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STATEMENT OF

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INTRODUCTION

Chairman Thornberry, Ranking Member Langevin, and Members of the Subcommittee, I am pleased to testify today about several of our ongoing efforts to counter the threats posed by weapons of mass destruction (WMD). The pursuit of WMD and potential use by actors of concern pose a grave threat to the security of the United States as well as our allies and partners around the world. Throughout the Department of Defense (DoD), and in concert with our interagency and international partners, we are continuously innovating to counter new and evolving threats with military and civilian solutions to ensure that we are neither attacked nor coerced by actors with WMD. Today I will highlight several examples of these initiatives as they pertain to chemical, biological, and nuclear threats.

As the Deputy Assistant Secretary of Defense for Countering Weapons of Mass Destruction, I am responsible for establishing policies and guidance to protect U.S. and Allied armed forces against a chemical, biological, radiological, or nuclear (CBRN) attack from a State actor or terrorist. I also represent the Department's interests on counterproliferation and non-proliferation policy issues, including the Biological Weapons Convention (BWC), Chemical Weapons Convention (CWC), the Nuclear Non-Proliferation Treaty (NPT), the Proliferation Security Initiative (PSI), as well as the DoD Cooperative Threat Reduction (CTR) Program.

My office develops policy and guidance for the programs and activities of the DoD CTR Program, which is implemented by the Defense Threat Reduction Agency (DTRA), under the direction of Mr. Kenneth Myers. Mr. Andrew Weber, Assistant Secretary of Defense for Nuclear, Chemical, and Biological Defense Programs, provides acquisition guidance and oversight for DTRA's work. Mr. Carmen Spencer, the Joint Program Executive Officer for Chemical and Biological Defense, was instrumental in the development of the deployable hydrolysis technology that will be neutralizing the deadliest of Syria's chemical weapons. I am pleased to be here today with these colleagues, all of whom are integral to countering the threats that I will be addressing.

COUNTERING TODAY'S GLOBAL WMD CHALLENGES

A number of State and non-State actors continue to pursue WMD, posing a persistent threat to the security of the United States, as well as our allies and partners. In addition, the constant evolution of weapons, materials, tactics and technologies will continue to challenge our ability to deter, detect, and defend against these threats. Finally, the interconnectedness of global communities means that WMD threats can proliferate at the speed of an airliner, a missile, or even the internet. Countering such complex and dynamic threats requires flexible, innovative, and agile responses. Twentieth Century solutions are not sufficient to meet the WMD challenges of the Twenty-first Century.

Our military plays a large part in countering WMD, but we must consistently look beyond military solutions and take maximum advantage of the diplomatic and non-kinetic tools

available. Countering the proliferation or use of WMD requires flexible and agile responses, capable partners, as well as "whole-of-department," "whole-of-government," and even "whole-of-international-community" solutions. In these times of fiscal austerity, we must make full use of partnerships, contributing where we can and avoiding unnecessary duplication. Cooperation is a force multiplier, enabling swift and comprehensive action to respond to existing and emerging WMD threats.

REDUCING CHEMICAL WEAPONS CHALLENGES

The extraordinary effort to deal with Syria's chemical weapons (CW) program in the midst of an ongoing revolution, where many continue to strive to create a free and democratic Syria while their country is faced with instability, civil war, and an influx of terrorist elements, is a great example of how the U.S. Government and the international community are cooperating to rapidly address an emergent tangible threat.

As the crisis unfolded, the U.S. Government sought to reassure close partners and reduce the risk of cross-border proliferation of CW assets. We also began to work with Syria's neighbors to mitigate the risk to their populations from possible CW use near their borders. Anticipating the potential need for eliminating Syria's CW program led to the rapid development and acquisition of key capabilities, particularly with respect to transportable technology to neutralize bulk chemical agents.

After the August 21, 2013 use of chemical weapons by the Syrian Government against its population led to a threat of U.S. military intervention, the United States and Russia forged the September 14, 2013, Geneva Framework, which – together with United Nations Security Council Resolution 2118 and a concurrent decision by the Executive Council of the Organization for the Prohibition of Chemical Weapons (OPCW) – launched the international effort to eliminate Syria's CW program. UN Security Council Resolution 2118 and OPCW Executive Council decisions also established a verifiable and transparent process by which the Syrian Government agreed to the complete destruction of its CW program by June 30, 2014. Syria has since acceded to the Chemical Weapons Convention and submitted a formal declaration, with subsequent amendments, of their chemical weapons materials and production facilities.

This effort is unprecedented in scale, speed, and complexity. Although much remains to be done, it is extraordinary how much has already been accomplished through DoD, interagency, and international partnerships. In addition to the prudent planning that is part of DoD's genetic coding, the DoD Cooperative Threat Reduction (CTR) Program's Middle East determination facilitated new partnerships and collaboration across DoD's communities to support both civilian and military requirements to reduce CW proliferation risks in the region. The DoD CTR Program remains one of the leading programs partnering with the international community on chemical, biological, and nuclear security initiatives. The Program became the primary means through which the U.S. Government could provide funding, expertise, and resources to shape and implement the Syrian CW destruction plan spearheaded by the OPCW. The DoD has worked hard in recent years to ensure greater agility within the CTR Program to respond rapidly

to shifting requirements and threats worldwide. Syria represents the best example of these efforts, and Congressional support has played a significant role in enabling such success.

To date, the DoD CTR Program has allocated approximately \$160 million to support the Syria CW elimination effort, including by providing equipment to the United Nations/OPCW Joint Mission to facilitate the safe removal of the chemicals from Syria, as well as to support the vast majority of the effort to prepare, use, and eventually demobilize the Motor Vessel (M/V) CAPE RAY for the mission to neutralize Syria's most dangerous chemicals. Congressional action authorizing the DoD CTR Program's authority to accept contributions from foreign partners has enabled us to allow international partners to share the financial burden for these considerable efforts. In fact, in 2013 and 2014, the DoD CTR Program has received more than \$19 million in combined contributions from Germany, the United Kingdom and Canada to assist in our threat reduction efforts in Syria, Libya, Jordan, Iraq, and Georgia. We will continue to seek additional contributions from our international partners for these efforts.

Today, thanks to the tremendous efforts of so many contributors, Syria's CW program is on the path to elimination. The international coalition to remove and destroy the components of Syria's chemical weapons program is in place. Technical and policy experts within DoD have contributed to the OPCW's destruction and operational planning groups, offering their expertise on the safest and most efficient ways to conduct the mission. The maritime task force spearheaded by our Danish and Norwegian allies and supported by the United Kingdom, Finland, Russia, and China has enabled the removal from Syria of almost half of the chemicals associated with the Syrian CW program. The centerpiece of the U.S. contribution, the motor vessel (M/V) CAPE RAY, is ready to neutralize the most dangerous chemicals in the Syrian arsenal in a safe, secure, and environmentally sound manner. This maritime Ready Reserve Force vessel is outfitted with DoD's recently-developed Field Deployable Hydrolysis Systems (FDHS) and manned by the finest experts from our operational and technical communities. This unprecedented international effort demonstrates the ability of DoD, other U.S. departments and agencies, and our international partners to develop innovative solutions to complex problems. This type of creative, collaborative approach to a WMD challenge must become the norm.

Another CW elimination effort spearheaded by the Department and concluded this past year is the destruction of the chemical weapons stockpile that Libya's new government discovered after the ouster of Moamar Qaddafi. Following nearly two years of close cooperation with the Libyan Government, Libya announced in January of this year that it had completed destruction of its chemical weapons munitions. This success was due in large part to the DoD CTR Program's provision of approximately \$52 million in training, security upgrades, advice, equipment, and destruction support. The German Government also made a significant contribution to this effort by providing funds directly to the DoD CTR Program through our external contributions authority.

CW elimination efforts are critical not just in responding to today's crises, but to prepare to respond to future threats. Success in the destruction of the Libyan and Syrian CW programs will

not eliminate the WMD proliferation risks in the Middle East. Non-State actors interested in obtaining and using CW remain a concern to our forces and partners around the globe. We must continue to leverage the capabilities and partnerships we have established and are now better positioned to respond more effectively to the next challenges that emerge. It is important to recognize that many of these requirements were not, and could not have been, predicted in advance, but rather were addressed rapidly as they emerged.

The Syrian CW elimination effort is just one testament to how swiftly the whole of the U.S. Government, in coordination with the international community, can work together to solve complex challenges that threaten global security. As we look to two other high-priority counter-WMD issues – countering biological threats and enhancing global nuclear security – we are seeing similar payoffs from such national and international-level collaborations.

REDUCING BIOLOGICAL AGENT RISKS

Biological agents pose serious risks to the United States due to the emergence and spread of new pathogens and the rise of drug-resistant ones and the potential acquisition and use of biological agents by hostile State and non-State actors. These risks are further exacerbated by the globalization of travel and the food supply; the advancement and increasing accessibility of biological science capabilities; and the existence of unsecured pathogens of concern. These are all conditions that present increasing opportunities for hostile State and non-State actors to cause catastrophic strategic consequences.

The potential severity and complexity of biological incidents and the risks they can pose to our forces anytime, anywhere demands close attention both at the strategic and tactical levels. During the past year, we conducted what we have termed a "Bio Stock-take." Designed to develop longer-term, bio-specific strategic guidance for the department, this process has already informed our recently-released 2014 Quadrennial Defense Review (QDR). Specifically, the QDR highlights the confounding challenge of advancing biotechnology and the potential for use of agents that evade detection and countermeasures, and directs us to pursue global prevention, detection, and response efforts. Additionally, it directs us to help our allies and partners build capacity so they can join us in countering proliferation and use of WMD.

Also as a result of the stock-take, we have identified some key areas for further work, such as preventing strategic surprise, enhancing early warning, raising proliferation barriers, and engaging partners, all in support of a strategy to prevent and dissuade the malicious use of biological agents. Should prevention fail, however, we understand that we must be prepared to respond and mitigate threats from the use of biological agents quickly, and many of those capabilities will be discussed today by my colleagues representing the Chemical and Biological Defense Programs and DTRA. As was the case with the Syria CW challenge, holistic approaches that leverage interagency partnerships and international collaborations are the most efficient and pragmatic way to address the biological agent risks we face today.

Since prevention, detection, and response often rely heavily on public health infrastructure, harnessing the power of the international community to reduce biological risks is best done by building bridges between the security and public-health sectors. This approach is the lynchpin of the Administration's Global Health Security (GHS) Agenda, which outlines nine priority objectives for U.S. Government departments and agencies, and advances the goal of working with international partners to accelerate progress in improving capacity to prevent, detect, and respond to outbreaks of infectious disease threats, no matter the source. Although the Department of Health and Human Services is the U.S. lead for this Agenda, DoD supports the GHS Agenda through existing missions and activities, such as force health protection, threat reduction, and biodefense. These activities, resourced and conducted to meet DoD's military objectives, provide benefit toward the achievement of GHS Agenda objectives while we continue to prioritize capabilities that counter operationally significant risks to our forces.

One example of a DoD program that supports the GHS Agenda is the Chemical and Biological Defense Program, which develops and fields diagnostic devices that benefit both U.S. forces and GHS partners in improving detection of, and response to, infectious disease outbreaks. Additionally, it is developing several medical countermeasures and improved electronic surveillance tools that will enable better protection against, detection of, and situational awareness of infectious disease outbreaks, which support key objectives of the GHS Agenda.

We are also aligning our security mission with Public Health assets in new and robust ways that benefit both our forces and promote global health security. The Armed Forces Health Surveillance Center and the DoD Global Emerging Infections Surveillance and Response System, in partnership with the DoD OCONUS laboratories located strategically in six locations throughout the world, collaborate with international partners to improve capacity for disease prevention, detection and response through enhanced surveillance networks and diagnostic capabilities to facilitate better and earlier force health protection measures.

Finally, recognizing the potential risk of non-State actor-based threats, the DoD CTR Program is a key tool in our prevent strategy, as well as in supporting the security objectives of the GHS agenda. This program is specifically concerned with terrorist organizations that are seeking to acquire pathogens of security concern for use in biological attacks. To address the diverse and rapidly changing global biological threat, the Cooperative Biological Engagement Program (CBEP) has active engagements in Africa, South and Southeast Asia, as well as the Middle East. The CBEP is focused on enhancing partner countries' capability to identify, consolidate, and secure collections of pathogens of security concern as well as strengthening their capability to survey, detect, diagnose, and report rapidly and accurately biological incidents and outbreaks of pathogens of security concern. As an example of the holistic, whole-of-government approaches that CBEP is utilizing, the Program will partner with the Malaysian government, the Federal Bureau of Investigation (FBI), the Centers for Disease Control and Prevention (CDC), and U.S. academic partners this spring to conduct one of

a series of intersectoral workshops on building a robust bio-risk management system for Malaysia.

As we turn our focus to enhancing global nuclear security, the spirit of collaboration with our national and international partners has resulted in similar successes.

REDUCING NUCLEAR THREATS

Nuclear threats also remain a prominent concern. Unless arrested and reversed, the nuclear ambitions of countries like North Korea and Iran can imperil the interests of the United States and our allies and partners around the world, create instability, and increase the likelihood that other nations will seek to become nuclear-armed States. In addition, the growing number of nuclear-armed States increases the chances that terrorists may acquire nuclear materials, or even weapons.

The ongoing spread of advanced nuclear technology knowledge, potential new enrichment techniques, and improved weaponization also contribute to new types of challenges, especially when coupled with long-range ballistic missile and other delivery capabilities. Moreover, the global distribution of weapons-useable nuclear material in non-nuclear weapons States continues to provide additional opportunities for terrorists to obtain material to produce a nuclear weapon. Reports of insufficient security standards at some sites and continued nuclear-material trafficking demonstrate that threats are still present. The combination of vulnerable nuclear materials and non-state actors seeking to acquire WMD capabilities presents a grave threat to U.S. security and that of our allies and partners.

Preventing access to essential materials and technology significantly inhibits the ability of State and non-State actors to acquire nuclear capabilities. By reducing the availability and accessibility of weapons-usable nuclear materials worldwide, promoting a culture of security, and sustaining robust interdiction efforts, the nuclear ambitions of State and non-State actors will remain difficult to realize.

DoD is taking action to reduce nuclear threats by working with partner countries, in close coordination with the National Nuclear Security Administration (NNSA) and the Department of State, to secure nuclear weapons and vulnerable nuclear materials, contributing to the Nuclear Security Summit process, and by promoting global best practices in nuclear security.

The Nuclear Security Summit is a world summit that seeks to prevent nuclear terrorism around the world. The broad goals of the Nuclear Security Summit process are for participating countries and international organizations to come to a common understanding of the threat posed by nuclear terrorism, to agree to effective measures to secure nuclear material, and to prevent nuclear smuggling and terrorism. DoD also plays a role and has worked closely with interagency partners to support the Nuclear Security Summit process. Since the 2012 Nuclear Security Summit, DoD has participated in at least seven domestic exercises to increase capabilities in nuclear preparedness, response, recovery, and resilience. We intend to continue to conduct safe

and secure shipments of spent nuclear fuel containing highly enriched uranium for disposition and more secure storage, as well as modify casks to use to transport the fuel from submarines with unique reactor designs.

DoD will continue to build on its partnerships with other U.S. Government departments and agencies, support critical international organizations such as the International Atomic Energy Agency, and collaborate with countries that can contribute resources and expertise--all to help build a more robust, comprehensive global nuclear security system.

Although our goal remains to prevent proliferation and the loss or acquisition of nuclear material, components, or weapons themselves, DoD also will continue to work closely with U.S. interagency and foreign partners to enhance our crisis planning and capabilities for responding to a nuclear terrorism threat or incident. We recognize that successfully executing DoD's roles and responsibilities in the response to this type of crisis requires effective coordination with other U.S. government agencies and international partners. Our ongoing efforts will thus continue to focus on working with our partners to provide the capacity for a robust ability to respond to and mitigate this type of WMD threat or incident.

Consistent with other proactive steps we are taking to reduce WMD threats, we cannot wait for an act of nuclear terrorism before working together to improve our collective nuclear security culture, share our best practices, and raise our standards for nuclear security. Through its Global Nuclear Security (GNS) program, the DoD CTR Program is the Department of Defense's primary mechanism to support and implement President Obama's objectives for nuclear security, at a site-, country-, and global-level. The GNS program conducts projects and activities to increase the nuclear security of partner nations, including establishing Centers of Excellence and conducts technical exchanges with partner countries to enhance training capabilities. The program also works to decrease the vulnerability of nuclear weapons-usable material based upon the latest threat assessments.

Finally, even as we focus on the highest-priority nuclear threats, we must remain mindful of the potential for radiological dispersal and exposure devices that may become increasingly attractive to actors of concern. Although these devices do not generate the same destructive effects associated with nuclear weapons, they can produce significant health, psychological, and economic effects and increase the cost of addressing them due to the wide areas they may affect. DoD will continue to refine our planning and build partnerships to address this significant threat.

ANTICIPATING FUTURE THREATS

Despite progress over the last year, much work remains to ensure our continued security. Syria and other recent events have given us great insight into how we may have to look at problems differently, enabling us to prepare for and tackle these and other threats more effectively as they emerge. We will continue to manage the risks through close coordination and consultation with

the international community and, most importantly, we will remain steadfast in our commitments to innovation and cooperation with our allies and partners worldwide.

In the increasingly interconnected global environment, the threat from WMD extends well beyond State actors and we cannot take our eye off the terrorism risk. Although the threat to the Homeland from core al-Qa'ida has been degraded in recent years, there has been an increase in activity by other networks of like-minded extremists. The conflict in Syria is generating new extremists who could eventually turn their attention elsewhere if they are not confronted by the United States, our allies, and our partners. As the diffusion of threats continues, the challenges we face will only increase as terrorist networks continue to demonstrate interest in obtaining WMD. We must continue our vigilant efforts to prevent the proliferation of WMD, including by expanding adherence to international agreements and norms, dismantling State programs where possible, and interdicting transfers when necessary.

Our Countering WMD efforts center on preparing and posturing our military to address future challenges that may emerge and escalate quickly. DoD's Countering WMD strategy also places a premium on enhancing efforts to prevent threats and reduce risks before our homeland, citizens or interests can be threatened. Prevention, detection and intervention are all areas that require the sustained involvement in Proliferation Security Initiative (PSI).

Since PSI began in 2003, it has had a real, practical, and significant impact on interdiction. From the beginning, DoD has played an important role by serving as the U.S. Government lead in the Operational Experts Group (OEG); supporting PSI-related exercises and other engagements; and providing technical advice and assistance to endorsing nations as appropriate. These exercises demonstrate the will of the PSI community to take action to prevent and, if necessary, to stop illicit shipments. PSI is a vital part of the international tapestry of countering WMD programs that enhance global security, and is another example of how the whole–of-government, working in collaboration with the international community, can affect meaningful progress in combatting the threat of WMD.

We must bring these programs I have described and other solutions to bear as new challenges surface, leveraging partnerships and lessons learned to respond quickly and decisively. I thank you for your support for our Fiscal Year 2015 budget request and look forward to our continued partnership.