resources to procure the Harvester Particulate Airborne Collection System, a modular pod system designed for use on multiple airborne platforms for post-detonation nuclear debris sampling. This system will augment the current United States Air Force nuclear collection capability and will help to inform attribution of an event or an attack.

With respect to the Nation's nuclear deterrent forces, the domestic Nuclear Weapons Accident Incident Exercise (NUWAIX) program serves as the premier interagency training event to enhance the whole-of-government ability to protect, preserve, and secure U.S. nuclear weapons. Annually, this full-scale, national-level exercise program provides realistic conditions for Federal, State, Local, and Tribal entities to work together to address crisis situations and mitigate consequences from a U.S. nuclear weapon accident or incident. DTRA's FY17 budget will support the execution of NUWAIX at Naval Submarine Base Kings Bay in April.

GLOBAL THREAT REDUCTION

Through DTRA, the Department's CTR and capacity building efforts help to identify potential threats and enable effective, early actions to prevent or mitigate them. The CTR Program strengthens biosecurity and pathogen consolidation efforts to ensure that pathogens of security concern, which are endemic or stored in laboratories around the world for research and diagnostic purposes, remain safe from potential adversaries, and terrorist organizations. The CTR Program's effectiveness was most recently highlighted by its timely confirmation of the first resurgent case of Ebola since the World Health Organization declared Liberia Ebola free in spring of last year. This CBEP supported engagement was instrumental in triggering the appropriate response needed to prevent a resurgence of the disease.

The Ebola outbreak highlights the potential for naturally occurring pathogens to cause enormous damage in terms of lives lost, economic impact, and societal stability abroad and in the United States. Countering biological threats is important to both global security and public health. Success in this arena depends on the close coordination among all stakeholders including health, defense, law enforcement, private, international, and non-governmental counterparts. To respond to these complex and evolving threats, the Department has established programs to protect our Nation and enhance our allies' capabilities to detect and respond to man-made or natural outbreaks of diseases of security concern. The FY17 budget, we will continue to support these programs and their important work.

Our office maintains strong partnerships with allied international defense departments with the intent of accelerating technology development, achieving system interoperability, and filling

knowledge gaps for priority threat agents. This is reflected in a number of productive technology cooperative agreements for detectors, diagnostics, biosurveillance tools, and medical and physical countermeasures. Further, the Department and our international partners cooperatively develop and test processes and procedures for potential collaborative biological research events through a series of tabletop exercises. The Department is actively identifying opportunities to maximize the capability and capacity of our infrastructure through sharing agreements with foreign partners.

CWMD SITUATIONAL AWARENESS

The CWMD systems portfolio leads the development of a situational awareness capability for DoD, with the goal of strengthening our ability to forecast WMD threats by accessing and analyzing large amounts of diverse information and providing unprecedented situational awareness of global WMD-related activities. A new information system, Constellation will include information on WMD threats as well as USG and international activities to counter those threats. Developed by DTRA, with support from the Defense Intelligence Agency, Constellation will support analysis, planning, and decision-making by the Combatant Commands and their interagency and international partners. When deployed, it will provide a common information environment that will facilitate secure information sharing and cross-organizational collaboration.

Our FY17 budget request includes resources to transition the Constellation system from a developmental to an operational prototype. Resources will be used to add new data sources and applications, and expand support to more DoD and interagency users. In 2017, the Department will also prepare for transition to an acquisition program of record.

CONCLUSION

WMD threats are real and increasing globally. The Department's top priorities are to prevent attacks, protect warfighters and citizens, and manage the consequences in the event of attack. The Department's activities address the full spectrum of CWMD activities, from preventing acquisition to containing and reducing threats, to responding to crises. We act in collaboration and coordination with numerous interagency and international partners to ensure efficiencies are gained. The President's FY17 budget request will enable us to strengthen our capabilities and continue to perform our mission effectively.

Thank you for this opportunity to testify.

Statement of Mr. Kenneth A. Myers III
Director, Defense Threat Reduction Agency
And
Director, U.S. Strategic Command Center for
Combating Weapons of Mass Destruction

Countering Weapons of Mass Destruction (CWMD) Strategy
and the Fiscal Year 2017 National Defense Authorization
Budget Request for the Defense Threat Reduction Agency and
Chemical Biological Defense Program:

Before the

Emerging Threats and Capabilities
Subcommittee
Committee on Armed Services
United States House of Representatives

10 February 2016

Director Ken Myers
Defense Threat Reduction Agency
Testimony to Emerging Threats and Capabilities Subcommittee
House Armed Services Committee
February 10, 2016

Chairman Wilson, Ranking Member Langevin, and Members of the Subcommittee, it is an honor to be here today to share with you the work we do every day to make the world safer by countering the threats posed by the proliferation and use of weapons of mass destruction (WMD).

Who We Are

The Defense Threat Reduction Agency (DTRA) is a unique place with a rich history. Our roots go back to the Manhattan Project where we provided expertise in weapons effects – work that we still do today. Since that time, we have consolidated several agencies into one, economized our force, expanded our mission areas and demonstrated a track record of success with a direct impact on improving our national security.

As a defense agency, DTRA operates under the authority, direction and control of the Undersecretary of Defense for Acquisition, Technology and Logistics, through the Assistant Secretary of Defense for Nuclear, Chemical, and Biological Defense Programs, and supports the Commander of the US Strategic Command. In this role, performing and managing a research and development portfolio to develop tools and capabilities in a WMD environment is our prime responsibility. In fact, DTRA provides the Special Operations Command with all of their counterproliferation Science and Technology. As a combat support agency, DTRA communicates directly with the Chairman of the Joint Chiefs, and provides direct support to combatant commanders and the Services.

Our facility at Fort Belvoir also houses the United States Strategic Command Center for Combating Weapons of Mass Destruction (SCC-WMD) and the United States Strategic Command Standing Joint Force Headquarters for Elimination (SJFHQ-E). These organizations were embedded with DTRA because of the leveraging opportunities that strong coordination can provide.

We exist because of the existential threat posed by WMD. The consequences of a major WMD attack on our country are almost unimaginable with potentially devastating impact. Those who wish to harm us understand that the use of such weapons could result in immense loss of life and enduring economic, political, and social damage on a global scale. While not an attack, the recent Ebola outbreak provides a good example of the possible impact of WMD. The panic caused by the Ebola outbreak was not just felt in Africa. The outbreak raised legitimate concerns all over the world. In the United States, there was a non-stop news cycle which persisted for months and there was genuine fear in communities. And the United States only had 4 confirmed cases. Now just imagine if the outbreak hadn't been controlled. Or, what if we had a novel biothreat that we were dealing with? The hypothetical scenarios are easy to develop and imagine. For all of these reasons, there is a clear need for an on-call, comprehensive WMD expertise -- for not just the Department of Defense, but for all of the United States Government. That's what we provide.

Our People

We don't build tanks, satellites or aircraft carriers; our biggest and greatest asset is our people. We have a unique blend of subject matter experts who are able to rapidly respond with information, products, services, plans, and analysis. Our expertise spans the full WMD threat spectrum – chemical, biological, radiological, and nuclear weapons, and high yield explosives (CBRNE). When you walk down our halls you see nuclear physicists, microbiologists, chemists, former Special Forces operators, logisticians, contract specialists, and accountants working side by side to eliminate WMD threats. We are a “one-stop-shop,” open 24 hours a day that DoD's functional and geographic commands, the Services and the rest of the interagency can rely on. We are the only USG entity with this type of unique concentration in this critical mission area.

On any given day, tens to hundreds of DTRA and SCC-WMD experts are dispatched overseas, and in certain cases to some of the most dangerous and sensitive of areas, in order to provide analysis, research, testing, training and operational expertise in support of the Warfighter.

Our nuclear experts are supporting global nuclear weapons lockdown efforts, helping to protect and ensure surety of our own nuclear weapons, understanding and predicting nuclear weapons effects, and the survivability of US Nuclear Command, Control, and Communications.

Our biological experts are consolidating and improving the security of dangerous pathogen collections across the planet, collaborating closely with other like-minded nations to prevent nefarious distribution of biological materials. They are also working cooperatively with international partners to build their abilities to counter naturally emerging infectious disease outbreaks and potential intentional attacks caused by genetically altered or weaponized diseases as well as developing new means for protecting our military personnel against biological terrorism.

Our chemical experts are assisting with the safety, security, and cooperative destruction of chemical weapons and developing methods to make it more difficult for terrorists to use Toxic Industrial Chemicals as improvised weapons. Our S&T efforts also address potential future chemical weapons threats.

DTRA structural dynamics experts are working on solutions to protect military and related government facilities at risk while also developing new means for mitigating blast effects resulting from a variety of explosive devices against structures and other infrastructure. Our products are also used internationally, where they have been critical to our partners' efforts in constructing facilities that require the highest levels of protection for personnel and equipment.

Our DTRA and SCC-WMD workforce performs countering weapons of mass destruction (CWMD) planning and exercise support and provides expertise to the combatant commands and other customers.

Our CWMD Science and Technology development is conducted in parallel with our operational capabilities in a complementary and collaborative fashion. DTRA does not own or operate any functional laboratory, but we are able to select from the full range of national expertise, wherever that may be. Our performers include the DoD and Department of Energy/National Nuclear Security Administration (DOE/NNSA) labs, contractors, Federally-Funded Research and Development Centers, University-Associated Research Centers, and academia. And, we provide and operate unique and essential test and evaluation capabilities at government facilities in New Mexico and Nevada to meet our own mission requirements, and those of our various customers and stakeholders.

The Challenge of CWMD

Countering weapons of mass destruction is a complex and challenging mission. During the Cold War, most of our focus was on nation states. We were worried about huge stockpiles of nuclear weapons. While we remain concerned about the acquisition of nuclear weapons by State actors, an emerging concern is terrorist acquisition of WMD materials that could be stolen, modified, or enhanced for use as a weapon. We are not talking about huge factories or facilities in most of these cases; sometimes it is a small laboratory that could fit inside a bathroom. Given this reality, no region of the world is impervious to potential WMD threats.

The barriers to making WMD, including deadly pathogens, continue to fall every day. Once developed, they are difficult to detect and stop while in transit. The footprint can be small in these cases. And don't forget the power of the internet. The availability of open source expertise and journals now allow for people anywhere to learn about dangerous materials. It is hard to get ahead of this type of threat. Likewise, terrorist activity is on the rise. There are more of them and they are in more places. And, of biggest concern, the terrorists that we are facing today have clearly demonstrated that they will use any weapons or materials at their disposal and for them, no targets are off-limits.

Let me add a couple of additional factors. The increased movement of people means that devastating diseases, whether spread naturally, accidentally or intentionally, can be transferred worldwide through a simple plane trip. There is also a greater threat of animal-to-human pathogen transmission due to the growth of the population which has pushed individuals to reside where only animals once lived.

In addition, the prevention space is hard to quantify and the demand signal continues to increase. It is difficult to assess what crises we have averted as a result of forward-leaning actions to prevent materials from falling in the wrong hands. The job will never be “completed” nor absolute. Prioritization, cooperation, and leveraging ability is key in this environment. You can’t simply be “everywhere” to counter these threats.

Partnerships

For all of these reasons, countering WMD threats has to be performed on a larger scale than just one single institution. No one Department, no single geographic region, no single country can marshal the necessary capabilities alone to successfully fight the WMD threats we face in this day and age. Success requires careful collaboration and communication across a variety of functional areas and also with a diverse group of institutions, partner nations and organizations abroad. In addition to established partners like the Departments of Energy, Justice, State and Homeland Security, we also have key relationships with the Department of Health and Human Services, including its Centers for Disease Control and Prevention, and international organizations like the World Health Organization and the World Organisation for Animal Health. These health-focused organizations are critical partners as we address biological threats. As the Ebola outbreak showed, biothreats are both a public health issue as well as a biosecurity and biosafety issue.

Success in this New Reality

The countering weapons of mass destruction effort is further complicated because WMD events are occurring more often and in real-time. In 2011, DTRA provided real-time technical and

modeling assistance to our US Armed Forces in Japan and the Japanese government in dealing with the estimated 9.0 magnitude earthquake and subsequent tsunami that battered the east coast of Honshu, Japan. The tsunami damaged the Fukushima nuclear power plant, and resulted in the biggest nuclear accident since Chernobyl. At the same time, DTRA was providing planning support to Operation Odyssey Dawn and played a role in the eventual destruction of the declared chemical weapons in Libya. DTRA had several lines of support in the destruction of Syria's chemical weapons. We worked with our DoD partners to create a first ever field- deployable chemical weapons destruction facility in a mere five months. In 2013, working with our interagency partners, DTRA was able to outfit a ship to host the destruction facility in 66 days. Both achievements were remarkable in terms of their turnaround times and had a direct impact on the success of destroying 600 metric tons of Syria's declared chemical weapons and materials. And of course in 2014 and 2015, DTRA led several lines of effort in response to the Ebola outbreak in West Africa. DTRA developed and provided medical countermeasures and diagnostic equipment; created and shared situational awareness tools and modeling data; purchased and delivered mobile labs and laboratory equipment; provided Ebola response training; and developed, tested and fielded the Transportation Isolation System – a novel system which allows for the transport of multiple military members exposed to a deadly, highly infectious disease, such as Ebola while still keeping the medical caregivers and aircrew safe from exposure. Some of these efforts demonstrate our ability to move quickly and adapt to ever-changing threats, while others – especially medical countermeasures – are the result of years of research and having the foresight 5, 10, even 15 years ago, to address WMD threats that were not of concern to most people.

I highlight these examples for the Committee for three reasons. One, we have a track record of success with several high profile and significant CWMD challenges.

Two, nearly every year since 2011, we have faced another WMD crisis. These are not necessarily situations that can be easily budgeted or planned. In these cases, we are forced to surge our efforts and reprioritize resources from more steady-state types of activities.

And the third reason is because the unique authorities and funding that Congress provides to us each year allows us to respond to these challenges. When we are presented with a WMD challenge, we carefully review our various authorities and funding and approach problems on a regional, mission-focused basis. We have internally organized ourselves to promote communication, agile contracting, rapid innovation, and quick turn decision-making to achieve success. DTRA's ability to rapidly respond to the nation's requirements remains at the fundamental core of the Agency mission and directly enables accomplishment of real-time US global health and national security objectives.

The Levant

Let me give you an example. The devastating turmoil in Syria has had a broad impact to the security of the Middle East and beyond. It was clear by 2012 that the countries neighboring Syria both wanted and needed improvements to their military and civilian response sectors to counter the possible illicit WMD-related trafficking coming from Syria. DTRA immediately started working with USCENTCOM and the whole of the U.S. Government to build the countering weapons of mass destruction capacity of the Governments of Jordan, Turkey, Iraq, and Lebanon. In these countries, to varying degrees we train, equip, and exercise with the military and civilian sectors so they can address non-proliferation, counter-proliferation and consequence management issues.

For Jordan, now home to over 600,000 Syrian refugees, the potential for WMD coming across its borders became a critical concern and they approached the U.S. Government for assistance.

Working within the Department of Defense, the interagency, and utilizing the capabilities of the Nunn-Lugar Cooperative Threat Reduction Program, DTRA is making a significant difference to Jordan's regional security approach through the Jordan Border Security Program (JBSP), just one of many projects on-going in Jordan today. This work is now more important than ever given the rise of ISIS, the clear use of chemical weapons, and the well-known intention of terrorists to utilize any WMD material against the United States and our allies.

The Jordan Border Security Program provides automated border security capabilities – an integrated border surveillance system and a command and control network that provides a common operating picture to the Jordan Armed Forces (JAF). The Phase 1 system was implemented on the Northern border with Syria. Phase 1 was implemented by another partner through Foreign Military Financing, but Jordan had not allocated funding for later phases. Through the unique authorities and funding available through the Nunn-Lugar Cooperative Threat Reduction program, DTRA was able to fund and implement Phases 2 and 3 of the program. The Phase 2 section picks up on the boundaries of the Phase 1 system towards the Syrian and Iraqi borders. Phase 3 provides overlapping coverage of the Iraqi border. These phases expand Jordan’s capability to remotely monitor its vulnerable borders. Simply put, the length of the border (Phase 1 and 2) is roughly about a trip from Washington, D.C. to Raleigh, North Carolina. Phase 3 is an additional trip from Raleigh down to Charleston, South Carolina. Given the threats that Jordan faces, all three Phases are critical for success.

Through assertive management of timelines and schedules the U.S. Government provided an initial operating capability to Jordan in December 2014, far in advance of what was originally projected. As JAF personnel became familiar and more accustomed to the system and they placed more operators along the border, Jordan began to have operational successes and begin interdicting border incursions. In fact, after only about six weeks of using the system, JAF detected several vehicles trying to cross a berm and penetrate into Jordan from Syria. Today, the systems are fully operational and this project has been officially transferred to the Kingdom of Jordan who will maintain it throughout its lifecycle.

In addition, the Nunn-Lugar border security effort was enhanced by DTRA’s CBRN Preparedness Program (CP2) and its ongoing engagements with USCENTCOM in the region. CP2 is a Combat Support Agency effort for Global Combatant Commanders. Utilizing 2014 NDAA Section 1204 authorities, CP2 provides assistance to the military and civilian first responder organizations of designated Partner Nations, to include Jordan, Lebanon, Iraq, and Turkey, which border Syria.

The JBSP is a Defense Agency effort, while CP2 is a Combat Support Agency effort. Two different funds, two different authorities, two different DoD customers, but one country and one threat. Jordan is a good example of where a Defense Agency and Combat Support Agency come together completely. It is a coordinated and smooth effort.

Ukraine

Another excellent example of our building partnership capacity efforts involves Ukraine. DTRA has successfully worked with the Ukrainians for many years, in particular on border security efforts. Our longstanding work with the Ukrainian State Border Guards Service has focused on how to look for weapons of mass destruction (WMD), toxic chemicals, or associated WMD materials. We trained them on how to detect smuggled devices and related techniques.

Now, obviously, our help is needed more than ever. The Ukrainians are understandably worried about controlling border crossing points where known smugglers traverse. They want to make sure that no WMD or smuggled devices make it into their country and they have the desire to be better prepared to respond.

In 2014, DTRA, in close collaboration with U.S. Embassy Kyiv, delivered a motorized brigade and engineering battalion's worth of vital border security equipment in 18 months. This included communications equipment to improve command and control capabilities, personnel sustainability and engineering equipment to support immediate operations near conflict zones, and other mobility assets to patrol borders, administrative boundaries, and territorial waters. In close collaboration with the Ukrainian State Border Guard Service and other US Government agencies, DTRA applied Nunn-Lugar Cooperative Threat Reduction program funding to deliver Ukraine \$39 million worth of assistance. By leveraging DTRA's expertise in capacity building, the Ukrainians are better prepared to detect smuggled WMD devices and are better prepared to respond to potential future WMD threats across the Russian and separatists borders.

At the same time, DTRA's CP2 is also working in Ukraine to provide critical skillsets needed for responding and handling CBRN material safely. Much like Jordan, this effort complements the border security work.

This is the type of work that DTRA does in many places around the world, places such as Moldova, Georgia, Albania, and Kosovo.

Support to the Nuclear Deterrent

Last year I shared with the Committee our intent to establish a Nuclear Enterprise Support Directorate (J10) to support the nuclear deterrent. This action fulfilled a commitment to elevate and increase focus on our nuclear mission in order to meet the expectations of the DoD Nuclear Enterprise Review. I am pleased to inform the Committee that our J10 reached full operational capability in May 2015. Our J10 has continued to develop programs in a wide array of areas, including nuclear surety, stockpile logistics, inspections, education, training, exercises, as well as assessments and Countering-WMD.

Joint Improvised-Threat Defeat Agency

I also want to update the Committee about the Department's intent to realign the Joint Improvised-Threat Defeat Agency (JIDA) under DTRA. This move is in response to the fiscal year 2016 National Defense Authorization Act which prohibited JIDA from standing up as a separate agency and directed that the capabilities of JIDA be transitioned to a military department or to an existing defense agency.

I can assure the Committee that the Counter-Improvised Explosive Devices and the CWMD missions will be preserved and enhanced under this transition. Both these missions are critical for the safety of our nation's warfighters and to the national security of our country and that of our allies. JIDA will now transition and operate under the authority, direction, and control of DTRA. Realigning JIDA under DTRA will enhance upstream threat prevention and defeat capabilities. Other areas of collaboration will include sharing science and technology information, collaborating on security cooperation and building partner nation capacities,

leveraging acquisition and information technology strengths, sharing expertise particularly in anticipating and identifying emerging threats, and improving each other's situational awareness regarding indications and warning on global threats. Under DTRA, JIDA will now be referred to as the Joint Improvised-Threat Defeat Organization (JIDO).

Budget Request

Fiscal Year 2017 (FY17) DTRA Budget Request Overview

Our base budget request for FY17 is \$1.2 billion and comprises Defense-wide Research, Development, Test and Evaluation; Operations and Maintenance; Procurement; and Nunn-Lugar Cooperative Threat Reduction (CTR) appropriation accounts. In addition, DTRA executes the \$361.4 million Science and Technology (S&T) portion of the DoD Chemical and Biological Defense Program (CBDP) and serves as the funds manager for the remainder of that program's funding, \$832.8 million. Additionally, \$408.3 million in overseas contingency operations funds have been requested in the Joint Improvised-Threat Defeat Fund (JIDF) for execution by JIDO. Therefore, the total DTRA resource portfolio is approximately \$2.84 billion. Details and highlights for these requests follow.

Operations and Maintenance Funding

O&M funding directly supports the warfighters and national missions as it pays for planning, training, exercises, and other means for collaboration across DoD, the USG, and international partners. O&M funding is the fuel that enables us to reach out to our components and personnel, the warfighters, and international partners across the globe.

The requested \$448.1 million in O&M funding would be applied as follows:

** Nonproliferation Activities (\$70.3 million) for arms control activities including the conduct of USG inspections of foreign facilities, territories, or events; coordination and conduct of the escort of inspection teams for inspections or continuous monitoring activities in the U.S. and at U.S. facilities overseas; and the acquisition and fielding of technology capabilities required to

implement, comply with, and allow full exercise of U.S. rights and prerogatives under existing and projected arms control treaties and agreements. Last fiscal year, we conducted 37 New START Treaty missions, 24 Open Skies Treaty missions, 22 conventional engagements in Ukraine, and established a Chemical Weapons Convention treaty monitoring detachment at Pueblo Chemical Depot.

** WMD Combat Support and Operations (\$188.0 million) for a wide range of combat and warfighter support to the Joint Chiefs of Staff, the Combatant Commanders, and military forces as they engage the WMD threat and challenges posed to the U.S., its forces and allies. DTRA supports the essential WMD response capabilities, functions, activities, and tasks necessary to sustain all elements of operating forces within their area of responsibility at all levels of war.

** U.S. Strategic Command Center for Combating WMD (\$10.3 million) for DTRA direct support to the SCC-WMD including providing strategic and contingency planning, policy, and analytical support; developing interagency relationships; and working closely with USSTRATCOM partners to establish the means for assessing and exercising capabilities to combat WMD.

** Core Mission Sustainment (\$179.5 million) for a wide range of enabling capabilities which include information management; resource management; security and asset protection; acquisition and logistics management; strategic planning; leadership and professional development; and provide the safety, security, and efficiency necessary for mission success.

Nunn-Lugar Cooperative Threat Reduction Program

The request of \$325.6 million for this important program would be used as follows:

** Strategic Offensive Arms Elimination (\$11.8 million) for propellant destruction and elimination activities of SS-24 ICBM solid rocket motors in Ukraine.

** Chemical Weapons Destruction (\$2.9 million) for working with Iraq to secure and inventory toxic industrial chemicals and materials from those who seek to exploit them and with other

partner countries to reduce threats by assessing and being prepared to destroy chemical weapons stockpiles, chemical agent research capabilities, and production facilities..

** Global Nuclear Security (\$16.9 million) for improving nuclear material security, including security for weapons-usable nuclear material. This program also assists in the secure transport of high-threat radiological and nuclear weapons-usable material to secure storage areas, or to processing facilities for disposition. The program also directly supports planning and preparation activities related to potential contingency response requests to secure, transport and dispose of interdicted nuclear weapons, components or material.

** Cooperative Biological Engagement (\$214.0 million) for preventing the proliferation of biological weapons, weapons materials, and expertise. This program secures certain biological agents at their source, and conducts activities that facilitate detection and reporting of highly pathogenic diseases of national security concern. This program works closely with other US Government departments and agencies, international partners and the private sector.

** Proliferation Prevention (\$50.7 million) to enhance the capability of partner countries to deter, detect, report, and interdict illicit WMD trafficking across international borders.

** Threat Reduction Engagement (\$2.0 million) to support relationship-building engagements intended to strategically advance the Nunn-Lugar Cooperative Threat Reduction Program mission with new partners and new geographic locations.

** Other Assessments/Administrative Support (\$27.3 million) to provide a network of regional offices and bilateral offices at US Embassies to facilitate DTRA activities and ensure that DoD-provided equipment, services, and related training are fully accounted for and used effectively and efficiently for their intended purposes. This account also funds Nunn-Lugar program travel, logistics, translator/interpreter support, and other Agency support.

Research, Development, Test, and Evaluation

DTRA RDT&E programs respond to the most pressing CWMD challenges including stand-off detection, tracking, and interdiction of WMD; modeling and simulation to support weapons effects and hazard predictions; classified support to Special Operations Forces; defeat of WMD agents and underground facilities; and protection of people, systems, and infrastructure against WMD effects.

DTRA RDT&E is unique in being focused solely on CBRNE; tied closely with the agency's Combat Support responsibilities; has a top-notch in-house field test capability; relies upon competitive bids, the national labs, industry, and academia rather than an in-house laboratory infrastructure, allowing for a "best of breed" approach to performer selection; and is nimble and responsive to urgent needs. DTRA's test beds provide unmatched threat-representative target structures and threat-characteristic geologies. We support a number of Service, Joint Staff, and Combatant Command priorities, including development of the Large Caliber Penetrator; expanded tactics, techniques, and procedures for use of the Joint Programmable Fuse; and enhanced U.S. missile defeat capabilities.

The agency has a comprehensive, balanced CBRNE S&T portfolio that supports DoD goals and is well connected with DoD customers, as well as interagency and international partners. Our RDT&E approach balances the need for near-term pay-off with the need for long-term technology and capability development, knowledge and expertise, and is centered upon the following programs: Basic Research (6.1), Applied Research (6.2), Advanced Research (6.3), and System Development and Demonstration (6.5). The requested RDT&E funding totals \$461.3 million. We are requesting \$35.4 million in Basic Research to provide for the discovery and development of fundamental knowledge and understanding by researchers primarily in academia and world-class research institutes in government and industry. The DTRA Fiscal Year 2017 request also includes \$154.9 million for WMD Defeat Technologies Applied Research, which is used to translate fundamental knowledge into useful materials, technologies, and concepts that address recognized CWMD needs. Our \$266.4 million budget request for Proliferation Prevention and Defeat Advanced Research funds development of systems, subsystems, and component integration to build, field and test prototypes to assess utility and feasibility of technology solutions to well-defined CWMD requirements. Finally, \$4.6 for WMD

Defeat Capabilities System Development and Demonstration funds development, operational testing, and initial deployment of mature technologies and systems.

These programs have resulted in significant capability transfer to the warfighter. DTRA has transitioned nuclear detection and forensic capabilities to the Air Force Technical Applications Center and the Army's 20th CBRNE Command. All 57 National Guard Civil Support Teams now benefit from use of the Mobile Field Kit, a hand-held device and application that integrates and coordinates the readings from multiple radiation sensors. We've achieved initial operating capacity for the National CWMD Technical Reachback Support Enterprise, providing 24/7 CBRNE decision support capability for planning, operations, and post event analysis to Combatant Commands, OSD, the Joint Staff, the Intelligence Community, and other USG agencies. We're hard at work developing capabilities for missile defeat, advanced analytics and discovery processes to predict the emergence of future threats, standards and technologies to protect critical systems from electromagnetic pulse, and models to predict the multidimensional effects of nuclear weapons use for USSTRATCOM.

Procurement, Defense-Wide

The DTRA Fiscal Year 2017 budget request includes \$6.6 million in procurement for mission-essential major equipment and vehicles.

Chemical and Biological Defense Program S&T

The Department's CBDDP S&T programs support DoD-wide efforts to research, develop, and acquire capabilities for a layered, integrated defense against CBRNE agents; better understand potential threats; secure and reduce dangerous materials whenever possible; and prevent potential attacks. Although funding for the CBDDP is not part of the DTRA budget request, the agency executes the S&T portion of this program, for which the Department has requested approximately \$361.4 million in FY17. The agency also manages funding execution in support of CBDDP advanced development and procurement.

Overseas Contingency Operations Funds

Joint Improvised-Threat Defeat Fund

The \$408.3 million requested in the JIDF will enable JIDO to support DoD efforts to counter improvised threats with tactical responsiveness and through anticipatory, rapid acquisition in support of Combatant Command's efforts to prepare for, and adapt to, battlefield surprise. JIDO accomplishes this mission by sustaining an advanced information technology and fusion infrastructure that enables a threat awareness and understanding capability; providing expeditionary, forward deployed operations, intelligence, training, and advisory capabilities with reach-back support linked to broad intelligence community, interagency, industry, and academia communities of action; enabling rapid and innovative counter-improvised-threat solution development and delivery; and supporting Military Departments/Services' pre-deployment training and Combatant Commands' priority training-exercise support requirements as requested and validated.

I would like to thank the Committee for this opportunity to share some of our recent efforts and accomplishments. There are a number of challenges on the horizon, but I am confident that the resources provided in our budget request will allow us to appropriately address these problems. I hope that we will continue to earn the Committee's trust and support in meeting WMD threats and ensuring our security. Thank you, again, for the opportunity to be here today. I would be pleased to respond to your questions.

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THE HOUSE ARMED SERVICES COMMITTEE

STATEMENT OF

DR. WENDIN D. SMITH

DEPUTY ASSISTANT SECRETARY OF DEFENSE FOR
COUNTERING WEAPONS OF MASS DESTRUCTION
BEFORE THE HOUSE ARMED SERVICES COMMITTEE
EMERGING THREATS AND CAPABILITIES SUBCOMMITTEE
FEBRUARY 10, 2016

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THE HOUSE ARMED SERVICES COMMITTEE

INTRODUCTION

Chairman Wilson, Ranking Member Langevin, and Members of the Subcommittee, I am pleased to testify today about the Department of Defense (DoD) Countering Weapons of Mass Destruction (C-WMD) policy portfolio that I supervise, and the Fiscal Year (FY) 2017 budget request. Today's complex security environment has made countering WMD threats ever more challenging and multi-dimensional. Three competing trends highlight the challenges we face in countering WMD. First, despite persistent efforts by the international community, some state actors continue to demonstrate interest in developing, acquiring, or advancing WMD materials and programs. Recent provocative and dangerous activities by the Democratic People's Republic of Korea (DPRK) highlight the continued challenges posed by state-based threats, and our need to remain vigilant. Second, non-state actors are concurrently demonstrating an increasing interest in acquiring or developing WMD capabilities, and have signaled their intent to use WMD if acquired. For these actors, traditional statecraft and nonproliferation tools may not be effective, requiring that we identify new and creative approaches to deter and prevent non-state acquisition and use of WMD. Third, our increasingly interconnected world enables the diffusion of WMD-related knowledge, materials, and technology to those seeking to harm the United States at home or our interests abroad. We believe it is critical to prepare for these emerging challenges, including the WMD-related threats evolving from the application of advanced technologies such as with additive manufacturing, unmanned systems, and cyber tools. We must continually exercise flexibility and creativity in countering emerging WMD challenges.

In 2014, then-Secretary Hagel issued a Strategy for Countering Weapons of Mass Destruction (CWMD) that updated DoD's approach to this challenge and directed DoD components to focus on particular lines of effort, objectives, and supporting activities. My testimony today will: outline how, almost two years following its release, we are applying this strategy to reduce the threat to the United States from chemical, biological, radiological, or nuclear (CBRN) weapons or materials, and preview how these efforts relate to the FY 2017 budget request.

As the Deputy Assistant Secretary of Defense for CWMD, I am responsible for establishing policies and guidance to protect our armed forces and other U.S. interests from a CBRN attack; and for representing DoD's interests on counterproliferation and non-proliferation policy issues. My office contributes to international efforts such as the Proliferation Security Initiative (PSI), the Nuclear Security Summit (NSS), and the Global Health Security Agenda (GHSA). We also support the Department of State (DOS) in implementation of treaty commitments under the 1993 Chemical Weapons Convention (CWC), the 1972 Biological and Toxin Weapons Convention (BWC), and the 1968 Nuclear Non-Proliferation Treaty (NPT). My office's portfolio of activities requires robust coordination with a wide range of interagency players, including the DOS, the U.S. Agency for International Development (USAID), the Department of Energy's National Nuclear Security Administration (NNSA), the Department of Justice's Federal Bureau of Investigations, the Department of Homeland Security, and the Centers for Disease Prevention and Control and Prevention (CDC) in the U.S. Department of Health and Human Services.

The CWMD office also develops policy and guidance for the programs and activities of the DoD Cooperative Threat Reduction (CTR) Program, which is among the activities implemented by the Defense Threat Reduction Agency (DTRA). Under the Office of the Under Secretary of Defense for Acquisition, Technology, and Logistics, the Office of the Assistant Secretary of Defense for Nuclear, Chemical, and Biological Defense Programs serves as the DoD's treaty manager, and provides authority, direction and control for DTRA's work. I am pleased to be here today with colleagues representing each of these organizations, both of which are integral to seamlessly countering the WMD threats that I will be addressing.

STRATEGIC APPROACH FOR COUNTERING TODAY'S WMD CHALLENGES

The DoD Strategy for Countering WMD articulates a comprehensive approach to addressing WMD threats. First, DoD takes proactive steps to *prevent acquisition* of WMD by adversaries and potential adversaries. Second, we *contain and reduce* threats by improving our ability and that of our partners to identify, locate, secure, and mitigate threats from WMD and WMD-related materials. Third, DoD seeks to maintain the necessary posture, capabilities, and authorities to *respond* to emergent WMD crises. Underpinning all three efforts is a constant cycle of preparation – the strategic enabler to ensure our policies, capabilities, and forces are positioned to respond.

PREVENT ACQUISITION

Ensuring that those who do not currently possess WMD do not obtain them is a critical component of our countering-WMD effort. This has become an extraordinarily complex undertaking given the diffusion of WMD-related knowledge, materials, and technological advances referenced above. For example, Additive Manufacturing (AM) processes harness the technology of 3-D printing, robotics, and the proliferation of design information to empower individuals to manufacture an unprecedented array of materials and components – many of which carry WMD-related applications. The emergence of “do-it yourself” biology communities, combined with low-cost DNA synthesis and the emergence of online access to genomic data for pathogenic organisms, makes synthetic biology increasingly feasible for those operating outside traditional research laboratories – including, potentially, those with harmful intent. Further, emerging “gain of function” biotechnologies can be used to make influenza viruses and mild infectious agents more dangerous through characteristics that increase spread in mammals, increase virulence in humans, evade existing host immunity, or become resistant to antibiotics or antivirals. In addition, encrypted-communication technologies increasingly enable nefarious individuals to develop and exploit illicit networks, potentially communicating and sharing WMD-related information with a reduced risk of detection. These emerging threats are just a few examples of those that intersect with cross-domain challenges of political instability, violent extremism, and poor infrastructure in states suffering from natural outbreaks of devastating diseases.

These trends could potentially be exploited by highly motivated non-state actors determined to obtain and employ WMD, particularly when such actors have effective control over territory,

knowledge, and finances with which to accomplish their objectives. It is therefore essential to deny terrorists and other non-state actors with malevolent intent access to WMD-related materials. The use of chemical weapons in Syria by state and nonstate actors demonstrates that the threat of WMD is real and may reflect an intent by these actors to use CW to terrorize populations, gain battlefield advantage, or advance other goals. Military operations against adversaries, coupled with cooperative efforts to secure or eliminate vulnerable material and to build the physical and human-capacity infrastructure necessary to prevent WMD proliferation, are critical tools to counter these threats. Continuing to deter and mitigate the threat of non-state actors acquiring and using WMD remains a top priority – and one that requires nimble and flexible approaches.

The DoD CTR Program remains one of the most flexible tools of the U.S. Government for preventing acquisition of WMD and WMD-related materials. The DoD CTR Program has a decades-long track record of working with foreign partners to successfully destroy existing WMD stockpiles; to make nuclear, chemical, and biological weapons more difficult to acquire; and to detect and interdict dangerous WMD components and materials. In line with DoD's strategy, the DoD CTR Program has evolved in recent years in response to the changing threat environment. From an early emphasis on securing sources of WMD material in the former Soviet Union to a focus in recent years on eliminating state-based CW programs outside the former Soviet Union (for example, in Syria and Libya), the Program builds the capacity of partners to counter WMD proliferation posed by non-state or State actors, and from the potential emergence of diseases of security concern. The FY 2017 budget request for the DoD CTR Program is \$325.6 million, which meets our current requirements. Further description of some of the accomplishments of the DoD CTR Program that demonstrate the return on this investment are described below.

The use of nuclear weapons and materials by states or terrorists poses one of the greatest dangers to our security. DoD's CTR Global Nuclear Security (GNS) Program is the primary mechanism for DoD's contributions to build partner capacity to enhance the security and prevent the proliferation of nuclear materials, and supports broader U.S. Government nuclear security objectives in bilateral, regional and global constructs.

As one example of the GNS Program's bilateral engagement, in Kazakhstan the Program is improving Kazakhstan's nuclear-security capabilities, and installing a computer-based inventory-management system to track and control nuclear materials. DoD also used the DoD CTR Program's Transportation Authority, obtained by the Department in 2013, to transport high-threat radiological material from Mexico for disposition in the United States. These efforts were carried out in close partnership with the Department of Energy, reflecting our commitment to integrate DoD threat-reduction activities with the complementary programs of other U.S. Government departments and agencies. On a regional level, DoD continues to work alongside its interagency and international partners to advance progress on the establishment of the Nuclear Security Center of Excellence in Beijing, one of a few nuclear security centers with whom the DoD CTR Program engages. At the global level, the GNS program directly supports the

President's Nuclear Security Summit process, which brings together a community of more than 50 world leaders and international organizations to attract high-level attention to the global threat posed by nuclear terrorism, and to advance a common approach to strengthening nuclear security.

Recognizing that biological threats are ubiquitous and often endemic, and that potential adversaries can acquire dangerous pathogens from naturally occurring outbreaks or non-secured laboratories, the DoD CTR Program allocates significant resources to the Cooperative Biological Engagement Program (CBEP). The CBEP continues to stop threats successfully "at the source" by securing vulnerable laboratories housing pathogens of security concern, reducing the number of such laboratories, and preparing partners to detect and report disease outbreaks of security concern. As with the GNS Program, the CBEP supports bilateral, regional, and global U.S. Government efforts to promote biological security.

As an example of CBEP's bilateral engagement, in Iraq the CBEP worked to establish a National Biorisk Management Committee (NBMC), an inter-ministerial body authorized by the Prime Minister and chaired by the Director General for Public Health at the Ministry of Health in Baghdad. The Committee establishes and implements safe and secure biorisk-management protocols at the national level within Iraq, and includes representatives from national ministries as well as the Kurdistan Regional Government (KRG). Additionally, to enhance the speed and accuracy of disease detection and reporting, regardless of the source of the outbreak, the CBEP deployed or is in the process of deploying the Electronic Integrated Disease Surveillance system (EIDSS) at 49 sites in Baghdad, southern Iraq, and the KRG-controlled area. Finally, the CBEP continues to connect Iraqi biological scientists to international subject matter experts and U.S. and global research institutions through scientific fellowships, which play an important role in developing relationships and advancing the state of ethical science in Iraq.

A distinguishing feature of the CBEP's regional engagement is the success of the program in Southeast Asia in leveraging strong existing regional networks, including the Association of Southeast Asian Nations (ASEAN), the Asia-Pacific Biosafety Association (APBA), WHO Western Pacific Regional Office (WPRO), and the WHO Southeast Asia Regional Office (SEARO), to reach a broad audience of stakeholders and standardize best practices and encourage information sharing. Through these multi-lateral networks, the CBEP is able to enhance the region's biosecurity and biosafety capabilities and reduce the risk of accidental or intentional release of pathogens of security concern. Across the region, the CBEP's efforts are coordinated with and complemented by efforts of the Proliferation Preventing Program (PPP), whose efforts improve WMD-detection capabilities. In the Philippines, the PPP completed construction of the National Coastal Watch Center (NCWC), an interagency center to promote a whole-of-government approach to the Philippines' maritime WMD proliferation-prevention mission that is well integrated with its national maritime security architecture.

DoD's efforts to reduce biological threats overseas, including through the CBEP, directly support the goals of President Obama's Global Health Security Agenda (GHS), which includes a commitment to work with at least 30 partner countries to deepen their commitment to health

security. The CBEP aims to improve partners' biosafety and biosecurity practices and capabilities, along with their ability to detect and report outbreaks of diseases of security concern rapidly, irrespective of whether those outbreaks are natural or malevolent. In an increasingly interconnected world, cooperation among health, agriculture, security, development, and other sectors to tackle biological threats and ensure that dangerous pathogens are not accessible to terrorists is paramount. Strengthening the bridge between the public health and national security communities at home and abroad is essential to reduce the threats posed by the intentional, accidental, or natural spread of pathogens and diseases of security concern, and potential terrorist acquisition and use of biological weapons. DoD remains focused on reducing biological threats to U.S. forces and the U.S. homeland, working closely with the CDC and USAID, along with other domestic and international partners, to ensure assistance is provided in the most holistic, effective and efficient manner.

DoD also continues to work to raise the barriers to acquiring WMD material through the Proliferation Security Initiative (PSI). Over the 13 years since its inception, PSI has brought together 105 nations to build political will to stop the trafficking of WMD, delivery systems, and related materials. Through supporting and participating in numerous exercises and leadership in PSI's Operational Experts Group, DoD works with partners to address all aspects of the proliferation threat from rapid, national-level decision-making to operational tactics and procedures. This past year, I had the opportunity to attend Leading Edge 15, our regional PSI exercise held in the U.S. Central Command Area of Operations (AOR). OSD Policy also participated in Exercise MARU 15, the second in a series of annual Asia-Pacific PSI exercises hosted by a rotating group of critical PSI partners. The 2016 Asia-Pacific exercise will be hosted by Singapore, then Australia in 2017, Japan in 2018, and the Republic of Korea in 2019. To keep pace with proliferators who continually adapt, PSI itself is evolving, from an activity focused heavily on preparing for at-sea interdictions, to one that highlights the critical role that customs, treasury, and diplomatic tools play in detecting and preventing WMD proliferation. In an era of evolving WMD-related threats, PSI engagements underscore that interdiction is a whole-of-government effort that requires both strong institutional capacity and political will.

International regimes that bring together like-minded nations are also critical elements of the U.S. Government's efforts to prevent the development and proliferation of WMD materials. For example, the NPT, the BWC, and the CWC remain essential foundations for the pursuit of nonproliferation and disarmament goals. In close partnership with DOS, we depend on these and related regimes as essential and evolving tools in countering WMD.

Finally, DoD plays an important role in U.S. policy toward Iran, including supporting U.S. efforts to implement the Joint Comprehensive Plan of Action (JCPOA). This agreement demonstrates the value of diplomacy, underwritten by military power, in devising solutions to some of the world's most challenging nonproliferation concerns. My office will remain vigilant in supporting interagency and international efforts to monitor and prevent Iran from acquiring WMD-related material.

CONTAIN AND REDUCE THREATS

Despite our best efforts to prevent malevolent actors from acquiring WMD, we must nevertheless contend with threats posed by the acquisition of WMD-related material. In addition to ensuring appropriate U.S. capabilities, we must also ensure that we have partners around the world capable of mitigating such threats at and within their borders. DoD has key partnerships with NATO, the Republic of Korea, and other allies and partners to ensure we maintain an understanding of emerging threats and interoperable capabilities to meet them.

The DoD CTR Program is DoD's preeminent program for building partner capacity to counter WMD threats. Over the past year, the DoD CTR Program has advanced the capabilities of a number of key partners to detect and interdict WMD material – in particular Ukraine, Jordan, and Lebanon.

Although the level of fighting in eastern Ukraine has lessened, Russia has not stopped its destabilizing actions in eastern Ukraine and continues to occupy Crimea illegally, challenging Ukraine's ability to prevent WMD proliferation across its borders. In 2015, the DoD CTR Program completed equipping and training the Ukrainian State Border Guard Service (SBGS) to reconstitute counter WMD capabilities that had deteriorated following Russia's invasion of Ukraine and to establish control over the new administrative boundaries. We will continue to work with our partners in the SBGS and the Ministry of Interior to ensure that they are able to detect proliferation threats; prevent WMD attacks or attacks against nuclear, chemical, and biological facilities; and respond to WMD incidents.

Jordan continues to face proliferation threats from dangerous non-state actors on two borders – Syria on its north, and Iraq to its east. The DoD CTR Program has worked since 2013 to provide comprehensive training and equipment to the Jordanians to enable their military and civilian first responders to mitigate WMD-proliferation threats. The Jordan Border Security Program (JBSP) – an integrated surveillance, WMD detection, and interdiction system that runs along a 293-mile stretch of Jordan's borders with Syria and Iraq – is the centerpiece of this support. The JBSP made significant headway in 2015, with the two longest stretches reaching completion. The JBSP was extended in FY 2015 to the Wadi Glades area, a 30-kilometer section of the Jordan-Syria border near the Golan Heights. Complementing the JBSP is a nuclear-security effort that the DoD CTR Program started with the Jordanian Armed Forces in 2014 to develop the capability to store and transport interdicted WMD material safely. The DoD CTR Program is working in close coordination with the U.S. Department of Energy to help Jordan establish a self-sustaining nuclear-security culture in the current and planned civil nuclear facilities.

Lebanon shares many of the same proliferation threats as Jordan along its border with Syria. In 2015, the CTR Proliferation Prevention Program (PPP) awarded a contract for a Lebanon Border Security Program that will provide the Lebanese Armed Forces (LAF) with an integrated command and control and surveillance system to defend the most vulnerable section of Lebanon's border with Syria. This effort is being fully coordinated with assistance provided to

the LAF by the United Kingdom, and it will complement other assistance provided by the DTRA CBRN Preparedness Program (CP2).

Consistent with the DoD Strategy for Countering WMD, the DoD CTR Program is seeking to assist partners proactively to confront emerging WMD-proliferation risks, such as in North Africa. In December 2015, Deputy Secretary of Defense Bob Work, with the concurrence of Secretary of State John Kerry, made a determination that an emerging WMD-proliferation risk exists in North Africa due to the use of dangerous chemicals as weapons in Iraq and Syria coupled with the growing encroachment of extremist groups. As a result, early in Fiscal Year 2016 the DoD CTR Program initiated proliferation-prevention cooperation with the Government of Tunisia along the Tunisia-Libya border, and in FY 2017 the Program intends to complete a border-surveillance system along the most vulnerable section of that border.

RESPOND TO CRISES

This element of the CWMD Strategy focuses on activities and operations to manage and resolve complex WMD crises, and thus incorporates diplomatic efforts to respond to WMD-related crises, kinetic action against hostile non-state actors who acquire WMD or materials of concern – and who we must assume would be prepared to use them, and ensuring that we and our partners are prepared to mitigate the effects of WMD use.

DoD will continue to support interagency diplomatic efforts aimed at WMD crisis management and response. While the Iranian government has decided to pursue diplomacy to resolve the international community's concerns over its nuclear program, the Democratic People's Republic of Korea (DPRK) continues to pursue its WMD programs. Its recent nuclear test underscores the importance of a well-coordinated international response. The DPRK is the only country in the world that has tested a nuclear device in the 21st century, and is a country that routinely threatens other nations with nuclear attack. The DPRK should not underestimate our resolve – we, along with many partners in the region and internationally, are fully committed to the peaceful denuclearization of the Korean peninsula. DoD will continue to make the necessary preparations to protect our security, defend our allies, and promote regional stability. We do not accept the DPRK as a nuclear armed state, and this latest test has only served to reaffirm this position.

The Ebola crisis, which ravaged West Africa beginning in March 2014, presented a biological threat of global significance. Although Liberia, Sierra Leone, and Guinea were by far the most acutely affected countries, the threat spread to Senegal, Nigeria, Europe, and the United States. As of January 2016, Ebola had taken more than 11,000 lives, with more than 28,000 suspected, probable, or confirmed cases. Although these numbers are devastating, they are, by orders of magnitude, less than what the World Health Organization (WHO) and CDC warned could have been reached if the international community had not mounted a serious and sustained response effort.

This was not just a public-health crisis; the outbreak posed a clear threat to stability and security in West Africa. The infrastructure strain caused by the prolonged and far-reaching outbreak

posed a significant risk to the stability of civil society and governance in West Africa. The intense focus on reducing Ebola's spread also detracted from the region's efforts to counter violent extremism. In addition, the large collection of Ebola samples from the outbreak and potential vulnerable storage of other pathogens presented a significant biological-security threat.

In cooperation with other interagency partners, particularly USAID and the CDC, the DoD CTR Program was able to respond quickly and effectively in support of broader U.S. and international efforts. Consistent with our statutory authorities, the DoD CTR Program procured and staffed transportable diagnostic laboratories and supported the staffing of existing laboratories to diagnose Ebola quickly and accurately in Liberia, Sierra Leone, and Guinea; supplied personal protective equipment, associated consumables, and laboratory equipment to the affected countries to prevent transmission to workers, including those returning to the United States; and provided support to the WHO to train workers, protect from infection, and prevent its spread.

As the Ebola epidemic recedes from the front pages and international support efforts diminish, we remain committed to ensuring that laboratory capabilities are transitioned to our host government partners in a sustainable manner. We are also working to ensure that Ebola samples are not vulnerable to theft or diversion. The DoD CTR Program will provide training to transition sustainable biosurveillance and diagnostic capabilities to the governments of Ebola-affected countries, will bolster preparedness levels of countries at risk for Ebola transmission, and will work to develop regional biosurveillance networks by leveraging the capacities of regional leaders. The overarching goal will be to ensure that these partners can detect, report, and manage outbreaks on their own.

Complementing the DoD CTR Program is the CP2, which works with partner nations to respond to and mitigate the effects of a CBRN incident. Section 1204 of the National Defense Authorization Act for Fiscal Year 2014 authorizes DoD, with the concurrence of the Secretary of State, to enhance the capability of military and civilian first-responder organizations to respond to WMD incidents. Section 1204 provides the authority for DTRA to use its Operation and Maintenance funds to assist partner nations to develop whole-of-government WMD defense preparedness and response capability.

DoD first exercised its Section 1204 authority in FY 2014 to provide WMD preparedness and response training to the military and civilian first responders of Jordan, Lebanon, and Turkey. In FY 2015, DoD expanded its use of Section 1204 authority to provide CBRN-response training and equipment to military and civilian first responder communities in Albania, Brazil, the Dominican Republic, Jordan, Kenya, Lebanon, Morocco, Philippines, Turkey, and Ukraine. Although the training focused on CBRN-incident preparedness and response, it also emphasized a whole-of-government approach to execute WMD incident operations effectively. In this fiscal year, DoD will continue to improve the WMD-preparedness and response capability of key partners, identified collaboratively with the Combatant Commanders and DOS.

CONCLUSION

Despite the accomplishments I have described above, which build upon numerous CWMD-related successes of the past, we must remain prepared against static *and* emerging WMD threats. We must anticipate that state and non-state actors will develop increasingly sophisticated methods to pursue, develop, or deploy WMD – in pursuit of an array of objectives. We will continue to work with and through our interagency and international partners to confront the threats posed by WMD at home and abroad. As WMD-related crises continue to emerge, your continued support for and funding in the areas described today are critical to our ability to understand, anticipate, and mitigate these threats.