

**DEPARTMENT OF DEFENSE AUTHORIZATION
FOR APPROPRIATIONS FOR FISCAL YEAR
2014 AND THE FUTURE YEARS DEFENSE
PROGRAM**

TUESDAY, APRIL 23, 2013

U.S. SENATE,
SUBCOMMITTEE ON EMERGING
THREATS AND CAPABILITIES,
COMMITTEE ON ARMED SERVICES,
Washington, DC.

**PROLIFERATION PREVENTION PROGRAMS AT THE DE-
PARTMENT OF ENERGY AND AT THE DEPARTMENT OF
DEFENSE**

The subcommittee met, pursuant to notice, at 2:31 p.m. in room SR-222, Russell Senate Office Building, Senator Kay R. Hagan (chairman of the subcommittee) presiding.

Committee members present: Senators Hagan, Fischer, and Graham.

Majority staff members present: Jonathan S. Epstein, counsel; and Richard W. Fieldhouse, professional staff member.

Minority staff members present: Thomas W. Goffus, professional staff member; and Robert M. Soofer, professional staff member.

Staff assistants present: Lauren M. Gillis, Daniel J. Harder, and Kathleen A. Kulenkampff.

Committee members' assistants present: Jeff Fatora, assistant to Senator Nelson; Christopher Cannon, assistant to Senator Hagan; Chad Kreikemeier, assistant to Senator Shaheen; Peter Schirtzinger, assistant to Senator Fischer; and Craig Abele and Matthew Rimkunas, assistants to Senator Graham.

**OPENING STATEMENT OF SENATOR KAY R. HAGAN,
CHAIRMAN**

Senator HAGAN. Good afternoon. The Emerging Threats and Capabilities Subcommittee meets today to review the President's fiscal year 2014 request for nonproliferation programs at the Department of Defense (DOD) and Department of Energy (DOE). We plan to have a hard stop here at 3:20 p.m. so that we can adjourn to the Office of Senate Security in room SVC-217 of the Capitol Visitor Center for a closed session with our witnesses today.

In the interest of time, I want to ask that the witnesses, if you would give a short, 2 minutes or so, opening statement. We have your written testimony and we obviously have that for the record.

We are joined today by three expert witnesses to help us understand the programs under way in both of these Departments. Madelyn Creedon is the Assistant Secretary of Defense for Global Strategic Affairs, who is responsible for the policy aspects of these programs at DOD, and we welcome you back to the Senate Armed Services Committee.

Kenneth Myers is the Director of the Defense Threat Reduction Agency (DTRA) at DOD, which is focused on reducing the threats from weapons of mass destruction (WMD). The agency is responsible for executing the Cooperative Threat Reduction (CTR) program. He is also the Director of the U.S. Strategic Command (STRATCOM) Center for Combating (SCC) WMD, located at the agency.

Anne Harrington is the Deputy Administrator for Defense Nuclear Nonproliferation at the National Nuclear Security Administration (NNSA) at DOE.

We thank you all for your service and thank you for joining us here today.

For fiscal year 2014, DOD and DOE propose to spend on the order of \$2.6 billion in nonproliferation activities to help stem the flow of the WMD. For the past 20 years, the CTR has achieved remarkable accomplishments in Russia and the former Soviet states in helping to secure or to destroy the world's largest stockpiles of WMD and their materials. I understand a new CTR umbrella agreement between the U.S. and Russia is under negotiation and we would like to hear the administration's objectives for the new agreement.

Also, we are now transitioning many CTR programs to countries in Southeast Asia, the Middle East, and Africa, and for the first time we may see as much CTR funding outside the former Soviet Union as in it.

We'll want to hear what strategic approach you have implemented to assess how these funds would be most effectively spent. For instance, the Cooperative Biological Engagement Program now has 61 projects in 19 countries. Within DOE's NNSA, I understand the mixed oxide (MOX) fuel program is considering a strategic pause due to significant cost overruns of as much as \$3 billion and a 3-year delay. The purpose of the 14-year-old program is to turn 34 metric tons of excess weapons-grade plutonium into commercial reactor fuel, with the Russians doing the same, a laudable non-proliferation goal.

My understanding is DOE is now estimating a life cycle cost of up to \$27 billion over 15 years to produce the MOX fuel. So I look forward to hearing from Ms. Harrington what DOE is thinking with the existing MOX program and how long it will take DOE to get back to Congress with the results from the reevaluation of this program.

Again, thank you for being here today. We look forward to your testimony. I want to turn to my colleague and ranking member, Senator Fischer, for her comments.

Senator Fischer.

STATEMENT OF SENATOR DEB FISCHER

Senator FISCHER. Thank you, Madam Chairman. I join you in thanking our witnesses for being here today. While I look forward to their testimony on these essential proliferation prevention programs, I am concerned by the prevalent argument that the United States can persuade the rest of the world to halt nuclear proliferation by reducing its own arsenal. I know that the Strategic Forces Subcommittee oversees our nuclear enterprise, but its critical contribution here is also worth highlighting.

In fact, a robust U.S. nuclear deterrent, often referred to as the nuclear umbrella, provides a strong disincentive for other nations, including our partners and allies, to develop WMD. Moreover, there's little evidence that U.S. nuclear reductions from a high of 30,000 nuclear weapons in 1967 to just 5,000 today have reduced nuclear proliferation. North Korea and Iran stand as recent evidence to the contrary.

While some in the United States and in the west view nuclear weapons as outdated Cold War relics, other nations are increasing their reliance on nuclear weapons, much as the United States did after World War II. The United States will not change this reality by reducing its arsenal. Overlooking this fact and dogmatically pursuing the reduction of U.S. nuclear forces, instead of addressing the proliferation of nuclear weapons to rogue states, will lead to a lack of confidence in U.S. nuclear security guarantees. As a result, adversaries won't be deterred and nations that have not pursued nuclear capabilities, such as South Korea, Japan, Turkey, and Saudi Arabia, may reconsider.

Transparency and strategic stability must be our goals with respect to Russia and China. Dealing with North Korea, Iran, and potential nuclear terrorists requires a different set of priorities and different programmatic tools, some of which we intend to discuss here today.

The important proliferation prevention agencies represented here today, underpinned by a strong U.S. nuclear deterrent, are critical to our national security.

So I thank the chair and I look forward to our questions. Thank you so much for being here.

Senator HAGAN. Secretary Creedon, if you would like to go first with your opening statement.

STATEMENT OF HON. MADELYN R. CREEDON, ASSISTANT SECRETARY OF DEFENSE FOR GLOBAL STRATEGIC AFFAIRS, DEPARTMENT OF DEFENSE

Ms. CREEDON. Thank you, Senator Hagan, Ranking Member Fischer. It's a pleasure to be here, also to be here today with colleagues of longstanding duration from both the DTRA and from the NNSA.

As we all are very well aware, we face a number of significant WMD challenges and the three of us together are aggressively pursuing the President's vision to keep WMD out of the hands of terrorists and states of concern. These states of concern, of course, include North Korea, Iran, and Syria, just to mention a few.

One of the most worrisome scenarios we face is the prospect of a dangerous WMD crisis involving the theft or loss of control of

weapons or materials of concern that end up in the hands of hostile actors. As the situation in Syria illustrates, instability in states pursuing or possessing WMD could lead to just such a crisis. To meet these challenges, DOD has focused on three areas: preventing WMD acquisition, containing and rolling back the threats, and responding to a WMD crisis.

Preventing the WMD acquisition requires cooperation with our international partners and the Proliferation Security Initiative (PSI) is a good example of that. This is 29 partners together who participate in, among other things, exercises. The United Arab Emirates hosted the most recent one. We are now on the verge of celebrating PSI's 10th anniversary and our Polish allies will be hosting that particular celebration of the accomplishments and also looking forward to the next 10 years.

PSI is an interesting concept with our allies and for the United States. It's not included in any budget line as it comes out of general exercise money. But in the fiscal environment that we're now facing, we are looking at the idea of developing a specific line item dedicated for PSI activities and will probably be presenting this in the construct of the fiscal year 2015 budget.

But beyond preventing acquisition, which is one of our priorities, we're also containing and rolling back WMD threats. One of the most important tools we use to accomplish this is the CTR program. The flexibility of the CTR legislation has allowed the program to expand its work both geographically, most recently in the Middle East, and now also functionally.

A major focus of CTR is addressing the threat posed by Syria's chemical weapons. To address the proliferation threat from these weapons, CTR is funding the second portion of Jordan's border security project, which will increase Jordan's ability to mitigate proliferation along a 256-kilometer border with Syria.

CTR also works in Africa to improve the safety and security and hopefully destroy, in an excellent partnership that's just developing with Germany, Libya's chemical weapons stockpile. CTR is also working to improve biological security and increasing partner capacity in Kenya and Uganda and to enhance maritime surveillance capabilities and capacity in Southeast Asia.

The functional expansions that I mentioned were developed initially to assist with the close collaboration that we enjoy with DOD. DOE negotiates high-priority transfers of material, mostly nuclear material, to more secure locations for storage and reprocessing, and DOD has specific capabilities and training to transport this material. As a result, we are developing a transportation determination that will allow more nimble collaboration with DOE.

These examples also demonstrate that the CTR program remains responsive to the current and emerging security environment. We have pushed the envelope and we will continue to do so when we believe it will reduce WMD threats.

If our efforts to contain and roll back WMD threats fail, we must be prepared to respond. The recently activated Standing Joint Force Headquarters-Elimination (SJFHQ-E) has this responsibility. In addition to the unique support it provides to the combatant commands, this year the SJFHQ-E participated in major exercises with South Korea, France, and the United Kingdom. We're

committed to meeting the Nation's countering WMD requirements while taking into account shrinking DOD budgets.

None of the efforts I have described would be possible without the continuing support of Congress. I thank you for your support for our fiscal 2014 budget and look forward to your continuing cooperation.

Thank you.

[The prepared statement of Ms. Creedon follows:]

PREPARED STATEMENT BY HON. MADELYN R. CREEDON

INTRODUCTION

Madam Chairman, Ranking Member Fischer, and members of the subcommittee, I am pleased to testify today about the progress the Department of Defense (DOD) has made in carrying out a wide range of activities to counter weapons of mass destruction (WMD). We continue to pursue aggressively the President's vision for countering WMD by keeping WMD out of the hands of terrorists and states of concern, locking down dangerous nuclear and biological materials, eliminating chemical weapons, destroying legacy weapons, and building capabilities and conducting operations to prevent acquisition, contain and roll back threats, and respond to WMD crises.

I am pleased to be here today with two colleagues whose efforts are critical to addressing these important issues: Mr. Kenneth A. Myers III, the Director of the Defense Threat Reduction Agency (DTRA); and Ms. Anne M. Harrington, the Deputy Administrator for Defense Nuclear Nonproliferation for the National Nuclear Security Administration (NNSA). Together, we are supporting a whole-of-government effort to make the United States, and the world, safer from WMD threats.

In my role as the Assistant Secretary of Defense for Global Strategic Affairs (GSA), I oversee all Defense efforts to counter WMD, as well as nuclear, missile defense, space, and cyber policies. The great team at GSA develops defense strategies and policies, sets Departmental priorities based on guidance from the Secretary of Defense, and manages interagency and international relationships for the Department in these functional areas. Under the leadership of Mr. Myers, DTRA implements GSA's countering WMD guidance through the management and execution of the Cooperative Threat Reduction (CTR) Program and other non- and counter-proliferation activities. Mr. Andrew Weber, Assistant Secretary of Defense for Nuclear, Chemical, and Biological Defense Programs, provides acquisition guidance and oversight for DTRA's work. Together, we work with the Joint Staff, the combatant commands, the Services, national labs, and other implementing partners to execute DOD's counter WMD responsibilities. DOD also works closely in this area with Ms. Harrington and her team at NNSA, as well as other interagency partners.

Our mission is straightforward—DOD is working to ensure that no additional states or non-state actors acquire WMD; those possessing WMD do not use them; and if WMD are used, the effects are minimized. In a constrained fiscal environment, we are focusing our efforts on preventing acquisition and countering the most likely threats. Accordingly, we are emphasizing early cooperative action in order to shape the security environment and disrupt proliferation networks through pathway defeat—deliberate actions taken against actors of concern and their networks to delay, disrupt, destroy, or otherwise complicate WMD-related activities. We are prioritizing capabilities that counter operationally significant risks and that are not resident elsewhere in the U.S. Government, in order to avoid wasteful or duplicative expenditures.

WMD CHALLENGES

The current strategic environment presents a number of WMD challenges stemming from those who possess WMD and those seeking to acquire new and expanded capabilities, including North Korea, Iran, Syria, and certain non-state actors. Both state and non-state actors who are actively seeking or already possess WMD present a significant intelligence and defense planning challenge. Their strategic intentions, proliferation pathways, decisionmaking processes, and capabilities are difficult to assess and influence. Their relative risk tolerance and isolation can create further challenges for the United States to dissuade and deter these actors from acquiring or using WMD. For example, North Korea has recently taken a series of provocative and destabilizing actions and Iran continues to defy the calls of the international community for transparency into its nuclear activities and a demonstration that

these activities are solely for legitimate, peaceful purposes. Certain non-state actors continue to seek WMD, and WMD technologies.

Technological advances and the availability of expertise, materials, and technology through a variety of networks increase the likelihood that both state and non-state actors will gain access to WMD and related capabilities. Those who provide support—including WMD and related capabilities—to other governments and non-state actors also threaten U.S. security and destabilize the international system. Furthermore, such proliferation increases the likelihood that a recipient may employ WMD independently or as a proxy.

Despite significant progress in securing vulnerable WMD materials, new avenues for access continuously emerge. Fragile or failed states with WMD programs or capabilities are particularly ripe for exploitation. One of our most worrisome scenarios is the prospect of a crisis involving the theft or loss of control of weapons or material of concern that results in the WMD ending up in the hands of hostile actors. Instability in states pursuing or possessing WMD or related capabilities could lead to just such a crisis. The potential convergence of violent extremism, political instability, and inadequate WMD security is also a most troubling scenario. If highly motivated non-state actors determined to obtain and employ WMD took advantage of these types of situations, they would no doubt be difficult, if not impossible, to deter.

Violent extremists are expanding their geographic reach into ungoverned territories. Recent events in Mali involving Al Qaeda and affiliates demonstrate this problem. Such territories could be used to support illicit activities, including undetected and unwarned development and proliferation of WMD-related capabilities. These safe havens enhance adversaries' freedom of action and make our task all the more difficult.

ADDRESSING THE CHALLENGES

When making strategic resourcing decisions, DOD consistently has protected countering WMD (CWMD) efforts. In today's fiscal environment, however, our goals will be tougher than ever to sustain. We are accepting increased risk in areas where WMD use is less plausible, less feasible, or would have limited effects, allowing us to prioritize more likely scenarios for WMD acquisition and use.

To maximize effectiveness and because this is not a DOD mission alone, we are incorporating our CWMD efforts, as reflected in the broader plans and operations within DOD, across the U.S. Government and with international partners. Partnering serves as a force multiplier: it extends DOD's strategy and capabilities through increased interoperability with other U.S. departments and agencies, allies and friends, and international bodies. DOD seeks to leverage and enhance, but not duplicate, capabilities resident elsewhere in the U.S. Government or activities best executed by our interagency partners, for which other agencies and departments have lead responsibilities. DOD stands ready to support these other agencies and departments as needed.

Today's complex security environment presents significant challenges that require increased emphasis on early cooperative action to shape the environment and disrupt networks. The dynamic structures of WMD networks present challenges, but they also offer opportunities for exploitation through flexible, innovative, and adaptive approaches that target these networks and their hubs. Understanding, monitoring, and targeting these networks can help deter acquisition, bolster prevention activities, and reduce reliance on measures that carry higher political, military, and humanitarian risks.

Deterrence strategies supported by credible CWMD capabilities will remain an effective approach against many WMD-armed adversaries. Toward that end, the Department equips and trains forces and develops capabilities that can be employed in three broad categories: (1) prevent acquisition; (2) contain and roll back threats; and (3) respond to WMD crises.

1. Preventing Acquisition

To further reduce incentives for WMD acquisition, DOD continues to support the efforts of our State Department colleagues and others to strengthen international treaties, conventions, and regimes, and to implement sanctions. We support discussions among the permanent five (P5) states of the U.N. Security Council to meet our obligations under the Nuclear Nonproliferation Treaty and to make progress under the action Plan agreed to at the last Nuclear Nonproliferation Treaty Review Conference. In this context, DOD is developing, in conjunction with interagency partners, common approaches to reporting and definitions. Such confidence-building measures, when reciprocated by other members of the P5, increase transparency and stability among nuclear weapon states. DOD also supports efforts to begin negotiating a Fissile Material Cutoff Treaty (FMCT). We support the P5's moratorium

on the production of new fissile material for use in nuclear devices, and believe its continuance is part of the foundation that is needed in order to make progress on an FMCT. To meet U.S. obligations under the Chemical Weapons Convention, DOD has destroyed almost 90 percent of our chemical weapons stockpile while continuing to assist other states in the destruction of their stockpiles. We also continue to support U.S. transparency efforts in the context of the Biological and Toxin Weapons Convention (BWC) and to uphold longstanding U.S. commitments under the BWC Confidence-Building Measures by reporting on biodefense research activities taking place at DOD biological facilities.

Another example of our commitment to preventing proliferation of WMD is our support to an interagency effort to develop and implement a U.S. policy for Dual Use Research of Concern (DURC). As was highlighted during national and international discussions in 2012 concerning H5N1 avian influenza research, biological research, while critical for the betterment of the health, welfare, and safety of mankind, also has the potential to be misused. As a Federal research funding agency, DOD has now implemented the 29 March 2012 “United States Policy for Oversight of Life Sciences Dual Use Research of Concern,” and reviews the life sciences research it funds and conducts to ensure that dual use issues are adequately addressed from the outset. In addition, we continue to actively engage in interagency efforts to further develop additional policies in this area as our understanding of this challenge evolves.

DOD is raising barriers to the acquisition and proliferation of WMD through both bilateral and multilateral cooperation with partners. This May, our Polish allies will host meetings marking the 10th anniversary of the Proliferation Security Initiative (PSI). Through its exercises and leadership in PSI’s operational experts group, DOD has steadily worked with partners to address all aspects of the proliferation threat. Twenty-nine partners participated in our most recent exercise, Leading Edge, which was co-hosted by the United Arab Emirates and included full maritime, air, and land interdiction activities. PSI is an activity, not a program, and as such has no dedicated budget. In a time of increasing resource constraints, previous methods of funding PSI activities are becoming less available, and it is time we addressed the need for a dedicated PSI funding line.

DOD is also engaged in what we refer to as pathway defeat activities. These activities seek to identify various pathways that are or could be used to conceptualize, develop, acquire, or proliferate WMD and related capabilities and develop methodologies to deny, delay, disrupt, or destroy these WMD pathways. The pathway defeat work focuses on the specific nodes and linkages in the networks that constitute an adversary’s WMD acquisition pathway. By disrupting these networks, we raise barriers to acquisition and enhance efforts to detect, identify, and respond to acquisition attempts, especially those shielded by legitimate activities such as nuclear power generation; chemical, biological, radiological, and nuclear (CBRN) defensive programs; biomedical research; and the global chemical industry.

2. Containing and Rolling Back Threats

DOD is containing and rolling back WMD proliferation threats by restricting the supply of WMD-relevant materials and technologies, including delivery systems, available for illicit uses. One of the most important tools we use to accomplish this is the CTR Program. The President recently commemorated CTR on its 20th anniversary. He stated, “This is one of our most important national security programs. It’s a perfect example of the kind of partnerships that we need, working together to meet challenges that no nation can address on its own . . . That’s why, over the past 4 years, we’ve continued to make critical investments in our threat reduction programs—not just at DOD, but at Energy and at State. In fact, we’ve been increasing funding, and sustaining it. Even as we make some very tough fiscal choices, we’re going to keep investing in these programs—because our national security depends on it.” Among other achievements in securing and eliminating WMD materials and in preventing WMD proliferation, the CTR Program can take credit for assisting three former members of the Soviet Union in deactivating and properly disposing of over 13,000 nuclear warheads.

As WMD threats have changed since the end of the Cold War and dissolution of the Soviet Union, so has the CTR Program’s focus and partnerships. In support of this geographic and functional expansion, the President has requested \$528.5 million in fiscal year 2014 for DOD CTR activities, an increase of approximately \$9 million over the fiscal year 2013 appropriated level. These funds will continue ongoing partnerships in the former Soviet Union, support new partnerships in Africa, and expand work in the Middle East, South Asia, and South East Asia. It is important to note that CTR remains a threat-based program focused on supporting DOD’s mission. To strengthen our stewardship of program resources, the Department is devel-

oping a comprehensive metrics approach to improve program management and ensure investments directly advance strategic threat reduction goals. When fully implemented, CTR Program metrics will track material inventory, training activities, equipment utilization, and major program milestones, such as the completion of transfer of custody. These inputs will help us track project plans against our completed activities in a tailored way. Importantly, this will improve the dialogue between Congress and the Department of Defense when evaluating the success of the DOD CTR Program. Additional information on the CTR metrics will be included in the CTR annual report to Congress, which will be submitted later this spring.

The Secretary of Defense, with the Secretaries of State and Energy, recently approved the expansion of CTR activities to the Middle East. Through enhanced border security and threat reduction train and equip support, CTR will work with partner countries to help mitigate the threat posed by the potential proliferation or use of Syria's chemical weapons or materials and other WMD. With this new authority the CTR Program is working with our regional partners to increase their awareness of the threat posed by the potential proliferation or use of Syria's chemical weapons, materials, or other WMD; build and expand border protection capabilities to prevent illicit transfers of chemical weapons materials; and operate in a potentially contaminated environment. The CTR Program is proving to be exceptionally valuable to our partners and to existing partnerships in the face of this emerging threat. For example, CTR is funding Phase 2 of the Jordan Border Security Project, which will integrate technology and training to increase Jordan's visibility and ability to mitigate proliferation along the remaining 256-kilometer stretch of border with Syria.

Another focus area for the CTR Program is to enhance maritime domain awareness capabilities for maritime surveillance in Southeast Asia, providing the ability to detect illicit transfers of WMD materials and strategic delivery systems. In particular, we are engaging Vietnam to improve maritime law enforcement awareness and security. This program is working to improve logistics and maintenance as well as providing equipment and developing a training center to enable more efficient efforts to thwart illegal smuggling of WMD and related equipment.

CTR is also countering biological threats. CTR's partnerships decrease the vulnerability of biological agents to theft by nefarious actors and increase partners' abilities to detect, diagnose, contain, and report outbreaks of public health and national security concerns. Our hope is that current partners will, in the future, become sources of best practices and resources for other countries looking to improve their domestic biological security, outbreak surveillance, and response capabilities. GSA has briefed this committee in the past on improved biosecurity partnerships in East Africa, and I am proud to inform you that key facilities housing some of the world's most dangerous pathogens are now secure thanks to collaborative efforts among partner countries and the Departments of Defense and State.

But gates and guards are not the only solution. We are also working to enhance the culture of security within the life sciences community. Insufficient security leaves us all vulnerable to misuse of biological material. As new challenges of dual-use and global access to biotechnologies demand new approaches, we are developing non-traditional partnerships, including collaboration with the World Health Organization (WHO) to leverage their technical capabilities and global networks. While a DOD-WHO partnership may seem counterintuitive to some, we do in fact share many biosafety and biosecurity objectives. The WHO's International Health Regulations specifically call out these areas as requirements and sets guidelines for active and passive biological surveillance, which are the best means for detecting naturally occurring outbreaks and biological terror events. Compliance with these guidelines reinforces DOD objectives and enhances U.S. and international security. Direct and continued engagement with the WHO and similar organizations provides CTR with significantly more opportunities to enhance a culture of security within the existing life sciences communities that can recognize, report and aid in countering the grave threat posed by biological weapons development or use. Further, partnership with such organizations increases the likelihood that CTR-provided investments will be sustained in the future.

I highlight these efforts in particular to note new levels of responsiveness in the CTR Program as it expands. We are advancing our approaches to threat reduction in appreciation of the dynamic threat environment. We have pushed the envelope, and we will continue to do so where we believe it will reduce WMD threats.

DOD will also encourage and support—through direct and indirect assistance—states that have already committed to secure and dispose of WMD and reduce or dismantle WMD programs. In Libya, the CTR Program is working now to increase the safety and security of Libya's recently-discovered chemical weapons stockpile, and we are also working to finalize a destruction agreement.

Indeed, even beyond the projects and partnerships mentioned here, we are considering other, novel applications of the CTR Program. One is to transport vulnerable nuclear and radiological materials to more secure locations for storage or reprocessing. The Departments of Defense and Energy collaborate closely in threat reduction, drawing on each department's respective strengths. The Department of Energy is negotiating high-priority transfers of material to more secure locations for storage or reprocessing, and DOD has specific capabilities and training for secure transportation internationally. We are, therefore, working cooperatively to achieve overall U.S. objectives in nuclear and radiological security.

Touching briefly on the future, DOD's CTR program is at a transition. We are now funding roughly as much work outside of the former Soviet Union as we are inside the former Soviet Union. Based on emerging threats, our aperture has widened substantially and we are increasing the flexibility of the program to be successful as a global effort. Developments in Libya and the Middle East this past year exemplify this requirement. We look forward to engaging with you and your congressional colleagues in the future about how to continue this update to the CTR program and increase its effectiveness.

3. Responding to Crises

DOD works to manage WMD risks emanating from hostile, fragile, or failed states and safe havens. Where hostile actors persist in making significant progress toward acquiring WMD, the Department is prepared to undertake or support a full range of actions to stop such capabilities from being fully realized. We will convey to fragile states that proliferation undermines security and stability and work with them to enhance WMD security. We must deny non-state actors the means to manipulate and acquire the tools and resources of state actors and prevent them from achieving territorial freedom of action.

The Department is continuing to develop tailored plans and capabilities to deter specific actors of concern, including those who may be serving as proxies, from employing WMD. DOD will also be prepared to locate, characterize, secure, exploit, and destroy WMD. We are seeing immediate successes in this area with the activation of the Standing Joint Force Headquarters-Elimination (SJFHQ-E). In addition to its unique support to the Combatant Commands, this year the SJFHQ-E participated in major exercises jointly with South Korea, France, and the United Kingdom. We are already seeing how this capability is able to address a range of challenges under varying security and political conditions.

Given the prevalence of coalition operations in contemporary military campaigns, helping allies and partners understand WMD risks to develop effective defenses is an important element of our mutual defense. Such practical security cooperation focused on countering regional WMD threats helps partners resist incentives to acquire WMD in response to changes in the security environment. With this in mind, we have active bilateral CBRN defense partnerships with Japan, South Korea, Israel, France, the United Kingdom, and members of other countries as well as with NATO.

The Department is also prepared to sustain operations and support continuity-of-government efforts following a WMD incident. Forces and operational areas must be able to function with minimal residual limitations resulting from chemical, biological, radiological, or nuclear (CBRN) exposure or contamination. In support of the warfighter, we will build on the successes of the Chemical and Biological Defense Program by continuing to improve the training of CBRN forces and advisors, developing medical and physical countermeasures, and advancing protective equipment and platforms for physical protection and decontamination. In addition, DOD is prepared to support civil authorities with CBRN response capabilities to mitigate the consequences of events in the homeland and abroad, including through the provision of timely technical forensics to enable strategic decision-making. DOD may also lead or assist in the disposal of residual adversary WMD capabilities until such time that a civilian or international entity can assume these responsibilities.

CONCLUSION

We are committed to meeting the Nation's countering WMD requirements while taking into account a shrinking Department of Defense budget. DOD will continue to pursue CWMD activities that span a range of unilateral and multilateral counter-proliferation and non-proliferation efforts, and we will continue to coordinate our efforts within the interagency and with our international partners to prevent and protect against these most dangerous threats. None of the efforts I have described to you today would be possible without the continuing support of Congress. I thank you for your support for our fiscal year 2014 budget request and look forward to our continued partnership.

Senator HAGAN. Thank you, Secretary Creedon.
Director Myers.

STATEMENT OF MR. KENNETH A. MYERS III, DIRECTOR, DEFENSE THREAT REDUCTION AGENCY, DEPARTMENT OF DEFENSE, AND DIRECTOR, U.S. STRATEGIC COMMAND CENTER FOR COMBATING WEAPONS OF MASS DESTRUCTION

Mr. MYERS. Madam Chairwoman, Ranking Member Fischer, members of the subcommittee: It's an honor to be here today. I'm pleased to share with you the work being done to counter the threats of WMD by the DTRA and the SCC WMD.

As a combat support agency, we are available 24 hours a day, 7 days a week, to support the combatant commanders and Military Services in responding to any WMD threat. As a defense agency, we manage a research and development portfolio to develop tools and capabilities needed in a WMD environment. In fact, DTRA provides U.S. Special Operations Command (SOCOM) with the tools they need to address counterproliferation threats.

As a STRATCOM center, we synchronize U.S. efforts to counter WMD, and the complementary SJFHQ-E provides direct operational support for U.S. military task forces in hostile environments. As STRATCOM Commander General Bob Kehler recently noted: "DTRA-SCC is where the country's expertise is. This is the focus point. This is where it all comes together, right here."

The events of the past week have reminded us once again that terrorists are determined to strike at any opportunity. Al Qaeda encourages their mujahedin brothers with degrees in microbiology or chemistry to create poisons and an effective delivery method. Because of our success in limiting access to materials in the former Soviet Union, groups and states seeking WMD have shifted their attention to other geographic areas and potential WMD sources.

This evolution has required a shift in our thinking and strategy and is the reason why we have authorized the expansion of the Nunn-Lugar program and other programs to nearly 80 countries. Today we are confronting potential WMD threats all over the world. We must be prepared for any geopolitical or military event.

Thank you again for the opportunity to be here. I'm happy to take your questions.

[The prepared statement of Mr. Myers follows:]

PREPARED STATEMENT BY MR. KENNETH A. MYERS III

Madam Chairwoman, Ranking Member Fischer, and members of the subcommittee, it is an honor to be here today to share with you the work being done to counter the threats of weapons of mass destruction (WMD) by the Defense Threat Reduction Agency (DTRA) and the U.S. Strategic Command Center for Combating WMD (SCC-WMD).

The threat posed by nuclear, radiological, biological, and chemical weapons is immediate, growing in scope, and evolving in its potential applications. 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.

President Obama has made it clear that countering weapons of mass destruction (CWMD) is a critical national security priority for our Nation. Quite simply, the Agency and Center's focus is to keep WMD out of the hands of terrorists and other enemies by locking down dangerous nuclear and biological materials, destroying legacy weapons, preparing for, and responding to WMD incidents, and developing technologies to prevent, defend against, and counter a WMD attack.

MISSION

Our mission spans the scope of nonproliferation—reducing WMD at their source; counterproliferation—the deterrence, interdiction, and defeat of WMD threats, and consequence management—the minimization of the operational effects of WMD attacks and mitigation of their consequences.

DTRA and the STRATCOM Center, and the companion Standing Joint Force Headquarters for Elimination are a one-stop shop in addressing these threats. If these organizations were compared to a grocery store, not only would we provide access to nearly every kind of food product one could ask for but we have partnerships to deliver what we do not carry in-house. Our store would not only bring in the produce but would also work with the farmers in the field to improve productivity. We would not only bring your groceries to the car but we would also come home with you to help cook the meal. In fact, we would provide our own recipes. Now obviously we are not a grocery store nor do we stock shelves with inventory, but through our partnerships and expertise, we are built lean and flexible to fill very unique and specialized CWMD roles for a wide variety of customers. What is most impactful about these three organizations is not just the depth of our mission but the broad span of services we provide, all of which are necessary for successfully countering WMD. Each of these initiatives, whether large or small in scope add up to create a very strong proactive and reactive shield for our security and that of our allies.

Regardless of the time or day, our building housing DTRA and the SCC is constantly buzzing with activity and with a diverse and remarkable collection of talented workers. As you enter our building and walk through the hallways, you encounter personnel with highly advanced technical degrees and skills related to physics, chemistry, microbiology, and nuclear engineering. They are working right alongside those with expansive experience with program management, logistics, planning, special operations, targeting and military operations. Our operation is often described as unique in this way, and it is true.

Let me give you a simple example of exactly how our agency works. On our Science and Technology (S&T) side, we are developing the technologies necessary to verify arms-control commitments. We must make sure that the equipment we are producing in our research and development efforts fit the needs and the constraints and the conditions under which our inspectors are going to have to operate. It has to be rugged, compact, transportable, easy to use and most of all effective in a variety of diverse and often difficult environmental conditions. Consistent with our one-stop shop mission, we bring everything needed to wherever the mission is to be performed.

On the other side, our operations experts have to be properly trained to make full use of the technology, make repairs, work with foreign governments and personnel, and get the job done under tight timelines. These two parallel processes, S&T and operations, must be able to support each other and the workforce must be dynamic enough to fill both roles.

What binds our mission together are the consequences of the world's most dangerous weapons. The processes to create chemical, biological, radiological, nuclear and high yield explosive (CBRNE) weapons are all different and each represents different challenges in terms of approach, destruction, and impact. As a result, there are over 2,000 people who work for DTRA/SCC–WMD in 11 sites within the United States and 9 sites around the world. In fact, nearly 30 percent of DTRA/SCC's workforce performs work outside of the DC area. While these individuals are specialized, they are focused on one mission, protecting the United States and our allies from weapons of mass destruction.

The truth is that countering and combating weapons of mass destruction has to be performed on a larger scale than just our single institution. No one Federal 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. It requires careful collaboration not only across a variety of U.S. Government agencies but also with our allies and other partner nations abroad. As a result, the design and approach of our agency is intentionally open to collaborative partnerships and outward engagement.

For example, it is not enough to turn back a shipment of WMD materials at an overseas border crossing. The actors' motives and intent need to be dissected and analyzed. The WMD material itself needs to be analyzed so we can better understand its strength, how it was made, and trace it back to its source. The materials at hand must be safely secured and disposed. The DTRA and SCC role in all of this provides the support necessary to do just that.

On any given day, tens to hundreds of DTRA and Center 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.

Our nuclear experts are supporting global nuclear weapons lockdown efforts, helping to protect and ensure surety of our own nuclear weapons, and survivability of U.S. Nuclear Command, Control, and Communications.

Our biologists 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 counter emerging and potentially genetically altered or weaponized infectious diseases and developing new means for protecting our military personnel against biological terrorism.

Our chemical weapons experts are assisting with the safety, security, and cooperative destruction of chemical weapons (CW) in the United States and Russia. They are also assisting with safety and security at Libya's CW storage facility and developing plans to assist them with CW destruction activities. In addition to addressing this urgent need, 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 vehicle-borne improvised explosive devices against structures and other infrastructure.

Our DTRA and Center workforce performs 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 complimentary 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/NNNSA) labs, contractors, Federally Funded Research and Development Centers, University-Associated Research Centers, and academia. We provide and operate 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.

As our STRATCOM Commander General Bob Kehler recently noted while visiting DTRA and the Center, "this campus right here is where the experts are, this is where the country's expertise is. This is the focus point; this is where it all comes together, right here."

STRUCTURE

DTRA was created from a number of other national security entities whose combined history includes the Manhattan Project, the Defense Nuclear Agency, the Defense Special Weapons Agency, and the Chemical and Biological Defense and Nunn-Lugar Cooperative Threat Reduction programs, to name a few.

As a Combat Support Agency we are available 24 hours a day, 7 days a week, to support the combatant commanders and Services in preparing for, preventing, or if necessary, responding to any WMD threat or challenge that they might face whether it be here or abroad. In the laboratory, planning sessions, or on the battlefield, our experts provide or utilize collaborative partnerships to address every CWMD contingency.

As a Defense Agency, one of our prime responsibilities is to perform and to manage a research and development portfolio to develop tools and capabilities that the warfighter will need to address and to operate in a WMD environment, whether that be nuclear or other CWMD detection, chemical and biological protection gear, uniforms, or detectors.

As the STRATCOM Center for Combating Weapons of Mass Destruction, I report to General Bob Kehler, Commander, STRATCOM. Our Center supports the Commander, STRATCOM with the Unified Command Plan responsibility to synchronize the planning for DOD CWMD efforts and advocate for CWMD capabilities.

The Standing Joint Force Headquarters for Elimination was stood up by General Kehler last year to provide direct operational support to on-scene task forces that need CWMD expertise. To be clear, I am not the commander of the Standing Headquarters, but it is commanded by the flag officer that serves as my Deputy Director of the STRATCOM Center collocated in DTRA. The Standing Joint Force Headquarters is intentionally designed to expand our threat reduction activity to non-permissive environments, or one in which we are not permitted a cooperative opportunity to reduce weapons of mass destruction.

DTRA, the SCC and the Standing Joint Force Headquarters all have technically different roles in the counter-WMD mission area but they are located together so we can all leverage the most out of the resources that Congress provides and the capabilities that we develop and deploy together.

To quote General Kehler again, if a joint commander “needs help with an SCC–WMD issue, he turns to Mr. Myers ... and if Mr. Myers can’t help him with his SCC–WMD hat on, he can flip on his other hat and turn to DTRA ... all of the expertise to deal with these problems is here ... and it makes all the sense in the world.”

DTRA performs its programs in response to direction provided by the Office of the Secretary of Defense (OSD), in direct support of each combatant commander on behalf of the Chairman of the Joint Chiefs of Staff and General Kehler as Commander of STRATCOM. As the Director of DTRA, I report through Mr. Andrew Weber, the Assistant Secretary of Defense for Nuclear, Chemical, and Biological Defense Programs, to the Under Secretary of Defense for Acquisition, Technology and Logistics. We also work in partnership with the Assistant Secretary of Defense for Research and Engineering and with the Assistant Secretary of Defense for Global Strategic Affairs in the Office of the Under Secretary of Defense for Policy.

STRATEGIES AND GOALS—LAYERED ATTACK

One of our major strategies is erecting layers of defense between the threats and the American people. It is just common sense to go where the problem begins and attempt to counteract and eliminate these threats as far away from American soil as possible.

NONPROLIFERATION

The most well-known nonproliferation program was created by your former colleagues Senator Richard Lugar and Senator Sam Nunn. The Nunn-Lugar Cooperative Threat Reduction (CTR) Program has been a true success story and has made incredible contributions to U.S. national security in the last 20 years.

The program has now helped to destroy more than 7,616 warheads created for the purpose of hitting targets in the United States. This is chilling when you consider that any one warhead could take out the city the size of Charlotte in one shot. As of the end of February this year, we have destroyed 912 intercontinental ballistic missiles (ICBMs), 197 ICBM mobile launchers, 906 air-launched cruise missiles, and eliminated 33 nuclear powered submarines (SSBN) capable of launching ballistic missiles (SLBMs); eliminated 498 ICBM silos, 155 bombers, 492 SLBM launchers, and 695 SLBMs; sealed 194 nuclear test tunnels and holes; safely and securely transported 607 nuclear weapons train shipments; upgraded 24 nuclear weapons storage sites; and secured 47 Biological Threat Reduction Zonal Diagnostic Laboratories.

This past year, we eliminated 21 SS–24 ICBM rocket motors in Ukraine and destroyed over 791.8 metric tons of Russian nerve agents. We have also secured four bio labs in Ukraine and Georgia, and opened a Biosafety Level 2 laboratory in Georgia to help us with global bio surveillance. This is just scratching the surface of the Nunn-Lugar program’s accomplishments. As President Barack Obama recently stated at a Nunn-Lugar Program 20th anniversary celebration, “missile by missile, warhead by warhead, shell by shell, we’re putting a bygone era behind us.”

The evolution of Nunn-Lugar has been remarkable. We are no longer building large, expensive missile dismantlement facilities or large chemical weapons destruction sites. Missile and submarine elimination projects are now being tracked alongside smaller, yet equally critical biological material projects in sub-Saharan Africa and proliferation prevention projects in Southeast Asia. Because of our success in eliminating access to materials in the former Soviet Union, groups and states seeking WMD have shifted their attention to other geographic areas and potential WMD sources. This evolution has required a shift in our thinking as well and is the reason why we have expanded Nunn-Lugar authority to nearly 80 countries, with close collaboration with our partners at the State Department and the National Nuclear Security Administration.

In most cases, our new partners have no WMD aspirations. But, endemic diseases, man-made or otherwise, are not constrained by geographic or political boundaries. So it is up to us to go to the source. It requires us to form cooperative partnerships to ensure that consequential WMD proliferation does not occur.

For example, DTRA/SCC–WMD is focused on helping African nations secure naturally occurring dangerous pathogens. Deadly African diseases like Ebola, Marburg, and Anthrax that were once used to make biological weapons during the Cold War are being safeguarded, cataloged, and, if needed, destroyed as part of the Coopera-

tive Biological Engagement Program, now the largest activity within the Nunn-Lugar Cooperative Threat Reduction Program. For a relatively small investment, the program is reducing access to biological materials and expanding international partnerships to better counter natural and man-made biological events.

For example, the laboratories I visited in Africa in 2011 had broken windows, rusty locks, meager electrical capabilities, and insecure fencing. Keep in mind that these facilities stored Anthrax, Ebola, Marburg, and Brucellosis. During one of my visits I casually walked into an unlocked room in an unsecure building that had seven unlocked freezers. In those freezers, situated next to countless other diseases, were many vials containing several grams of Anthrax. Just 2 grams of Anthrax killed five Americans in the postal mail attack on the U.S. Senate in 2001. The anthrax that I saw was not weaponized; however, those vials could serve as the foundation for a biological weapon. In fact, during the Cold War, the Soviets reached into Africa to obtain the Anthrax which filled the 300 metric ton fermenters at Stepnogorsk. Through Nunn-Lugar we are working with our partners in Kenya and Uganda to ensure that those vials of Anthrax will not be weaponized and will not fall into the hands of terrorists.

Timing is everything with biodefense. DTRA works closely with the Departments of Health and Human Services, the Centers for Disease Control and the U.S. Department of Agriculture and others to maximize our expertise and relationships within the global health community to improve early warning and detection capabilities and mitigate pandemic disease threats. We are even working on a mobile testing device which would allow for us to diagnose both threat and infectious bio-agents in humans in potentially remote areas. We are also creating partnerships with industry for advanced development and manufacturing of medical countermeasures to counter emerging bio threats and infectious diseases.

COUNTERPROLIFERATION

If our programs and our efforts at the source are unable to stop these WMD threats before they leak out, we help combatant commanders and military Service components to engage the threat on someone else's soil. Detection, interdiction, and if need be, destruction of these weapons and materials are the goal, thus disrupting the supply or smuggling routes and providing our national leadership with knowledge concerning important threat details. Working with our International partners, our goal is to deter, dissuade, and deny those who both produce and attempt to gain access to these materials and drive them out of business.

For example, the Proliferation Prevention Program (PPP) enhances the capacity of partner countries to deter, detect, investigate, and respond to the attempted proliferation of WMD. It provides specialized equipment, training, and facility upgrades for partner nation border security and law enforcement organizations. Training is institutionalized through a train-the-trainer approach and sustained with periodic local and regional WMD Integrated Exercises which enable students to use program skills and equipment within a realistic training environment. The PPP's partners span the Caucasus, Eastern Europe, Central Asia, Southeast Asia, and the Middle East.

One example of the impact of PPP can be seen with the country of Ukraine. During an exercise in 2007, Ukrainian border guard personnel intercepted a vehicle with an unmarked container filled with a suspicious white powder. PPP observers witnessed the border guards opening the container and literally smelling it to determine whether or not the contents were nefarious. Fast forward to today and we have fully institutionalized a "WMD Inspection" course at the State Border Guard Service of Ukraine. DTRA was able to accomplish this by providing appropriate training and training equipment. Furthermore, Ukraine has taken the initiative to offer training to its neighbors as a regional training center. They have hosted Moldovan border guards already and will soon be hosting Armenian Border Guard Forces in addition to the regular training that they provide for their own forces.

Because of our success in interdicting and eliminating weapons at the source, we have literally driven the enemy underground. As a result, our national security leadership and military commanders need non-nuclear capability to strike at Hard and Deeply Buried Targets (HDBT). DTRA works closely with the Defense Intelligence Agency to find these targets and provide Combatant Commanders and Service Components with effective CWMD contingency responses. For example, the U.S. Air Force now owns and can employ a DTRA initiated product—the Massive Ordnance Penetrator Program (MOP). The MOP is a 30,000 pound conventional penetrating weapon designed to provide substantial improvements in accuracy and lethality over current weapons in the inventory to defeat hardened deeply buried targets.

Another aspect of our work is to ensure the complete and successful stewardship of our nuclear weapons stockpile. We have systems in place to guarantee that we have complete control and accounting of our nuclear weapons at all times. In fact, last year we conducted 18 inspections of U.S. nuclear capable units. We make sure every safety system is in place, maintained and in working order, and put the operations, maintenance and security forces through drills and exercises to ensure that everyone knows their job, they know the proper procedures and they know how to react when the situation changes. Our collective goal is to protect, control and serve the Nation with 100 percent assured predictability, reliability and confidence in our nuclear weapons stewardship.

CONSEQUENCE MANAGEMENT

DTRA's roots reach to the early days of the Cold War when it provided technical and operational nuclear weapons effects expertise to the Military Services. This mission continues with additional services for the combatant commands and their ability to respond to WMD threats. DTRA's Technical Reachback capabilities support any CBRNE decisionmaking capability both here and abroad. We give the troops on the front line access to some of the smartest subject matter experts in real time. Last year, we fielded 1,492 Technical Reachback requests.

The Consequence Management Assistance Program (CMAP) has active engagements in the Middle East, South East Asia, East Africa, and Eastern Europe. One recent success story occurred in Jordan where CMAP worked to enhance their capability to respond to incidents involving WMD. This was the first time that representatives from 28 Jordanian civilian and military organizations—including the Jordanian Armed Forces, Civil Defense, Ministries of Water and Irrigation, Religious Affairs, Education, and Trade and Commerce—sat together for the express purpose of revising a national emergency response plan. This engagement produced a more focused response to chemical and biological threats and better coordination among their ministries.

REGIONAL CONTINGENCY TEAMS

In my testimony last year, I shared with the Committee DTRA's work to provide real-time technical assistance to our U.S. Armed Forces in Japan and the Japanese government in dealing with the estimated 9.0 magnitude earthquake that rocked the east coast of Honshu, Japan, causing enormous damage and destruction. The earthquake was followed by a devastating tsunami that resulted in even more damage and tremendous loss of life. As damage reports from the earthquake and tsunami reached the Japanese Government leadership, the Tokyo Electric Power Company was working to prevent a third disaster—nuclear meltdown.

As a close ally, the United States offered its consequence management support and DTRA provided radiological sensor data to produce models of the radiological plume. We provided daily update briefings and video teleconferences and worked to educate our military leaders about possible impacts to the Japanese population and our own troops in the area. In fact, the Japanese Ambassador even commented to me, "We wish we had a DTRA."

Following this and other missions, DTRA began to review how to best utilize their assets and maximize both results and efficiency during fast-paced, real-time events. As a result, we created Regional Contingency Teams (RCTs) for certain national security situations to ensure that when we face a crisis, we have in place the best and most appropriate and complimentary technical, planning, and operations staff from all three of our organizations. Likewise, we set up beforehand whatever necessary equipment and coordination among combatant commands, Joint Staff, other DOD offices, other U.S. Government agencies and even our international partners. This approach enhances our planning and response time and allows for the best, most integrated information to be available across the board. We didn't just alter the stove pipes; in this case we blew them up.

This concept sounds simple but it is often difficult as stove pipes are hard and thick and take considerable effort to break down. This is especially true when you consider the depth and breadth of our mission and the various roles that each organization fulfills. Communication and coordination across mission areas is sometimes difficult to accomplish. Nevertheless, it must be done—and we are making progress—but there is much left to do.

Events in the Levant, North Africa, Northeast Asia, and elsewhere have tested our model and the impact that we have seen is very positive. Our Requests for Information (RFIs) from our customers are up and the information disseminated is more timely, accurate and complete. Our fiscal year 2014 budget request helps us to continue this cross-cutting, collaborative approach.

NORTHEAST ASIA, SYRIA

Within this framework, DTRA is playing a critical role in current U.S. national security issues around the world. Events in North Korea, Syria, and the Middle East are well publicized and our agency is engaged in these matters. While I would prefer to discuss our agency's involvement in these issues during the closed session, I share the member's interest in these issues.

BUDGET

We accept that the overall budget situation will likely remain difficult and that additional pressures are expected to continue. This is significant as DTRA's annual appropriations have remained relatively flat since fiscal year 1999, despite the continuing importance, evolution, and transformation of CWMD mission requirements.

We are working very hard to become more effective and efficient with the resources we have. We are prioritizing. We have shut down a number of offices. We did a complete prioritization of programs and eliminated those we felt could be covered in other ways. We are utilizing technology to reduce the need to travel and attend conferences and other administrative costs.

One of the other ways we have worked to improve the efficiency of our organization is to expand partnerships that enable us to leverage expertise and capabilities from across DOD and other Federal agencies. For example, we coordinate with the Department of Homeland Security on development of nuclear detection and forensics, and piggyback on service technology development, particularly unmanned aerial vehicles as platforms for WMD search detection and interdiction. We also leverage the CDC's global partnerships and technical expertise to implement biological research and capacity building projects that help our international partners increase capacities through improved disease surveillance, detection, diagnosis, and reporting.

Today, DTRA and SCC-WMD remain capable of executing our missions. However, I believe that General Kehler and I speak with one voice when I describe my most serious concern as the direct impact that this continuing fiscal uncertainty is having on our people. Uniformed servicemembers and civilian Federal employees alike have successfully withstood the effects of round-the-world mission accomplishment and hectic operational tempos. They willingly accept the uncertainties and risks which accompany mission performance. But they are anxious about what financial risks do to their families.

Our workforce will cope with the effects of financial uncertainty in the near term. But, like General Kehler, I worry that over time our most experienced professionals and our most promising younger people will vote with their feet to pursue more stable opportunities elsewhere.

FISCAL YEAR 2014 DTRA BUDGET REQUEST OVERVIEW

Our budget request for fiscal year 2014 is \$1.49 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 \$449.3 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, \$1.05 billion. Therefore, the total DTRA resource portfolio is approximately \$2.99 billion. Details and highlights for these requests follow.

Operations and Maintenance Funding

Nearly 85 percent of DTRA O&M funding directly supports the warfighters and national missions as it pays for planning, training, exercises, and other means for collaboration across DOD and the U.S. Government, and with 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 O&M funding would be applied as follows:

- Nonproliferation Activities (\$67.3 million) for arms control activities including the conduct of U.S. Government inspections of foreign facilities, territories, or events; coordination and conduct of the escort of inspection teams for inspections or continuous monitoring activities in the United States 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.

- WMD Combat Support and Operations (\$180.2 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 United States, 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 (\$11.8 million) for DTRA direct support to the SCC–WMD including development of tools; providing strategic and contingency planning, policy, and analytical support; developing interagency relationships; and working closely with STRATCOM partners to establish the means for assessing and exercising capabilities to combat WMD.
- Core Mission Sustainment (\$185.1 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. In recent years, DTRA has increased investment in its Information Technology systems to provide secure and dependable connectivity for global mission execution.

Nunn-Lugar Cooperative Threat Reduction

The request of \$528.5 million for this important program would be used as follows:

- Strategic Offensive Arms Elimination (\$10 million) for elimination of Strategic Offensive Arms in Russia and the storage and elimination in Ukraine of rocket motors from dismantled SS–24 ICBMs. Due to diminishing elimination activities needed for the Russian Federation to meet the New START Treaty requirements, the DOD intends to transition remaining responsibility for elimination activities to the Russian Federation in 2014.
- Chemical Weapons Destruction (\$21.3 million) for technical support to the Russian chemical weapons destruction operations at Shchuch'ye and the Kizner Chemical Weapons Destruction Facilities. Russia began chemical weapons destruction operations at Shchuch'ye in March 2009 and, as of April of this year, has destroyed over 1.6 million munitions and 4014 metric tons of nerve agent. Funding is also provided under this account for technical expertise and resources to support chemical weapons destruction in Libya.
- Global Nuclear Security (\$86.5 million) for improving nuclear material security, including security for nuclear warheads and weapons-usable nuclear material. This program also assists in the secure transport of nuclear warheads and other qualifying nuclear material to dismantlement facilities, secure storage areas, or processing facilities for disposition.
- Cooperative Biological Engagement (\$306.3 million) for combating the threat of state and non-state actors acquiring biological materials and expertise that could be used to develop or deploy biological materials and weapons. This program destroys or secures certain biological agents at their source, and works in partnerships to ensure a secure disease surveillance system. This program works closely with other U.S. Government departments and agencies, international partners, and the private sector.
- Proliferation Prevention (\$73.8 million) to enhance the capability of non-Russian, Former Soviet Union (FSU) states and other partner countries to deter, detect, report, and interdict illicit WMD trafficking across international borders. Beginning in fiscal year 2012, the Proliferation Prevention program began expansion outside of the FSU to Southeast Asia. In fiscal year 2013 and 2014, Proliferation Prevention will continue expansion activities in the Southeast Asia region on a bilateral and regional basis and begin to work with partners in the Middle East.
- Threat Reduction Engagement (\$2.4 million) to develop active and positive relationships between the defense, military, and security establishments of the United States and the states of Eurasia and Central Asia. This program engages military and defense officials in activities that promote regional stability, counterproliferation, and defense reform; build security cooperation with the partner states; and promote exchanges that enhance interoperability with U.S. and North Atlantic Treaty Organization (NATO) forces for multinational operations.

- Other Assessments/Administrative Support (\$28.2 million) to 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 CTR program travel, translator/interpreter support, and other agency support to include support to program personnel assigned to U.S. Embassy offices in partner states.

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.

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 payoff with the need for long-term knowledge and expertise, and is centered upon the following projects: Basic Research, Applied Research, Advanced Research, and System Development and Demonstration. The requested RDT&E funding includes \$45.9 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 2014 request also includes \$175.3 million for WMD Defeat Technologies Applied Research, \$274 million for Proliferation Prevention and Defeat Advanced Research, and \$12.9 for WMD Defeat Capabilities System Development and Demonstration.

Chemical and Biological Defense Program S&T

The Department's CBDP S&T programs support DOD-wide efforts to research, develop, and acquire capabilities for a layered, integrated defense against CBRN agents; better understand potential threats; secure and reduce dangerous materials whenever possible; and prevent potential attacks. Although funding for the CBDP 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 \$449.3 million in fiscal year 2014. The agency also manages funding execution in support of CBDP advanced development and procurement.

CONCLUSION

Madame Chairwoman, in closing my testimony I would like to highlight a recent speech by Deputy Secretary of Defense Ash Carter who spoke at a celebration of the Nunn-Lugar program's 20th anniversary. "Historians should look back at what might have happened, but didn't thanks to Nunn-Lugar. Imagine the alternative if loose nukes from the former Soviet Union had gotten into Bin Laden's hands; into the hands of other terrorists with odious causes; or rogue states ... contemplate all of that and you see the enduring value of Nunn-Lugar."⁵

This analogy is a perfect snap-shot of why what our Agency and Center does is important. What would happen if we didn't do all of the things I have described today? What would happen if we were not funded enough to accomplish our mission? These are serious questions which strike at the heart of our national security challenges. We hope that we will continue to earn the committee's trust and support in meeting these threats and ensuring our security. Thank you, again, for the opportunity to be here today. I would be pleased to respond to your questions.

Senator HAGAN. Thank you.
Now Ms. Harrington.

STATEMENT OF MS. ANNE HARRINGTON, DEPUTY ADMINISTRATOR FOR DEFENSE NUCLEAR NONPROLIFERATION, NATIONAL NUCLEAR SECURITY ADMINISTRATION, DEPARTMENT OF ENERGY

Ms. HARRINGTON. Madam Chairman, Ranking Member Fischer: Thank you for having me here to discuss the President's fiscal year 2014 budget request for the DOE's NNSA defense nuclear nonproliferation account. I am particularly pleased to appear here today with my colleagues from DOD and DTRA. We share a strong commitment to the security of the Nation and to finding ways for our programs to work together to that end.

Earlier this month the President released the 2014 budget and allocated \$2.1 billion for NNSA's nonproliferation, counterterrorism, and emergency response programs. The defense nuclear nonproliferation appropriation account of the fiscal year 2014 budget request has been restructured to include nuclear counterterrorism and incident response programs and the counterterrorism and counterproliferation programs. By drawing these NNSA programs together with the Office of Defense Nuclear Nonproliferation Programs in a single appropriation, we strengthen existing synergies and cooperation among these functions. We already work together very strongly and we see that this is a good way to grow in that direction in the future.

Both the President and members of this committee have shown strong support for NNSA's mission in recent years. With your help and under the President's 4-year goal to remove dangerous nuclear materials and secure them, 10 additional countries are now free of highly enriched uranium and 3 more countries will be de-inventoried of highly enriched uranium by the end of 2013.

But there is still much to be done. I want to stress how vital your continued support of NNSA's nonproliferation programs is to reducing the threat of dangerous nuclear materials.

In today's budget-constrained environment, we have to ensure that we are continuously improving how we do business. NNSA is an organization that is modernizing in every way and we are holding our people, both contractors and Federal employees, accountable. We owe it to the American people to continually review our work and make strategic decisions for the future.

This includes our plutonium disposition strategy. The United States is firmly committed to disposing excess weapons plutonium, but, given the rising costs associated with the MOX project, we must step back and take a thoughtful look at the MOX project and our plutonium disposition options.

I'm sure you have a number of questions. I look forward to the opportunity to talking with you today. I want to thank you for acknowledging the value of our work and for your support in previous years that has helped us accomplish many things that have made the American people safer.

I look forward to working with you to implement the President's budget. I am ready for any questions you have.

[The prepared statement of Ms. Harrington follows:]

PREPARED STATEMENT BY MS. ANNE HARRINGTON

INTRODUCTION

Madam Chairman, Ranking Member Fischer, and distinguished members of the subcommittee, thank you for having me here to discuss the President's fiscal year 2014 budget request for the Department of Energy's National Nuclear Security Administration's (NNSA) Defense Nuclear Nonproliferation appropriation account. The Defense Nuclear Nonproliferation appropriation budget request of \$2.14 billion provides the funding necessary to implement the President's nuclear security priorities. I am particularly pleased to appear today with my colleagues from the Department of Defense and the Defense Threat Reduction Agency. We share a strong commitment to the security of the Nation and to finding ways for our programs to work together to that end.

The Defense Nuclear Nonproliferation appropriation account of the fiscal year 2014 budget request has been restructured to include Nuclear Counterterrorism Incident Response Program (NCTIR) and Counterterrorism and Counterproliferation Programs (CTCP), both of which include activities transferred out of the Weapons Activities appropriation. By drawing these NNSA programs together with the Office of Defense Nuclear Nonproliferation programs in a single appropriation, we strengthen existing synergies and cooperation among these functions. In doing so, we provide priority and emphasis to the NNSA programs that are responsible for implementing the President's nuclear security priorities and the 2010 Nuclear Posture Review (NPR) which "outlines the administration's approach to promoting the President's agenda for reducing nuclear dangers and pursuing the goal of a world without nuclear weapons, while simultaneously advancing broader U.S. security interests." This change in budget structure will present with greater clarity the total funding and level of activity undertaken by the NNSA in this area, which the NPR identifies as the highest priority nuclear threat facing the Nation. At the same time, this realignment ensures that the Weapons Activities appropriation is now more focused on the nuclear weapons stockpile and related activities.

As we look to the future, we see challenges and opportunities across the globe. Over the past 4 years we have seen increased focus, determination and expansion of activities with our international partners. This has been due largely to the momentum created by the Nuclear Security Summit process to meet shared nuclear security goals. Russia, for example, has announced its intention to be a full partner with us, and remains a critical partner in the efforts to secure the most vulnerable nuclear materials and keep them out of the hands of proliferators and terrorists. The Russians are not alone, and dozens of countries have stood alongside President Obama and the United States at two Nuclear Security Summits to show their commitment to our shared cause. The fiscal year 2014 Office of Defense Nuclear Nonproliferation budget request provides \$1.92 billion to harness the international momentum created by the Nuclear Security Summit process and address our most pressing nonproliferation challenges.

One of our most important accomplishments has been to support the President's call for an international effort to secure vulnerable nuclear material across the globe in 4 years. The President's 4-year effort is an unprecedented global undertaking, led by the United States, with significant contributions from dozens of countries around the world. The White House, in close coordination with our interagency and international colleagues, is leading and implementing a comprehensive three-tiered strategy to secure vulnerable material at the individual site level, the national level and the global level. I am pleased to report that NNSA has made important contributions to the U.S. Government's efforts in each of these strategic areas. Since 2009, our efforts to secure plutonium and highly enriched uranium (HEU) around the world have accelerated to make it significantly more difficult to acquire and traffic the materials to make an improvised nuclear device. I am proud to say that we are very close to meeting our goals to remove or dispose of 4,353 kilograms of highly enriched uranium and plutonium in foreign countries by the end of 2013, and equip 229 buildings containing weapons-usable material with state-of-the-art security upgrades, though some challenges remain.

On April 5, 2013, we completed the removal of all HEU from the Czech Republic, making it the 10th country to be completely de-inventoried of HEU in the last 4 years. The NNSA will complete prioritized removal of vulnerable nuclear material from three more countries this year.

The fiscal year 2014 budget request provides \$424.5 million to the Global Threat Reduction Initiative. While this is a decrease in funding compared to years past, this budget reflects the expected successful conclusion of the 4-year effort.

The 4-year effort allowed us to accelerate some of our most important work, but it has been accurately described as “a sprint in the middle of a marathon.” After our 4-year sprint, there will be much left to complete in the areas of the elimination, consolidation and securing of nuclear and radiological materials worldwide. Nuclear and radiological terrorism continues to be a grave threat, nuclear and radiological WMD technology and expertise remain at risk, and materials of concern, such as plutonium, are still being produced. While the challenges are substantial, they are not insurmountable.

GTRI’s fiscal year 2014 budget will address these challenges head-on by funding the removal of an additional 565 kilograms of HEU and Plutonium, the shutdown or conversion of an additional 4 HEU research reactors, and the completion of security upgrades for an additional 105 high-priority nuclear and radiological buildings.

In addition to GTRI’s material security and elimination efforts, the fiscal year 2014 budget provides \$369.6 million for another important element of the President’s nuclear security agenda— the Office of International Material Protection and Cooperation (IMPC). The fiscal year 2014 IMPC budget reflects the completion of a number of major initiatives in several program areas as well as a shift to a sustainability phase with the Russian Federation.

The fiscal year 2014 budget funds comprehensive MPC&A upgrades at 8 more buildings in Russia that store and process weapons-usable nuclear material, converts 0.8 Metric Tons of HEU to LEU and continues engagement with China, India, and other countries on MPC&A best practices. The fiscal year 2014 IMPC budget will also provide \$140 million to the Second Line of Defense program to implement the conclusions of the strategic review briefed to the Global Nuclear Detection Architecture (GNDA) interagency working group, including supporting fixed radiation detection at 25 sites in 8 countries, focusing more on mobile detection technologies, and on strengthening the GNDA.

In addition to physical security and material detection, the fiscal year 2014 budget provides \$141.7 million to the Office of Nonproliferation and International Security (NIS). The decrease from the fiscal year 2013 budget reflects a reduction in HEU transparency activities as the U.S.-Russian HEU Purchase Agreement nears completion. The fiscal year 2014 request funds NIS efforts to safeguard nuclear material and facilities, control illicit trafficking of nuclear WMD-related technology and expertise, verify compliance with international arms control and nonproliferation treaties, and develop and implement policy to reduce nuclear dangers.

A key element of our nuclear security and nonproliferation strategy is the development of capabilities to monitor nuclear treaties, weapons development activities, and detonations worldwide. The fiscal year 2014 budget provides \$389 million to the Office of Defense Nuclear Nonproliferation Research and Development to address these core goals including producing nuclear detection satellite payloads.

We will continue to pursue a multi-layered approach to protect and account for material at its source; remove, down-blend or eliminate material when possible, detect, deter, and reduce the risk of additional states acquiring nuclear weapons; and support the development of new technologies to detect nuclear trafficking and proliferation, as well as verify arms control treaties.

We owe it to the American people to continually reevaluate our work and make strategic decisions for the future. The fiscal year 2014 budget request takes a thoughtful look at the Mixed Oxide (MOX) Fuel Fabrication Facility project and our plutonium disposition options. The United States remains committed to disposing of excess plutonium, to working in partnership with the Russian Federation in our parallel plutonium disposition efforts under the Plutonium Management and Disposition Agreement, and to engaging with the International Atomic Energy Agency (IAEA) to verify the disposition. The U.S. plan to dispose of surplus weapons-grade plutonium by irradiating it as MOX fuel has proven more costly to construct and operate than anticipated. Considering these unanticipated cost increases and the current budget environment, the administration has begun assessing alternative plutonium disposition strategies and identifying options for fiscal year 2014 and the out-years. Naturally, this assessment of technologies will also include the Mixed Oxide approach. During the assessment period, the Department will slow down the MOX project and will actively engage key program partners and stakeholders as the assessment of alternative plutonium disposition strategies is developed. We believe the plutonium disposition assessment will ensure that we are able to follow-through on our mission in the decades to come.

NUCLEAR COUNTERTERRORISM INCIDENT RESPONSE

This year, the request for NCTIR will support a strategy focused on reducing nuclear dangers through integration of its subprograms: Emergency Management,

Emergency Response, Forensics and International activities supported by training and operations.

In fiscal year 2014, the program will invest in unattended sensing capabilities for the Nuclear Emergency Support Team, maintain training of the Consequence Management Home Team, sustain stabilization cities, complete improvements to U12P-tunnel, address and sustain emergency management requirements, maintain the Emergency Communications Network, and continue supporting international partners. The NCTIR program will continue to maintain essential components of the Nation's capability to respond to and manage the consequences of nuclear incidents domestically and internationally, and continue to conduct programs to train and equip response organizations on the technical aspects of nuclear counterterrorism.

COUNTERTERRORISM AND COUNTERPROLIFERATION PROGRAMS

The aforementioned budget realignment includes the CTCP program office, which we stood up last year. The funding request for CTCP includes the transfer of the discontinued National Security Applications funding into a consolidated and substantially revised budget line to support the highest priority counterterrorism and counterproliferation technical work, including the study of Improvised Nuclear Devices and other non-stockpile nuclear device threats. This increased funding will support unique nuclear device-related technical contributions derived from NNSA's core nuclear science and technology expertise. This activity supports interagency policy execution, DOD and Intelligence Community customers, and DOE's own emergency response operations.

CONCLUSION

Our continued focus on nonproliferation, nuclear security, and nuclear counterterrorism efforts is vital. The threat of nuclear terrorism and WMD proliferation remains. Detonation of a nuclear device anywhere in the world could lead to significant loss of life, and extraordinary economic, political, and psychological consequences. In these challenging budget times, we must not lose sight of the critical role played by these programs and the protections they provide by reducing the risk of nuclear terrorism and WMD proliferation.

Senator HAGAN. Thank you.

I do expect some other Senators to come in, so right now we will take about 6-minute questions for the Senators.

Secretary Creedon, I wanted to talk about the CTR umbrella agreement. I know that the United States is negotiating a new umbrella agreement with Russia on the continuing CTR activities there. Can you please explain the high-level goals and objectives you hope to achieve in a new agreement?

Ms. CREEDON. Thank you, Senator. When we look back over the 20 years of success of the CTR program, it is really striking how much we have accomplished with the Russian Government. When you look at the scorecard, which has been the longstanding metric for a lot of the accomplishments, this program has not only substantially reduced the number of warheads and delivery systems associated with the former Soviet Union, but it also was instrumental in removing entire countries from being weapons states and helping them to completely denuclearize.

This relationship has been able to survive all of the ups and downs of the broader U.S.-Russia relationship over the course of the last 20 years. So at the very highest levels, it is important that we maintain the ability to work with Russia on these topics of major concern to both countries.

How we actually will do that going forward in the future is still not resolved, as the umbrella negotiations are going on pretty much even as we speak today in Geneva. But it's maintaining that ability to work together. We're going to change, obviously, how we work. Many of the programs at DOD were on a natural glide path for

completion over the course of the next several years. We want to make sure that as we transition out of these programs that Russia is going to be able to sustain them, that they have the budget-making and funding capability to sustain these programs. But we want to also figure out ways that as we look for changes in this relationship that we can work together on certain things. So maybe there are opportunities in the future where we can take our combined knowledge and share it with other countries. It's that sort of a strategic relationship that we hope in the future we'll be able to sustain.

I think practically a lot of the work in Russia is really coming to completion, the actual work is probably less important at this point, although I don't want ever to underplay or undersell it. But it's that strategic relationship that's important in the future.

Senator HAGAN. Thank you.

In 2012 you made two determinations with respect to using CTR funding in the Middle East and Syria. Can you explain again what was accomplished in this past year and your long-term objectives for these activities?

Ms. CREEDON. As is very obvious, this is a region of significant turmoil, not the least of which is in the last 18 months or so with Syria. So one of the main things that we've done with this new authority is to work with the Jordanians in developing a substantial border program, as I mentioned in my statement, that will provide border security capability to the Jordanians for over 250 kilometers of the shared border with Syria, to help prevent the leakage or the proliferation, primarily of chemical weapons, but also of technology. One of the fears is that something along the line may be stolen or someone may try to get it out of the country.

We're also working with several of the other border countries, and we've also done a fair amount of work with the Jordanian military, helping them to also be able to respond in some sort of a chemical environment.

Senator HAGAN. Thank you.

Ms. Harrington, in the fiscal year 2014 budget it proposes to take, as I said earlier, a strategy pause in the MOX fuel program after the large cost growth in the overall effort. Can you explain why DOE has taken this strategic pause?

Ms. HARRINGTON. Thank you, Madam Chairman. Yes, we are developing a plan to assess the options for moving forward on plutonium disposition, emphasizing the fact that we remain at the highest levels in the administration fully committed to fulfilling our commitments under the plutonium management disposition agreement and to involving the International Atomic Energy Agency in verifying the disposition of those materials.

So those two principles remain steadfast. But in the face of rising costs and schedule slips and the prospect of rebaselined projected costs near \$8 billion, we thought it was prudent and responsible to the taxpayers whose funds actually support this program to take a step back to ensure that we are carrying out this commitment in the smartest possible way.

Senator HAGAN. I'm sure we'll have more questions. My time has run out. I will go to Senator Fischer.

Senator FISCHER. Thank you, Madam Chairman.

I'd like to continue with the CTR, if I may. Secretary Creedon or Director Myers, there has been a large reduction in the warheads within the former Soviet Union and I believe that's a very great accomplishment. In fact, I believe that the work that all of you do is vital and very important. I want to thank you for the service that you provide to our country and to the citizens of our country in this very important work.

When you're looking at moving on—you said work is nearing completion. How do you judge when work is complete? What are some of the benchmarks that you use?

Ms. CREEDON. I'll take two of those, just for example, and then ask Ken to do some additional ones. One of the ones that my office has been particularly focused on is understanding when we've completed or are nearing completion of the elimination of the strategic offensive delivery systems. So these would be, for instance, the intercontinental ballistic missiles (ICBM), the various ICBMs that were from the Soviet era. We are for the most part completed. We've almost completed all of that work. So that is an example of we've gotten rid of all the legacy systems, we're moving out, we've done all that work, and that's almost finished.

The other one of these big examples is also the chemical weapons destruction work. When we started off, the United States and Russia had the largest chemical weapons stockpiles. In the work, primarily at Shucha, the Russians have built one facility and the United States built another facility. This facility is working through the bulk of the Russian stockpile. There are several other facilities, but again this is one where they are about, I want to say, 70 percent complete of the stockpile that's out there. So this is another example of significant success and significant progress.

Senator FISCHER. How do you prioritize in which area you begin? Do you prioritize the nuclear over the chemical or the biological? How do you do that?

Ms. CREEDON. Are you speaking like historically within Russia or looking forward?

Senator FISCHER. Well, both.

Ms. CREEDON. Both.

Senator FISCHER. Let's look at both.

Ms. CREEDON. Historically we really focused initially on the nuclear side because that was the concern that Senator Nunn and Senator Lugar had when they kicked off these programs. As that relationship was built, we were able to venture into both the biological and the chemical weapons side as well. So it was a little bit of discovery and then building cooperation and more discovery and then more opportunities presented themselves.

As we look to the future, we want to maintain this threat focus. So we look out and see what are the threats. So it could be a specific threat from a specific country in a specific material, or it could be one that we just think is maybe underaddressed, and the biological threat fits in that one at the moment.

Senator FISCHER. Thank you.

Mr. MYERS. Senator, let me add a couple of points. First, one of the other specific areas that we cooperate with the Russians on is on nuclear warhead security, helping them transport nuclear warheads for dismantlement and ensuring that their storage facilities

are safe and secure. One of the ways that that was measured was in the Bratislava agreement which set up the cooperation. We were basically able to establish metrics and we were able to really judge how far along in that process we are.

Secretary Creedon also mentioned our work on chemical demilitarization. In addition to Shucha, we provide some technical support to Kisner and other locations and facilities. Than obviously we watch how quickly and how they move forward through the reports to the Organization for the Prohibition of Chemical Weapons as to progress they make moving forward.

The third category I would point out is there has also been efforts when the United States and Russia have worked together in third countries. That's also been a very important building block for the strategic relationship, specifically in places like Kazakhstan and elsewhere. Obviously, in those types of situations we're able to measure our effectiveness together and with equal responsibilities, either in-kind contributions or in monetary contributions.

I would also just echo what Secretary Creedon mentioned. As we move forward with these efforts in new countries, we are focused primarily on the threat, but we're also coordinating very closely with the combatant commands and working closely with them in terms of opportunities, in terms of building relationships, and the like. Obviously, the combatant commands also have an opportunity to make recommendations or make requests, and we'll work with them as we expand the program to new areas and new regions.

Senator FISCHER. Countries have to invite the United States in to do this work, correct? That's been the case with Russia, and you say that there has been a good working relationship and it's continued as you move on to other nations, correct?

Mr. MYERS. Just to be clear, Senator, yes, the relationship with Russia is very professional. The relationship where we work together in third countries has been very professional. But they have not been partners in all of the countries we work in.

Senator FISCHER. Do you see this partnership being available in countries such as Syria?

Mr. MYERS. It's unclear. We'll have to look forward to continuing the conversations and discussions and see what the opportunities provide us in the future.

Senator FISCHER. Thank you.

Senator HAGAN. Senator Graham.

Senator GRAHAM. Thank you, Madam Chairman. I'll try to do this in 6 minutes.

Ms. Harrington, we'll have a discussion here in a moment, but I want to let the chairman and the ranking member know about my concern about the MOX program. Back in the 1990s, under the Clinton administration, South Carolina agreed to accept 34 metric tons of plutonium, weapons-grade plutonium, in excess of our defense needs. There was an agreement negotiated between the Clinton administration and the Russian Government where we would take 34 metric tons of plutonium in excess of our defense needs, weapons material, and the Russians would take 34 metric tons and we would dispose of it.

We've been dealing with this issue for over a decade now, well over a decade, and the Obama administration comes along and

they actually begin to build the MOX facility. I'm sure you're aware of it because of Duke Power, but in case people are not, there's a technology that's been tested and it works, where you can take weapons-grade plutonium, blend it down, and make commercial-grade fuel out of it. So, you're taking a sword and making it into a plowshare. The MOX facility at Savannah River Site is somewhere toward halfway being completed.

Last year, the statute that Senator Thurmond wrote when he was in the Senate and I was in the House, because there was so much pushback in South Carolina about accepting this plutonium, the fear was we're going to hold this stuff and have no way forward—well, guess what, Yucca Mountain shut down. So MOX gives you a way forward. It becomes commercial-grade fuel.

But the statute we wrote back in the early part of this century, I believe 2000, required a \$100 million fine to DOE if they didn't stay on track. Last year they were off track in terms of the timetable, but I sat down with the Obama administration and said: "Listen, we don't want the \$100 million; we want the MOX facility." So we extended the time period for 2 years.

I can assure you, I would not have done that if I had known this year in the President's budget they would be suspending the MOX program for a study. We have studied this thing to death. It is now time to get on and getting it built.

Ms. HARRINGTON, we do have an agreement with the Russians regarding the 34 metric tons, is that correct?

Ms. HARRINGTON. Yes, sir, that's correct.

Senator GRAHAM. In 2010 the agreement was amended to say that the disposition path would be MOX, is that correct?

Ms. HARRINGTON. That is correct.

Senator GRAHAM. We rejected vitrification because if you're going to vitrify all of this stuff we're not going to store it at Savannah River Site. We're not a storage site.

So if we do something other than MOX, how can we meet our obligations under the treaty?

Ms. HARRINGTON. First, I'd like to clarify that in this assessment pause that we have included in the budget, MOX remains clearly on the table. It is not that we are disregarding MOX as a viable option.

Senator GRAHAM. Ms. Harrington, I don't mean to be rude. You're a very smart lady. It's not on the table. It's the pathway forward. It's not subject to debate. I wouldn't have done anything I did last year if I thought there was one chance in a million that we'd be debating a year later whether or not MOX is the way to go. I don't want the \$100 million. I want to get this stuff off the table in America and particularly in Russia, given the times in which we live in.

So what I would suggest to you is that the \$2 billion overrun concerns me, too. I met with the Deputy Secretary of Energy, and here's what I'm willing to do. I'm willing to sit down with DOE and the contractor to try to get the cost down below \$8 billion.

Now, at Savannah River Site the pit disassembly facility was going to be a third separate building. This is where you take the pit out of the warhead and that's what's blended down into MOX

fuel. It's the plutonium bullet. We were able to avoid building that facility and save \$2 billion right there.

Over the past decade, Savannah River Site has been very forward-leaning when it comes to saving money in a responsible manner. We have 54 tanks full of Cold War residual material, high-level toxic waste, and we agreed back in 2002, I believe it was, to leave a portion of the waste in the bottom of the tank, in the heel of the tank, rather than scraping it all out, and that saved \$16 billion. We thought we could close the tanks up with some high-level waste that would be treated, and that saved \$16 billion.

So, Ms. Harrington, we in South Carolina and Georgia have tried to be good stewards of taxpayers' money, and I'm just here to tell you that I will work with the administration—I talked with Denis McDonough about this last night—to get the cost down. But I will not entertain for 1 minute a disposition plan other than MOX. We're halfway through. There is no other way to do it. We have an agreement with the Russians and now is not the time to break that agreement, given the world in which we live in. When it comes to studying another way to do it, count me out.

Have a good day.

Ms. HARRINGTON. Thank you, sir.

Senator HAGAN. All right.

Mr. Myers, can you please give us an unclassified summary now of the role of the SCC WMD to support planning for any contingencies with the chemical weapons in Syria?

Mr. MYERS. Thank you, Madam Chairman. Yes. The SCC, DTRA, and the SJFHQ-E, working together as an integrated team, are working on planning across DOD. We are playing a key role in multiple planning initiatives. We are reaching out across DOD to identify pockets of chemical weapons expertise, capabilities, and equipment.

We have developed internally an entity called the Regional Contingency Team to bring the three organizations together in an effective and efficient manner, and together we are synchronizing planning efforts across the combatant commands, identifying and applying specialized WMD knowledge and expertise to the challenges at hand. We're looking to mitigate the gaps that might currently exist.

How that planning might be applied is obviously a decision for our leadership and for the President. But that's the best unclassified answer I can give you. I'm happy to go into more detail in closed session.

Senator HAGAN. Great.

Secretary Creedon, with the CTR program moving to countries outside Russia and the former Soviet Union, we understand you have developed a strategic approach or guidance for prioritizing what activities the CTR program will undertake. Please explain this strategic approach and what metrics you will use to assess the success of future programs?

Ms. CREEDON. Thank you, Senator. The new CTR strategic guidance has just been issued, and I should also mention we're also working on a broader guidance document that would be more largely for WMD. The combination of these two should help DOD focus on the threats as they emerge to prevent the acquisition, to prevent

the transition of technologies, and if all that fails, to be able to interdict. It's some of what I mentioned in my opening statement.

But mostly we want to be able to position DOD to be responsive to all of the various national security objectives and threats. We want to make sure that we've integrated all of the tools within WMD to bring to this program. We want to make sure that as we go forward that we are good stewards of the taxpayers' money, so that DOD really focuses on what DOD does best and works in collaboration with our international and interagency partners to do things that they can do. The transportation determination in our partnership with DOE is an example of one of those things.

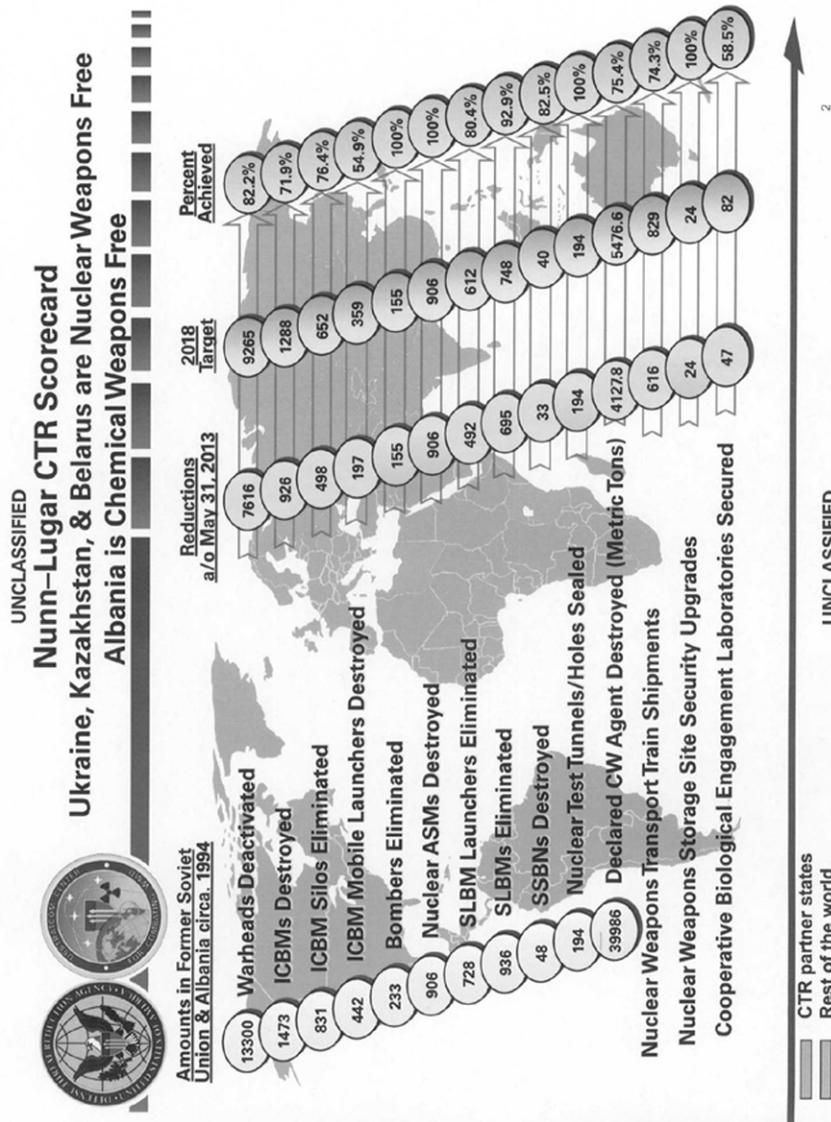
The other thing that we are going to continue to focus to the extent that we are able to do so in a cooperative environment is dismantle and destroy where we can. We want to make sure that what's out there is also accounted for and secure. Then we want to also expand our capabilities to prevent and detect. So understanding when something is missing, detection of when it's in transit, figuring out how to interdict it.

All of these are the construct in which we'll work with the CTR program going forward.

Senator HAGAN. Mr. Myers, is this your chart?

Mr. MYERS. Yes.

[The chart referred to follows:]



Senator HAGAN. On the second page, can you just go over this chart with me? I love charts, by the way.

Mr. MYERS. Madam Chairwoman, you have me at a disadvantage. I don't have that chart.

Senator HAGAN. Oh, you don't have the chart.

Mr. MYERS. But I probably have it memorized, if you give me a hint.

Senator HAGAN. Why don't we give you a copy of it.

Mr. MYERS. That would be great. Thank you.

Senator HAGAN. Since you have the chart too, right? [Pause.]

Then what I really want to ask you—if you can give him the second one, too.

The way I read this, you're showing the reductions as of 2013, the target in 2017, and the percent achieved.

Mr. MYERS. Yes, Senator.

Senator HAGAN. Then did you get the next one, too?

Mr. MYERS. Yes, Senator, I did.

Senator HAGAN. The one, "Nonproliferation, Counterproliferation, and Consequence Management"?

Mr. MYERS. Yes, Senator.

Senator HAGAN. That's the one I need, where you talk about best practices and best of breed or behavioral hallmarks. Explain best of breed to me?

Mr. MYERS. Best of breed—DTRA does not have a laboratory. We do not have a specific relationship with any one entity, which leaves us with the flexibility to search high and wide for the best technology and the best performers to confront specific challenges, whether that be in the nuclear, chemical, or biological arena, whether that be in the nonproliferation, counterproliferation, or consequence management.

So when we say best in breed, we have the opportunity to reach across the entire U.S. Government, academia, as well as the private sector here in the United States. We utilize that flexibility to the maximum extent possible, because many of the challenges that we're dealing with are obviously very difficult and very complicated. Very often we have to build partnerships, build partnerships between different entities in different sectors of our government and in the private sector.

We do that, and the nonproliferation, counterproliferation, and consequence management is really the scope, the breadth, and depth of our mission area.

Senator HAGAN. Consequence management is defined from your perspective as? Explain that section?

Mr. MYERS. Nonproliferation, let me start there, I would argue that that is when we're preventing the proliferation of weapons, not allowing them to leak or to move forward. Counterproliferation I would suggest is defeating those weapons or materials should they proliferate from their source. Consequence management obviously is the worst case scenario, in which we are responding to a WMD event or accident or incident.

Senator HAGAN. Thank you.

Senator Fischer.

Senator FISCHER. If I could ask all of you this question. The Government Accountability Office has reviewed a number of your programs and often recommended a comprehensive review of structure and scope to better target initiatives and prevent overlap. Can you describe what measures are in place to prevent that duplication across the proliferation prevention programs? Mr. Myers, let's begin with you.

Mr. MYERS. Senator, I would tell you that we work very hard with our partners at NNSA and at the Department of State (DOS) to ensure that we do not have overlap and duplication. In fact, the three of us meet on a regular basis. The employees of the organizations meet almost on a daily basis and communicate on an hourly

basis to ensure that we do not duplicate, to ensure that we do not overlap.

The recommendations that have been made in the past in terms of implementation, especially at the DTRA, have been adopted and we have moved forward with them.

Senator FISCHER. Could you give me an example of one?

Mr. MYERS. Yes, I'll give you a good example. In one case we had cost overruns in some of the cooperative projects that we were doing in Russia, and they made a number of different recommendations in terms of meeting on a regular, semi-annual basis to ensure that both the United States and the Russian side remained on the very same page, with the same goals, the same metrics in mind to make sure. It was a very commonsensical recommendation that we concurred with and have been implementing ever since, and it has proven very effective in terms of identifying potential differences of opinion long before they become an issue for programmatic purposes.

Senator FISCHER. Thank you.

Madam Secretary, do you have anything to add to that?

Ms. CREEDON. Just very briefly. Not only do we all meet with a pretty high degree of frequency, but we also bring in our DOS partner as well, so that we understand what the overarching U.S. Government approach is.

The other thing is, as you might imagine, this is a very active White House in this field as well. So we have a lot of meetings with the White House, with the various interagency teams, to tackle various problems so that we make sure that we're all coordinated in our various approaches. Then amongst the DOD and DOE, we also pretty carefully decide who's going to do what and who's going to focus on something. So whereas DOE focuses on nuclear materials, DOD will focus on the delivery systems. DOD focuses on biological and chemical, DOE doesn't do that.

Senator FISCHER. You mentioned you work with the DOS. Do you also work with your combatant commands?

Ms. CREEDON. We work very closely with our combatant commands, particularly on the planning side, and that was what Mr. Myers was talking about. DTRA provides a lot of the technical support to the combatant commands to do the planning and the policy role is to work with the combatant commands as they develop those plans. So there's a good relationship. We get the commands coming and going. DTRA helps them build the plans and we help review the plans.

Senator FISCHER. If you look at a timeline, I would guess that it's the combatant commands that possibly come up with a nation that you should be looking at partnering with? Or how does that work? Who finds this?

Mr. MYERS. Senator, much of what we work on is focused on where the threat is in terms of denying that, those threats from coming to fruition. But we work hand-in-glove with the combatant commands. DTRA and the SCC have a physical presence in each of the commands to facilitate communication and the discussion back and forth.

So I would suggest to you that as we do the planning, as we provide the subject matter expertise to the combatant commands and

share with them where we believe the threats are, why we believe we should move in one direction or another, it really does become a team effort, that we then move forward and obviously bring to Congress for authorization and appropriation.

Senator FISCHER. Ms. Harrington?

Ms. HARRINGTON. Both Mr. Myers and Ms. Creedon have talked about this coordination mechanism. In fact, we meet next week. It is called the bridge meeting because it bridges among us. It is a standing group. It meets typically on a quarterly basis. We have some standing working groups of our staffs underneath it, other ad hoc groups. Sometimes they look at exactly the question you asked, which is, which countries are ripe for engagement, where must we think creatively about how to engage.

So we task those sorts of things to our staffs. Next week we will look specifically at what the impacts of the 2014 budget might have on our ability to collaborate and cooperate and really have good synergy.

Another issue that's already come up today is the transportation process that DOD is going through. One of the reasons we launched that is because we discovered and were able to discuss in this mechanism the fact that we ended up on a removal from a country using the U.S. Transportation Command assets, but not having a way to actually coordinate that directly with the CTR program because the mechanism wasn't in place.

So we figured out that it actually costs the U.S. Government double, because it wasn't in place, what it would have cost had it been in place. So we just decided, okay, let's get this finished, let's set this up so that in the future we have the flexibility and the cost effectiveness to be able to do this in the most efficient way.

So I think those are just a couple more examples of why this interaction among us, including among our research and development groups and at other levels, is so valuable, not only in terms of program implementation, but in terms of budget efficiency.

Senator FISCHER. On your core groups that meet, does that stay the same group all the time or does it vary depending on what nation the United States may be in at the time?

Mr. MYERS. We obviously will augment the working groups with regional expertise or specific subject matter expertise if it's needed.

Senator FISCHER. Where does the expertise come from?

Mr. MYERS. A little bit from all of us, quite honest with you. Obviously, Secretary Creedon's colleagues in the Office of the Secretary of Defense-Policy, our colleagues at NNSA, as well as from the DOS, their country desks, their regional bureaus, and obviously the technical support comes from all three of us as well, and sometimes from outside our three organizations and the DOS.

Senator FISCHER. Thank you very much.

Ms. CREEDON. Just to add there, not only from Policy; we pull in all of our regional offices, and we also then can tap into the Joint Staff as well and so bring in their expertise.

Ms. HARRINGTON. We also have staffs at a limited number of embassies overseas in critical countries. So both DOE and DOD work with DOS and work through the embassies to also engage that network in our work.

Senator FISCHER. Thank you.

Senator HAGAN. I have one more question I wanted to ask in the open forum and certainly Senator Fischer can, too. I wanted to ask Ms. Harrington, last year I asked a similar question and I wanted to follow up on it this year. It pertains to the production of the medical isotope molybdenum-99 using low enriched uranium and converting Russian reactors that produce it from highly enriched to low enriched uranium. What is the status of that work?

Ms. HARRINGTON. Thank you, Senator. The minimization of the use of highly enriched uranium for civilian purposes is one of our high target programs, because that is where a good deal of the highly enriched uranium lies across the world.

In Russia we are working on two tracks. One is to convert their research reactors in general to low enriched uranium. We have completed six studies in that area. Two reactors are ready to go forward. The Russians have made a public statement that they intend to complete the first conversion by the time of the 2014 nuclear security summit. So that's a good step in the right direction. The second reactor should follow soon after that, and hopefully more after. The Russians have made significant public statements to the effect that they will underwrite a significant portion of the cost of those conversions and shutdowns.

On the moly-99 conversion, we also are working with them on that, but in a somewhat different venue. The Nuclear Energy Agency (NEA), which is headquartered in Paris, has a committee that looks specifically at the isotope production worldwide. Through that committee, we are developing a global strategy for full-cost recovery production of low-enriched uranium-based moly-99.

As you may know, we've already made significant progress with our European partners moving in that direction. South Africa really was the first major step in that direction. Russia is moving in that direction and we will continue to push on them both bilaterally and through the NEA. That is an important goal for us.

We have worked within the administration, I think, to do some fairly creative things that we're holding out as models to other countries. For example, the Department of Veterans Affairs, Medicare, government programs that deliver medical services and use this isotope in those medical services can give preference to low-enriched uranium-based moly-99. This can do a lot in terms of encouraging the marketplace to move in that direction.

So those are things that indeed are very helpful. We also are working with national regulatory agencies like our Federal Food and Drug Administration to license the low-enriched uranium-produced moly-99 so it can be used in more countries.

But that's a long answer and it's not totally specific to Russia, but it's a complicated, more global issue because ensuring a consistent supply of this is absolutely critical.

Senator HAGAN. Thank you.

Other questions?

Senator FISCHER. Madam Chair, I yield back my time. Thank you.

Senator HAGAN. What I'd like to do now is we will adjourn this open session and we will go over to the Capitol to the closed session. Thank you. We are adjourned.

[Questions for the record with answers supplied follow:]

QUESTIONS SUBMITTED BY SENATOR JAMES M. INHOFE

NEW 4-YEAR NUCLEAR SECURITY INITIATIVE

1. Senator INHOFE. Ms. Harrington, in April 2009 President Obama announced a new international initiative to secure all vulnerable nuclear material worldwide within 4 years. However, the administration appears to have moved the goal posts for the initiative, and adjusted its scope to focus on only securing the most vulnerable nuclear materials. What are the criteria for determining the most vulnerable materials, and can they specify how the original scope of work has been changed and what countries and facilities are no longer encompassed by the 4-year initiative?

Ms. HARRINGTON. The National Nuclear Security Administration's (NNSA) goal under the 4-year effort is to remove or dispose of a cumulative total of 4,353 kilograms of vulnerable nuclear material (highly-enriched uranium (HEU) and plutonium) by December 31, 2013, and this goal has not changed. The criteria that determines the highest priority work for securing vulnerable nuclear material includes the type of material (HEU, Pu, different radiological sources, et cetera), the form of the material (metal vs. alloys vs. oxides, et cetera), the quantity of the material, and a number of other factors that can be expanded upon in a classified briefing.

As of May 2013, NNSA's Global Threat Reduction Initiative (GTRI) has removed and/or confirmed the disposition of 3,641 kilograms of HEU and plutonium. GTRI must remove or confirm the disposition of another 712 kilograms of HEU and/or plutonium by the end of 2013 to meet this goal and we are currently on track to achieve this metric. In addition, over the past 4 years GTRI has removed all HEU and plutonium from 10 countries for a cumulative total of 23 countries deinventoried of these dangerous materials.

From the perspective of security upgrades to buildings containing weapons usable nuclear material, that aspect of the 4-year plan will be complete once 229 buildings are upgraded. All of the original 229 buildings identified are still part of the plan for upgrades. To date, we have completed security upgrades at 218 of the 229 buildings. The remaining 11 buildings are located at a single large nuclear site in Russia and we are working with our Russian counterparts to complete those upgrades on schedule.

Four years of accelerated effort helped NNSA make a significant contribution to global security, but it is accurately described as "a sprint in the middle of a marathon." Significant stockpiles of HEU still exist in too many places, and global inventories of plutonium are steadily rising. NNSA will continue to work with international partners to eliminate additional stocks of HEU and plutonium after the completion of the 4-year effort.

2. Senator INHOFE. Ms. Harrington, the Government Accountability Office (GAO) reported in December 2010 that a comprehensive strategy for the initiative did not exist and it raised many questions on the scope, timeframe, costs, and challenges associated with the initiative. The GAO recommended that the administration develop a comprehensive plan for implementing the initiative identifying the scope of facilities, U.S. programs responsible for addressing each location, and estimated timeframes and costs to address each site. To your knowledge, has the administration made any effort to develop such a comprehensive plan, and why not, if it hasn't?

Ms. HARRINGTON. Yes, the administration has developed a comprehensive classified U.S. Government strategy to lock down nuclear materials that identifies and prioritizes facilities and other nuclear security goals and allocates U.S. programs for addressing facilities, national capabilities, and the global nuclear security architecture. We routinely participate in interagency meetings led by the National Security Staff to discuss the status of NNSA's efforts that support the comprehensive strategy and ensure we remain coordinated on implementing a comprehensive plan. If you require additional information, NNSA will brief appropriately cleared staff in a classified setting.

3. Senator INHOFE. Ms. Harrington, many of the programs involved in working with other countries to secure nuclear materials have been in place and working internationally for many years, including the NNSA's nuclear material protection, control, and accounting (MPC&A) program and the GTRI. How much more work do these programs have to do, what are their key priorities, and how much longer do they need to achieve their goals?

Ms. HARRINGTON. The GTRI program has identified 5,350 kilograms of HEU and plutonium that needs to be removed or dispositioned by the end of 2019, which

leaves about 1,000 kilograms to remove after the 4-year plan ends in December 2013. GTRI is also focused on the conversion of research reactors and isotope production facilities from HEU to low enriched uranium (LEU). To date, GTRI has successfully converted or verified the shutdown of 88 of the 200 HEU fuel research reactors and isotope production facilities.

Additionally, GTRI estimates that there are more than 13,000 civilian buildings (70,000 devices) worldwide in over 100 countries that maintain high activity radiological sources of concern, with 8,500 in the United States and in other-than-high-income countries. GTRI and the interagency have identified the five most prevalent isotopes of concern as Cobalt-60, Cesium-137, Americium-241, Iridium-192, and Strontium-90. While the quantity of material sufficient to create a significant radiological dispersal device" varies by isotope, GTRI has categorized the most high-risk quantities into two levels: Category 1 thresholds generally have a radioactive activity of 1,000 curies and greater (such as a cesium-chloride capsule the size of a pencil), and Category 2 thresholds as 10–1,000 curies (such as a capsule of iridium the size of a pencil eraser). To date, GTRI has upgraded the security at 1,529 civilian buildings housing radiological sources (1,013 internationally and 516 domestically). Based on current projections, GTRI anticipates a protection program completion date of 2044, with GTRI planning on completing the highest priority sites as soon as possible.

The MPC&A program has completed a significant amount of work to secure vulnerable nuclear material. However, we continue to seek opportunities to partner with our Russian counterparts on further improvements to security systems and practices in that country due to Russia's very large material stockpiles. Nuclear security is not a static concept; rather it requires continual analysis and testing of system performance against a range of evolving threats. This has been a significant theme in our cooperation with Russia, and we have been able to work with counterpart organizations over the years to continue to improve security at these sites by addressing additional gaps that have been identified. For example, in recent years we have redoubled our efforts to ensure the security upgrades we support are effective in mitigating insider threats and have made important improvements in that area. Nevertheless, important work remains to be done such as improving personnel reliability programs and continuing to enhance nuclear security culture. Another example is the material consolidation efforts that are underway at two locations in Russia under this cooperation, which will significantly reduce the security requirements and the long-term cost of meeting those requirements at these two sites. There may be additional opportunities to engage in this kind of effort. Additionally, there are several HEU-fueled research reactors, more than 70 radioisotope thermoelectric generators, and hundreds of civilian buildings with high-activity radiological sources in Russia that require conversion, recovery, and/or physical protection upgrades.

Russia has continued to fund an increasing share of costs for new upgrades and sustainability measures related to nuclear security, but it is the assessment of NNSA that the U.S. needs to remain actively engaged in Russia. An ongoing nuclear security partnership with Russia will continue to foster broad improvements in nuclear security best practices there and will facilitate faster and more effective solutions to meeting the security challenges that both countries consider critically important.

NUCLEAR SECURITY SUMMITS

4. Senator INHOFE. Secretary Creedon and Ms. Harrington, the administration has initiated and supported a biennial Nuclear Security Summit process that has brought together dozens of world leaders to build consensus on practical steps that can be taken to improve nuclear security worldwide. The next Summit is scheduled for 2014. What goals and expectations do you have for the 2014 Summit?

Ms. CREEDON. 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. Those overarching objectives have not changed. President Obama has recently committed to attending the 2014 Summit in The Hague, Netherlands, and the Department of Defense (DOD) will continue to support the Nuclear Security Summit process actively.

Ms. HARRINGTON. The White House is leading the U.S. Government efforts for the 2014 Nuclear Security Summit and would be best able to provide details. For its

part, NNSA actively participates in this U.S. interagency summit process, and what we do know is that U.S. priorities going into 2014 fall into three broad areas:

- (1) strengthening the global nuclear security architecture (treaties, institutions (such as the International Atomic Energy Agency (IAEA)), informal collectives, and national regulations that govern nuclear security behavior);
- (2) maintaining a high rate of execution on the national commitments from the 2010/12 Summits and identifying further tangible security outcomes (i.e., HEU removals); and
- (3) expanding on a relatively new concept of international assurances (things done by a state or others to provide confidence in the effectiveness of nuclear security). Our nonproliferation programs continue to work towards implementing all of the commitments made during the two previous Nuclear Security Summits, and NNSA will be prepared to support the administration's global nuclear security agenda at the 2014 Nuclear Security Summit, and beyond.

5. Senator INHOFE. Secretary Creedon and Ms. Harrington, it is unclear whether the administration supports continuing this summit process beyond 2014, which has raised questions about how the global nuclear security agenda can grow and maintain a high profile without U.S. leadership. What are your views on the security summit process and whether it should be sustained beyond 2014?

Ms. CREEDON. The Nuclear Security Summit process has provided participating countries and international organizations much-needed impetus and an important forum for discussing and thinking critically about how to improve nuclear security. One of the goals of the Nuclear Security Summit process is to expand, enhance, empower, and energize the existing institutions and structures aimed at advancing nuclear security. The 2012 Seoul Communiqué identified the central role of the IAEA in this field; the United Nations and INTERPOL have their own areas of responsibility and competence as regards nuclear security. Therefore, regardless of whether the Summit participants decide to sustain the Summit process beyond 2014, we should work to ensure that these institutions have the human and financial resources, technology, and authorities they need to fulfill their respective mandates and execute their different but related missions—thereby reaching new levels of effectiveness in nuclear security.

Ms. HARRINGTON. The Nuclear Security Summit process has provided a critical political boost and brought the highest level of attention to improving nuclear and radiological security around the world. The Summits have invigorated important multilateral platforms and accelerated projects in dozens of countries to secure, remove, detect, and intercept material. In his speech in Berlin in June, the President has announced that the United States will host a fourth Nuclear Security Summit in 2016. We welcome this announcement and will work closely with the administration to ensure its success.

FOREIGN COSTSHARING

6. Senator INHOFE. Ms. Harrington, in December 2011, GAO reported that NNSA's nuclear nonproliferation programs have made efforts to obtain greater costsharing with foreign countries where these programs are implemented, but GAO noted difficulties NNSA faces in collecting such information and that NNSA is not systematically tracking such data when it is available. Has NNSA been able to make any progress in developing better costsharing information from recipient countries, and has it developed a system for tracking and maintaining costsharing data across all nonproliferation programs?

Ms. HARRINGTON. NNSA's nonproliferation programs consistently work with foreign partners to promote costsharing as a programmatic best practice and to encourage partner countries to build nuclear security capacity and financially support as much of the global nonproliferation effort as possible. Specifically, we have developed several new costsharing efforts and maintain a number of ongoing successful costsharing partnerships, which include:

- Recoveries of Russian radioisotope thermoelectric generators (RTG).
- Nuclear forensics development with the IAEA, European Union, the Global Initiative to Combat Nuclear Terrorism (GICNT), and the Association of South East Asian Nations Regional Forum members.
- Cooperative seismic monitoring efforts with Thailand and the Comprehensive Nuclear-Test-Ban Treaty Organization Preparatory Commission.
- Joint export control training with European, Russian, and Kazakhstani outreach partners.

- International export control, nuclear safeguards, and nuclear security outreach with approximately 25 bilateral partners.
- Costsharing with Russia for various MPC&A upgrades projects and increasing share of maintenance and sustainability support.
- Russian Ministry of Defense funding for all maintenance, sustainability, and retrofit costs for all U.S. funded security upgrades for warhead sites.
- Equal costsharing for radiation detection systems deployed in Russia with maintenance and sustainability costs increasingly taken over by the Russian Federation.
- Costsharing with China for the expansion of radiation detection at borders, ports, and airports and the Nuclear Security Center of Excellence.
- Costsharing with the Republic of Korea and Japan for their Nuclear Security Centers of Excellence and nuclear security course development and regional workshops.

While this program information helps inform planning and country engagement, a system for tracking and maintaining costsharing data across all nonproliferation programs is neither practical nor cost-effective due to the inability to audit another country's accounting records, and is complicated by uncertainties associated with variations in foreign labor rates, labor hours, material costs, and overhead rates. In addition, there may be situations where estimates of costsharing can be made only on the basis of cost-avoidance if NNSA had to bear the full cost of the project. Upon initiating engagement, NNSA carefully considers the financial capacity of foreign partners and encourages them to have a vested interest in the outcome of assistance or collaborative programs.

7. Senator INHOFE. Secretary Creedon and Mr. Myers, have Defense Threat Reduction Agency (DTRA) and the Office of the Secretary of Defense (OSD) been able to make any progress in developing better costsharing information with recipient countries and has it developed a way for foreign nations to be able to fund some of your efforts?

Ms. CREEDON. Yes, we are implementing new costsharing models with Cooperative Threat Reduction (CTR) partners so they can share the costs of projects, thereby demonstrating both a financial and a political commitment to mutual proliferation prevention goals. One example is the Philippines where we are costsharing construction expenses of the new Philippines' National Coast Watch Center; another example is Azerbaijan where they funded construction of the Central Reference Laboratory and the CTR will fund equipment and training costs. Additionally, CTR is exercising the authority provided by Congress to utilize contributions to the DOD CTR program from the United Kingdom, Canada, and Germany.

Mr. MYERS. Yes, the Nunn-Lugar CTR program has made progress in both costsharing with recipient countries and in developing a process for foreign nations to contribute to our efforts.

The CTR program encourages costsharing with recipient countries due to the cooperative nature of the projects. By instituting detailed joint project implementation plans, CTR is able to establish the various roles and responsibilities between the CTR program and the host nation, to include specific tasks for which the host nation is responsible.

The National Defense Authorization Act for Fiscal Year 2010, Public Law 111-84, section 1303, provided CTR program authority to receive outside contributions. We have developed a process, working with the Department of State (DOS), U.S. Treasury, and the Office of Management and Budget, by which outside contributions have begun to come into the program. The first contribution was received in March 2013 from the Ministry of Defence of the United Kingdom of Great Britain and Northern Ireland for \$685,000. Those funds will be contractually awarded in support of CTR's Cooperative Biological Engagement Program (CBEP) with scientific studies into avian influenza virus in the country of Georgia. There are two more contributions awaiting the finalization of memorandums of understanding with donors from Canada and Germany as well. We look forward to working with your committee to renew this authority before it expires.

ENGAGING NEW COUNTRIES

8. Senator INHOFE. Ms. Harrington, what work are you doing to secure large stockpiles of nuclear materials in countries outside of the former Soviet Union, where programs like MPC&A have not traditionally worked and where access has been problematic, including China and India?

Ms. HARRINGTON. There is a multilayered strategy that guides U.S. Government nuclear security engagement. Where possible, we remove or secure large stockpiles of materials. Where that is not possible, we engage in activities that promote nuclear security best practices through training and workshops. NNSA partners with China and India to develop Nuclear Security Centers of Excellence (COE), which are intended to serve as central venues for domestic and regional nuclear security training.

During the April 2010 Nuclear Security Summit, China announced a commitment to create a nuclear security training COE that will build on the best practices program that has been underway between DOE/NNSA and the China Atomic Energy Agency (CAEA) since 2004. The COE reflects the commitment of the Chinese Government to strengthen their cooperation on nonproliferation, nuclear security, and combating nuclear terrorism. China has the responsibility for constructing the physical facility, while NNSA is working with DOD and the CAEA on a design for the Center, as well as defining detailed equipment specifications, providing some equipment, and participating in technical consultations. To date, approximately 40 technical exchanges, including best practices and training workshops, have been conducted with Chinese experts. These include many technical discussions on the COE as well as best practices workshops on such topics as Secure Transportation, Mitigating Insider Threat, Domestic Inspections, Measurement Control, and Nuclear Security Culture.

In the case of India, the pace of the collaboration is proceeding more slowly. NNSA hosted a delegation of Indian officials at U.S. nuclear security training centers in July 2012 to further thinking on their training center requirements. The Indian delegation expressed interest in continued bilateral collaboration on the Global Centre for Nuclear Energy Partnership (GCNEP), including curriculum development and facility design consultation. The Indians have reported that they are actively working on internal approvals and planning for the GCNEP. A meeting is scheduled this summer to explore further partnership opportunities. Similar to the China COE, the Indian side is expected to fully fund the construction of the GCNEP.

NUCLEAR SMUGGLING OVERLAP AND FRAGMENTATION

9. Senator INHOFE. Secretary Creedon and Ms. Harrington, in December 2011, GAO identified potential fragmentation and overlapping functions among some Federal programs—including those at DOD, NNSA, and DOS—working to counter smuggling of nuclear materials, equipment, and technologies overseas, especially those providing equipment and training to foreign border security and customs services. Among other things, GAO recommended that the administration undertake a comprehensive review of the structure, scope, and composition of agencies and programs across the Federal Government involved in combating nuclear smuggling overseas. This review would assess the level of overlap and duplication among agencies and programs, potential for consolidation of these functions to fewer programs and agencies, and the feasibility, costs, and benefits of establishing a special coordinator for U.S. counter-nuclear-smuggling assistance to foreign nations. Has such a review occurred, and if so, what are the conclusions; and if not, why not?

Ms. CREEDON. The National Security Staff has led an interagency process to review the integration of the various programs and agencies contributing to the Global Nuclear Detection Architecture (GNDA), with particular focus on programs and agencies providing equipment and training to foreign border security and customs services to counter smuggling of nuclear materials, equipment, and technologies overseas. DOD, DOS, and NNSA contributed significantly to the resulting GNDA International Implementation Plan, which establishes coordinating mechanisms for improved collaboration and programmatic coverage, and establishes priority regions of focus to assist programs and agencies in reducing overlap and duplication of effort. The GNDA report, which references the International Implementation Plan, was submitted to Congress in April 2013. Following this report, the International Implementation Plan was approved in January 2013 via the Interagency Policy Committee (IPC) process, but has not yet been submitted to Congress.

Ms. HARRINGTON. The National Security Staff has led the Countering Nuclear Threats Sub-Interagency Policy Council (Sub-IPC) to take stock of the requirements of a GNDA and create an International Implementation Plan that reflects those requirements and identifies needed actions. This group has served as a cross-government mechanism to coordinate related efforts among participating agencies to prevent overlap and duplication in the areas which fall under the broad rubric of the international (outer) layer of the GNDA. In concert with this effort, the Second Line of Defense Program conducted an extensive strategic review in fiscal year 2012. This

review, and the broader coordination efforts undertaken by this Sub-IPC, involved all relevant U.S. Government agencies including the Departments of State, Defense, Homeland Security, Justice, and others.

RADIOLOGICAL RISKS

10. Senator INHOFE. Secretary Creedon, Mr. Myers, and Ms. Harrington, as terrible as last week's bombings in Boston were, had those bombs been so-called dirty bombs containing radioactive material, the effects could have been much more serious, complicating clean-up, inhibiting evidence gathering, and posing untold remediation and health costs. What steps is the administration taking to secure nuclear and radiological materials within the United States and to prevent trafficking of nuclear and radiological materials into the country?

Ms. CREEDON. DOD takes the security of nuclear and radiological materials very seriously and, as such, we work to complement and support a number of U.S. programs aimed at preventing nuclear and radiological trafficking. Consistent with law and at the request of the Attorney General, DOD provides support to the Federal Bureau of Investigation (FBI) for preventing acts of radiological and nuclear terrorism inside of the United States. DOD provides such support in accordance with the Prevention Framework, which is anticipated to be released May 2013, as one of the five National Preparedness Frameworks of Presidential Policy Directive-8. DOD also has overseas programs such as the Prevention Proliferation Program (PPP), previously called the Weapons of Mass Destruction (WMD) Proliferation Prevention Initiative (PPI), which addresses the vulnerability of partner countries to trafficking of WMD and related components. In addition, the Global Nuclear Security Program (GNS) works with partner countries to account for and secure vulnerable nuclear materials worldwide.

I defer to DOE, NNSA, and FBI on the domestic aspects of securing nuclear and radiological materials and I would direct your question to the Department of Homeland Security (DHS) pertaining to preventing trafficking into our country.

DOD coordinates both the PPP and GNS programs very closely with NNSA and other interagency partners.

Mr. MYERS. DTRA defers to DOE/NNSA, FBI, and DHS on the prevention aspects of securing domestic nuclear and radiological materials and preventing trafficking into U.S. territory.

Within the United States, DTRA provides operational and technical support to DOD components to sustain a safe, secure, and effective nuclear arsenal. We conduct independent nuclear surety inspections of units responsible for the assembly, maintenance, and storage of nuclear weapon systems, and oversight of military inspection teams. We provide research, development, test, and evaluation support to OSD and the military for nuclear weapons physical security, including force-on-force tests to examine DOD policies on nuclear physical security. We coordinate and collaborate with DOE/NNSA on our nuclear stockpile stewardship responsibilities.

Overseas, the Nunn-Lugar CTR program focuses on eliminating, securing, and consolidating WMD, related materials, and associated delivery systems and infrastructure at their source in partner countries and also preventing the proliferation of WMD materials in transit across international borders. DTRA also implements the DOD/FBI/DHS International Counterproliferation Program (ICP). The goal of ICP is to build partner capacity among border, customs, and law enforcement officials to detect, interdict, and investigate illicit WMD trafficking. Additionally, DTRA/U.S. Strategic Command (STRATCOM) Center for Combating (SCC)-WMD directly supports the Proliferation Security Initiative (PSI) activities, in cooperation with geographic combatant commands and other parts of the U.S. Government. This includes design, planning, and participation to support U.S.-led and foreign-hosted multinational PSI exercises and workshops as part of a global effort to stop trafficking of WMD, their delivery systems, and related materials to and from states and non-state actors of proliferation concern.

One final DTRA program bears special mention. The DTRA Nimble Elder program provides the combatant commanders with the capability to search for, locate, and identify lost or stolen radiological devices and/or radioactive material in all operational environments.

Ms. HARRINGTON. Just prior to the tragic bombings in Boston, NNSA's GTRI successfully completed the recovery of two high-activity radiological devices from Boston, MA. The first device, containing nearly 700 curies of cobalt-60, was recovered from St. Elizabeth's Medical Center, and the second, containing more than 1,200 curies of cesium-137 sources, from the Dana Farber Cancer Institute. These are but 2 of the more than 32,000 radiological sources recovered by GTRI in the United

States over the past 20 years. GTRI does this because there are no commercial disposal options for these dangerous radioactive materials.

In addition, GTRI has partnered with the Nuclear Regulatory Commission (NRC), DHS, and FBI to further strengthen security of high activity radiological sources in the United States. The NRC and State regulatory agencies have worked together to create a strong and effective regulatory framework that includes licensing, inspection, and enforcement of facilities with high-activity radiological materials. This framework provides a common baseline level of security to ensure adequate protection of public health and safety and the common defense and security. To assist in that effort, GTRI works with the NRC, the materials licensees, State, local, and tribal governments, and other Federal agencies, to build on the existing regulatory requirements by providing voluntary security enhancements. GTRI's voluntary upgrades complement NRC regulations to ensure the highest possible protection for U.S. locations with high-activity radiological sources.

GTRI implements security systems with remote monitoring capabilities to alert local law enforcement and to counter insider threats. GTRI has also developed an Alarm Response Training course that brings together site radiation protection staff, on-site security, and local law enforcement to train in realistic scenarios using actual radioactive sources. GTRI efforts are important because most site guards are unarmed and local law enforcement is outside the NRC's regulatory control. These domestic radiological security efforts complement similar efforts GTRI is undertaking with nearly 100 other countries.

11. Senator INHOFE. Secretary Creedon, Mr. Myers, and Ms. Harrington, in light of the proposed fiscal year 2014 budget cuts to the GTRI program, should we have concerns that preventing radiological terrorism in the United States is not a high administration priority?

Ms. CREEDON. No. WMD terrorism, including radiological terrorism, is one of the highest priorities of the Obama administration. DOD, in partnership with NNSA, DHS, and FBI, take the prevention of radiological terrorism very seriously and, as such, we have a number of programs to reduce the possibility of such an event. To complement the efforts of other parts of the government such as DOE, DHS, and FBI, DOD has overseas programs such as the PPP, previously called the WMD PPI, which addresses the vulnerability of partner countries to trafficking of WMD and related components. DOD works closely with all of these agencies to coordinate our respective programs and prevent duplication and unnecessary overlap.

Mr. MYERS. DTRA defers to DOE/NNSA on this question given their responsibility for oversight and implementation of the GTRI program.

DTRA fully supports the administration's priority as evidenced by our participation in defense support to civil authorities via assistance to U.S. Northern Command and/or U.S. Pacific Command.

Ms. HARRINGTON. Preventing radiological terrorism remains one of the highest priorities for the administration and NNSA. We are working with our domestic and international partners to secure radiological materials in the most effective, efficient, and timely manner possible.

SECOND LINE OF DEFENSE PROGRAM

12. Senator INHOFE. Ms. Harrington, the Second Line of Defense (SLD) program at NNSA, which works with foreign countries to install and maintain nuclear smuggling detection capabilities, has a proposed fiscal year 2014 budget of \$140 million, or a 54 percent reduction from its fiscal year 2013 funding of \$263.7 million. The fiscal year 2013 budget for the program was also sharply reduced while the administration took a strategic pause to reevaluate the program. In this context, what changes are being made to the SLD program and its approach to combating nuclear smuggling?

Ms. HARRINGTON. In fiscal year 2012, the SLD program, in coordination with interagency partners, completed a thorough strategic review and analysis to determine the most efficient and effective approach to closing key gaps in the global nuclear detection architecture and increase the impact of detection and deterrence using fixed and mobile deployments. The review incorporated a broad range of data, including: known trafficking pathways; smuggling information; country geography and border porosity based on imagery and other sources; updated maritime shipping system information and trends; the availability of existing infrastructure to support detection equipment; the availability of financial and technical resources to continue operation and maintenance of SLD-provided equipment over the long-term; results of interviews with key partner country stakeholders; deployments in place by SLD

and others; and political developments such as the expanding Russian-led Eurasian Customs Union. The review considered specific site and country information as part of a regional context to more effectively target resources. It also identified the point of diminishing returns after which equipping more ports produced limited benefit with respect to the volume of global and U.S.-bound cargo being scanned for radiation. Sensitive to budget realities in today's fiscal environment, the review also overlaid fiscal constraints so that the optimal approach could be taken to close critical gaps in the detection architecture and improve performance effectiveness.

The strategic review recommended a plan to address remaining fixed detection gaps, expand mobile detection, and fully fund sustainability. The review also resulted in the reorganization of SLD Core and Megaports programs under joint implementation and sustainability subprograms. The changes being implemented to program strategy include an accelerated effort to target deployments of fixed radiation portal monitors (RPM) to address critical gaps in the existing detection architecture surrounding Russia, made more complicated by the creation of a new Customs Union between Russia, Kazakhstan, Kyrgyzstan, and Belarus. At this time, only 17 percent of that work remains to be completed. The SLD program also intends to expand the provision of mobile radiation detection equipment to foreign law enforcement as part of an adaptable, flexible detection approach. The program has developed a reduced Megaports scope that will focus primarily on equipping the key hubs that process the most container traffic and cover the highest threat areas within the maritime system and maximizing SLD's global deterrence effect. Additionally, we have launched special initiatives in strategic focus areas including: enhancing deterrence through discreet monitoring and messaging, enhancing international capability to respond to information alerts related to smuggling through rapid asset mobilization planning, and developing a geospatial data interface that maps SLD capabilities worldwide and can be used in coordination with U.S. Government partners. Finally, SLD has increased technical exchange outreach efforts to recruit donor countries, industry and international organizations to accept a greater financial share of RPM deployments, while continuing an emphasis on the performance and effectiveness of the systems.

13. Senator INHOFE. Ms. Harrington, how will the decrease in funding affect SLD's future plans and commitments with partner countries?

Ms. HARRINGTON. SLD's strategic review considered a variety of factors, including existing trafficking pathways, assessments of border porosity, existing architecture, the ability of partner countries to sustain radiation detection capabilities, and existing fiscal constraints. The result of SLD's assessment led to a streamlined approach with fewer sites/ports and leveraged multiple types of resources to continue to mitigate threats.

For border sites, SLD reduced the program goal from approximately 650 sites to 585. The decrease is a result of removing deployments at crossings on opposite sides of the border, where possible, and areas that were impacted by the Customs Union (Russia-Belarus, Kazakhstan-Russia, and Kazakhstan-Kyrgyzstan). For large ports, SLD reduced the program goal from 100 to 73, which includes the completed 45 ports, plus 14 fully-funded and cost-shared ports, and 14 that would be completed via full financial support of host country or industry partner (technical exchanges). This revision in scope equips the highest threat and volume ports, focusing resources on those ports where the benefit of the RPM installations are apt to have the greatest impact. Though not among highest priority ports, SLD will remain open to considering technical consultations on detection at the 27 ports that have been removed from the program goals should the host country or port operator request it.

With regard to meeting the sustainability commitments that we have made to our partner countries, we remain committed to having a robust sustainability program that focuses on capacity building and maintaining system effectiveness. SLD typically provides between 3 to 5 years of sustainability support to each partner country, including training and maintenance support, data analysis, SLD Help Desk support, workshops, exercises, and assurance visits. Further, during the transition period, SLD conducts quarterly assessments of partner country capabilities to progress to building the requisite indigenous capabilities. SLD will strive to maintain this standard within the new funding profile.

GLOBAL SECURITY THROUGH SCIENCE PARTNERSHIPS PROGRAM

14. Senator INHOFE. Ms. Harrington, in 2008, GAO raised many concerns and problems surrounding NNSA's Global Initiatives for Proliferation Prevention (GIPP)

program, following a series of earlier GAO reports on this program and other agency WMD scientist engagement programs. NNSA is now recasting the GIPP program as a Global Security through Science Partnerships (GSSP) program. What assurances can you give that significant program improvements have been made to the program, including the extent to which GAO's recommendations have been implemented, to ensure the new program will be addressing real threats, using funding cost-effectively, and generating real, measurable results?

Ms. HARRINGTON. In response to the concerns raised by GAO and Congress in 2008, NNSA took immediate action to address all of the recommendations for the GIPP including:

- Implementation of more uniform interagency review and approval procedures for scientist engagement projects overseen by the National Security Council, strengthening an already comprehensive review process.
- Completion of a comprehensive institute risk assessment in order to target resources where they are most needed to prevent proliferation of WMD expertise.
- Revised project criteria including a requirement in Russia and the former Soviet Union to involve institutes that have been assessed as high priority.
- Management reforms to streamline the program, producing significant results, including the reduction of uncosted balances to meet the DOE carry-over threshold.

Based on recommendations from Congress, NNSA completed an all-source assessment of the expertise proliferation threat that included an extensive intelligence component. The assessment concluded that there is a significant WMD expertise proliferation threat that no longer is limited to expertise acquired by direct involvement in weapons programs, and that the threat is exacerbated by the increasing global availability and accessibility of weapons-usable information and knowledge. In response to the assessment, NNSA decided to transform its approach to scientist engagement to better address current threats. The GSSP program will be a distinct program from GIPP, but will build on lessons learned over almost 20 years of scientist engagement in the former Soviet Union and elsewhere. GSSP will mitigate the risks of WMD expertise proliferation by refocusing its efforts geographically; leveraging complementary NNSA and U.S. Government programs in a whole-of-government approach; and using new engagement methods that emphasize partnership over assistance or redirection.

The program incorporates all relevant improvements recommended by GAO, and includes a comprehensive prioritization system to identify countries for engagement that includes an assessment of vulnerability, capability, and interagency coordination. Moreover, GSSP has developed an approach to identifying priority areas of "at risk expertise" that are vulnerable to recruitment. By engaging "at risk" populations in priority countries, GSSP will ensure that projects meet nonproliferation objectives. GSSP will coordinate closely with other U.S. Government nonproliferation and nuclear security programs to prioritize the allocation of its resources to those countries that present the highest current and near-term risk of WMD-usable expertise proliferation. GSSP will use a combination of quantitative metrics, expert assessments, and whole-of-government considerations to evaluate its impact in engaged states and to ensure that GSSP effectively supports national priorities and programs. GSSP also will employ objective, weighted indicators to track each state's progress through five levels, with a desired minimal end state of achieving sustainable capacity to address expertise proliferation, corresponding to level three.

COOPERATIVE THREAT REDUCTION ENGAGEMENT PRIORITIES

15. Senator INHOFE. Secretary Creedon and Mr. Myers, currently about 60 percent of the CTR program is used for the CBEP. After the previous sharp focus on nuclear weapons in former Soviet Union countries, how did you determine the need to shift resources to biological issues?

Ms. CREEDON. Most of DOD's CTR effort to enhance security for nuclear weapons in the former Soviet Union will be complete in 2013. While CTR's foundation in the former Soviet Union is nuclear non-proliferation, we noted the importance of addressing the biological threat in the former Soviet Union many years ago and established the Biological Threat Reduction Program to eliminate offensive biological weapons. Much of the elimination work has been completed and we are now focusing on biological security risks, which have grown in recent years. The close proximity of organizations with intentions to acquire dangerous pathogens for use against the United States or its allies to potential sources of biological agents of concern is especially troublesome. As stewards of CTR program funding, we take a tar-

geted approach and prioritize expansion efforts based on threat awareness, support for broader U.S. nonproliferation objectives, and opportunities to enhance strategic relationships with partner countries. Thus far, this has led the Secretary of Defense, with the concurrence of the Secretary of State, to expand CBEP activities to Afghanistan, Pakistan, Iraq, India, Africa, Southeast Asia, and the Middle East.

Mr. MYERS. We dedicate resources and make priority decisions based on the risks and threats that we are facing in close coordination with the Intelligence Community, the U.S. Strategic Command, the Joint Chiefs of Staff, and the combatant and regional commands. Although a real and catastrophic threat, the capability to build, test, produce, and use nuclear weapons is constrained to a select few countries. The program's nuclear security efforts were previously completed in all former Soviet Union countries except Russia. Russia and the United States are in agreement that this is an appropriate time for the Russian Ministry of Defense to assume responsibility for security of its nuclear weapons. The biological threat has no boundaries. Diseases caused by especially dangerous pathogens occur every day, and the technologies to manipulate, store, isolate, and diagnose these pathogens for scientific research or medical diagnosis are becoming increasingly effective as biological sciences and biotechnology continue to rapidly evolve. Unfortunately, these technologies are becoming increasingly accessible to those with evil intent. The same technologies used to support medical and scientific research can also be used to support the production of biological weapons or toxins. The Nunn-Lugar CBEP provides an avenue to work with an ever increasing group of countries to safely secure and store especially dangerous pathogens. Simultaneously, CBEP actively engages their scientists in the areas of biological research, biosafety, biosecurity, and bioethics, thus reducing the possibility that diseases stored at these foreign facilities could fall in to the wrong hands, and be used for nefarious purposes.

SECURING FACILITIES IN KENYA AND UGANDA

16. Senator INHOFE. Secretary Creedon and Mr. Myers, your written testimony indicates success securing facilities in Kenya and Uganda that store Anthrax and Ebola. Can you describe your work in those countries and how you identified these particular nations to work with?

Ms. CREEDON. Kenya and Uganda both have a high prevalence of endemic diseases of concern to the United States, weak disease diagnosis and reporting systems, and active terrorist groups in the region. We have recently completed critical biosafety and biosecurity (BS&S) updates at key facilities in both Kenya and Uganda. In Kenya we recently completed construction of a perimeter security wall and installation of an incinerator ash pit at the Kenyan Medical Research Institute (KEMRI). We also completed construction of the perimeter security wall and guardhouses, provision of basic laboratory materials, and installation of three autoclaves at the Central Veterinary Laboratory (CVL) in Nairobi. In Uganda, we conducted initial BS&S at the Uganda Virus Research Institute (UVRI) and National Animal Disease Diagnostics and Epidemiology Center (NADDEC), including the installation of a perimeter security fence/wall, guard station, and facility lighting, as well as laboratory material and equipment, at both locations.

Mr. MYERS.

- In November 2010, U.S. Senator Richard Lugar (R-IN) and the Assistant Secretary of Defense for Nuclear, Chemical, and Biological Defense Program, the Honorable Andrew C. Weber, identified BS&S gaps during a visit to KEMRI and CVL in Kenya and UVRI and NADDEC in Uganda.
- DTRA CTR was given authority to expend funds on the Africa continent in March 2011.
- BS&S upgrades at KEMRI were completed in February 2013; the upgrades consisted of construction of a perimeter security wall and installation of an incinerator ash pit.
- CVL BS&S upgrades were completed in May 2012 and consisted of construction of the perimeter security wall and guardhouses, provision of basic laboratory materials, and installation of three autoclaves.
- BS&S at UVRI included the installation of the following: perimeter security fence/wall, guard station, and facility lighting. This also included BS&S upgrades at NADDEC and included installation of the following: perimeter security fence/wall, guard station, facility lighting, wheel wash, medical and animal waste incinerator, and incinerator ash pit; procurements of guard station equipment as well as laboratory materials and equipment were included for both locations; the upgrades at UVRI were completed by February 5, 2013, and all physical construction at NADDEC.

FUTURE IDENTIFYING HIGHEST RISK COUNTRIES

17. Senator INHOFE. Secretary Creedon and Mr. Myers, what is your systemic way of identifying the highest risk countries to work with in the future?

Ms. CREEDON. We use a threat-based approach and determine how CTR is able to best support national and departmental priorities such as those established the National Security Strategy, the National Defense Strategy for Countering WMD, and the Guidance for the Employment of the Force (GEF). Based on these and other similar inputs, we consider four factors when identifying and prioritizing CTR efforts:

- We evaluate threats, risks, and vulnerability and evaluate the ability—in cooperation with partner countries and applicable local, regional, and international organizations—to directly and appreciably prevent proliferation and/or terrorist acquisition of materials and expertise to develop and utilize WMD.
- We consider the ability of the CTR program to create, strengthen, or sustain partnerships on issues of bilateral, regional, and global concern with countries in existing and emerging centers of influence.
- We consider the ability of the CTR program to influence partner countries' views and behaviors toward international and regional countering WMD and nonproliferation regimes and to enable them to meet such commitments, encourage and improve compliance, and encourage others to do the same.
- We evaluate the ability of the CTR program to contribute unique threat reduction capabilities, resources, or partnerships that other DOD and U.S. Government threat reduction and related programs cannot contribute.

Combined, these criteria guide us in a systematic way to identify the highest risk countries with which the CTR program should partner. We also use these criteria to continuously evaluate the benefit of maintaining existing CTR program projects with current partners.

Mr. MYERS. Annually, DTRA assists DOD in concert with other expertise across the U.S. Government to make the best judgments possible concerning where/what/why we should focus limited resources based on congressionally-mandated Nunn-Lugar CTR goals and guidance. We dedicate resources and make priority decisions based on the risks and threats that the United States is facing—in close coordination with the Intelligence Community, STRATCOM, the Joint Chiefs of Staff, and the combatant and regional commands. Working closely with CTR partner countries and interagency partners, we thoroughly evaluate risks and identify opportunities that would have the highest impact to reduce or mitigate the WMD threat and support DOD's strategic objectives. On a yearly basis, Ms. Creedon and her staff host roundtable discussions to take a systematic approach in evaluating countries for future engagement.

18. Senator INHOFE. Secretary Creedon and Mr. Myers, your written testimony indicates that we are helping countries set up disease surveillance systems. Why is DOD rather than the Centers for Disease Control (CDC) executing the disease surveillance function?

Ms. CREEDON. The CDC has a public health mission to protect the public from infectious disease outbreaks. DOD's CTR program has a security mission to reduce the threat to the United States and its allies from WMD and related materials, technologies, and expertise, including associated delivery systems and infrastructure. One way in which CTR reduces biological threats is by working with partner countries to build capacity to rapidly and accurately prevent and detect the use of biological weapons. Often the first indicator of a biological weapons attack or accidental release of biological weapons-related material is through disease surveillance. DOD CTR therefore provides the tools, techniques, laboratory, and disease surveillance capacity to improve partner countries' readiness to detect and report all disease outbreaks, naturally occurring or otherwise. DOD CTR's biosurveillance efforts are carefully nests within a whole-of-government approach to ensure our efforts are coordinated and deconflicted with our foreign partners. Toward this end, the national security players—the Departments of State, Defense, and Energy—work in concert with the Departments of Health and Human Services (HHS), Agriculture, Commerce, and Homeland Security, the FBI, the U.S. Agency for International Development, and a wide range of international and nongovernmental partners to address problems that are of shared concern.

Mr. MYERS. It is safer, more secure, cheaper, most efficient, and most effective to address WMD threats at the source and as far away from our shores as possible. DOD's mission is to assist the U.S. Government and partner nations with the secu-

urity of extremely dangerous pathogens that can be weaponized or used to conduct a bioterrorist attack. This is a different mission than the CDC public health mission. The CDC has great experience and networks operating in Africa and Southeast Asia where many of these biological agents can be found. We can, and do, leverage their expertise, access, and existing institutional relationships by bringing the DOD defense-in-depth security mindset and expertise together with CDC's public health work. This allows the U.S. Government to focus all of its capabilities against a pandemic health and security threat as quickly, and as effectively, as possible.

Funding provided by DOD leverages CDC's expertise to develop epidemiological training courses, laboratory-based surveillance systems, laboratory quality management programs, build workforce capability, and create electronic disease data collection systems globally focused towards meeting the legislatively-mandated security goals for CTR.

DOD, through the Nunn-Lugar CTR's CBEP, works to enhance the partner country's capability to detect, diagnose, and report pathogens of security concern from natural outbreaks (endemic and epidemic) and bioterror attacks as well as potential pandemics. CBEP also ensures that the developed capabilities are designed to be secure, safe, and sustainable. CBEP's primary efforts focus on the infrastructure and networks, within DOD core capabilities, to rapidly identify and report any outbreaks of pathogens of security concern (biological weapons-related) in order to differentiate a natural versus terror attack as well as identify any potential outbreaks/pandemics which could impact our national security. These activities are carefully coordinated with the CDC, and other relevant agencies, in a collaborative manner.

19. Senator INHOFE. Secretary Creedon and Mr. Myers, how do you work with and deconflict your efforts with the CDC on biological issues?

Ms. CREEDON. We consistently communicate and coordinate with all U.S. Government departments and agencies, including the CDC and HHS. At a strategic- and policy-level, IPC meetings provide opportunities to align and deconflict CTR efforts with those of other interagency partners and to ensure we are working in concert to advance national strategies and objectives. With respect to biological threat reduction issues, DOD, HHS, and CDC all participate in regular Global Health Security IPCs and sub-IPCs such as the International Biological Engagement Working Group. At a working level, we host quarterly regional forums to brief interagency partners on our biological engagement programs and to coordinate activities and raise issues or concerns. In the field we also engage with the Health Team at the U.S. Embassy—typically composed of CDC, the U.S. Agency for International Development, and other interagency partners—and we invite CDC colleagues to join DOD delegations when meeting with foreign partners, when appropriate. Combined, these efforts increase our collective awareness of similar or related activities across the U.S. Government as well as help identify areas in which the CTR program can leverage another department's or agency's capabilities.

Mr. MYERS. It is safer, cheaper, and most effective to address WMD threats at the source and as far away from our shores as possible. DOD's mission is the security of extremely dangerous pathogens that can be weaponized or used to conduct a bioterrorist attack. The CDC has great experience and networks operating in Africa and Southeast Asia where many of these biological agents can be found. We can leverage their expertise by bringing the DOD security culture together with CDC's public health work. CDC and DTRA collaborate regularly to reduce the potential for duplication of effort regarding biological issues. DTRA's collaboration with CDC occurs at the programmatic level. For example, DTRA's Nunn-Lugar CTR (through the CBEP) works in coordination with the CDC's Global Disease Detection and Emergency Response to resource and execute efforts to reduce global health security threats. Recently, DTRA and CDC have increased collaboration beyond the programmatic level. This broader strategic partnership will leverage the strengths of each organization and introduce capabilities that can enhance each other's overall capabilities to execute our missions. For example, increased collaboration on modeling and simulations helps to enhance situational awareness necessary for supporting decisionmaking regarding global health threats.

MEASURING SUCCESS OF PROGRAMS

20. Senator INHOFE. Secretary Creedon and Mr. Myers, CTR has eliminated over 7,600 warheads—a fantastic accomplishment. How do you measure your success for CTR programs so you know when a program in a particular country is complete and needs to be concluded?

Ms. CREEDON. First and foremost, we measure success by our ability to directly and appreciably achieve strategic threat reduction objectives, which include:

- Dismantle and destroy stockpiles of nuclear, chemical, or biological weapons, equipment, or means of delivery that partner countries own, possess, or have in their control.
- To account for, safeguard, and secure nuclear, chemical, and biological materials, equipment, or expertise that, if vulnerable to theft or diversion, could result in WMD threats.
- To prevent and detect acquisition, proliferation, and use of nuclear, chemical, or biological weapons, weapons-usable and related materials, equipment, means of delivery, and knowledge.

We also measure success by whether partners can sustain these capabilities when CTR funding is no longer available. This sustainment consideration is a significant factor in determining when and how to conclude CTR programs.

We also consider other indicators of success that are more qualitative yet provide a broader sense of the strategic value of initiating, maintaining, and concluding CTR engagements. For example, we evaluate the benefit of continued CTR engagement to the overall bilateral relationship. We also consider the contribution of CTR engagements to improving our partners' compliance with and commitment to countering WMD and nonproliferation agreements and frameworks, such as the Biological Weapons Convention and United Nations Security Resolution 1540.

Mr. MYERS. Secretary Creedon's response has outlined how DOD broadly measures success for Nunn-Lugar CTR programs. DTRA, as the program's implementing agency, is responsible for managing the programming, contracting, and funding aspects of the program. DTRA develops Joint Requirements and Implementation Plans (JRIPs) that prescribe mutually acknowledged and agreed-upon requirements, assumptions, major milestones, contract approaches, risk assessments, and responsibilities. DTRA's program and project managers routinely measure progress against the agreed upon JRIPs, and evaluate the progress of a partner nation to sustain capabilities. The CTR program has developed program-level metrics for all of its program areas and projects, as well as an electronic database tool that permits collection of the relevant data to track program-level metrics and measure progress. All of what DTRA does as the implementing agency provides feedback to DOD to make the broader determination as to when a program in a particular country is complete and can be concluded.

CHALLENGES ASSOCIATED WITH WORKING AS NON-PERMISSIVE ENVIRONMENTS

21. Senator INHOFE. Mr. Myers, the CTR program works in permissive environments with fairly long-time horizons. What are your challenges associated with supporting combatant commanders who are generally working on shorter timelines and want counter-WMD solutions for non-permissive environments?

Mr. MYERS. Counter-WMD operations in non-permissive environments present inherent challenges not present in permissive, cooperative environments.

First, in the area of planning, contingency scenarios necessitate compressed planning timelines with no room for error. While CTR planning might span months or years, counter-WMD contingency planning might have to be measured in weeks, days, or even hours. Second, a significant difference is the provision of security for agency personnel, to include military, civilian, and contract personnel, who will perform many of the counter-WMD operations. CTR contractors operate in relatively stable environments with little worry that they will be fired upon by hostile forces. In contingency scenarios, however, we have to make provisions for the security of our personnel to include the possible arming of contract personnel. Additionally, normal protections under Status of Forces Agreement may not be in place. Third, counter-WMD operations, such as transportation, storage, and elimination generally require bilateral agreements with host nation authorities regarding such things as liability coverage, tax exemption, and the like—that might not be possible in non-permissive environments.

Standing Joint Force Headquarters for Elimination (SJFHQ-E) was intentionally established in STRATCOM by the Secretary of Defense to provide direct operational counter-WMD support to the geographic combatant commands to assist dealing with such challenges. To be clear, I am not the commander of the standing headquarters, but the general officer who commands the headquarters also serves as my Deputy Director of the STRATCOM Center for Combating (SCC) WMD. The co-location of the headquarters with DTRA facilitates close collaboration with DTRA's extensive technical expertise and prior planning for follow-on nonproliferation activities.

22. Senator INHOFE. Mr. Myers, do you need changes to your authorities to be more effective in this realm?

Mr. MYERS. Yes, I would ask for your support for DOD's legislative proposal 117 to authorize the Secretary of Defense to provide WMD incident response training and basic equipment to foreign military and civilian first responders at all levels of government who may or may not be part of a national security force—this authority does not currently exist. The Secretary of Defense would exercise this authority and activities would be funded through DTRA using Defense-wide Operation and Maintenance funds in targeted partner nations.

DTRA executes DOD's Consequence Management Assistance Program (CMAP) in coordination with the supported strategic priorities of the combatant commanders. However, no specific authority exists to allow the use of Defense-wide Operation and Maintenance funds to train and provide basic response equipment to foreign military and civilian WMD incident first-responders.

Consistent with the current requirements, DTRA's proposal would allow DOD to train foreign country forces based on mission rather than organization. Partner nation first-response forces are often organized differently from those in the United States; they may perform military functions and require military capabilities, but may or may not be a part of a military organization. The ability of DOD to provide training to foreign military and civilian first-responders is critical to fulfilling the current requirements of the agency.

Furthermore, the ability to provide low-cost, high-demand equipment to partner organizations is essential to realistic and effective training and integration. This equipment would provide an initial capability and would take the form of basic equipment or supplies. Such equipment would be made available for use by both the host nation and U.S. forces that may be called upon to support the host nation.

This requires close coordination and collaboration with Under Secretary of Defense for Policy, STRATCOM, and relevant geographic combatant commands. Funding for these activities is included in DTRA's fiscal year 2014 budget request and no additional funds are required.

23. Senator INHOFE. Mr. Myers, Regional Contingency Teams (RCT) look to be an important initiative to better support the warfighter. Can you describe the concept in further detail, including the number of people, their typical functional areas of responsibility, and how you see them being employed?

Mr. MYERS. The DTRA/SCC-WMD/SJFHQ-E RCTs reach across all three organizations to unite subject matter experts in response to contingencies that require quick and coordinated responses to combatant commanders, OSD, and other parts of the U.S. Government. Two RCTs are currently activated: RCT-1 for contingencies in the Levant, and RCT-2 for contingencies in the Asia Pacific region. Each is led by an O-6—a uniformed military senior officer—who reports directly to DTRA/SCC-WMD/SJFHQ-E senior leadership and has the ability to leverage the expertise of any of the 2,000+ people across the organization. These RCTs integrate planning support, WMD technical expertise, intelligence support, deployable operational teams, treaty requirements, and regional experts to support U.S. Government response to WMD contingencies in all phases of military readiness preparation, reaction, and response. The RCTs also reach out to subject matter experts across the U.S. Government to ensure that RCT products include the best possible information, and produce the most effective outcomes. RCT products are regularly briefed to senior U.S. Government leaders to aid in high-stakes decisionmaking. RCTs are flexible and can be activated at any time. Typically, RCTs are activated because of new information identified through intelligence channels or requests for high levels of support from other parts of the U.S. Government.

STRATEGIC OFFENSIVE ARMS ELIMINATION PROGRAM

24. Senator INHOFE. Secretary Creedon, your funding of the Strategic Offensive Arms Elimination (SOAE) program is dropping off fairly rapidly, from about \$28 million in 2012 to \$10 million in the 2014 request. What work is left to accomplish in Ukraine and Russia under this program?

Ms. CREEDON. For a number of years, Russia has requested support for the elimination of a decreasing number of missiles and launchers. DOD continuously assesses the ongoing threat reduction value of CTR projects, and our assessment is that Russia is willing and able to conduct missile and launcher eliminations independently. For this reason, Russia is in the process of taking full responsibility for missile and land-based launcher elimination. DOD is prepared to assist with such eliminations through the first half of fiscal year 2014, but Russia may accept full

responsibility sooner due to the timing of its budget cycle and the timelines reflected in our current bilateral CTR Agreement. The SOAE program also anticipates assisting Russia with the elimination of a Delta III strategic submarine in fiscal year 2014.

DOD also assists Ukraine with the storage and elimination of solid rocket motors from dismantled SS-24 ICBMs and will remain prepared to respond to any WMD delivery systems elimination requirements in other countries. 101 SS-24 solid rocket motors currently remain in Ukraine, and they are scheduled to be eliminated by fiscal year 2016.

UMBRELLA AGREEMENT WITH RUSSIA

25. Senator INHOFE. Secretary Creedon, if the Umbrella Agreement with Russia lapses and there is a gap before a follow-on agreement can be signed, what specific lines of effort will need to be suspended?

Ms. CREEDON. Under the current agreement, DOD conducts five kinds of cooperative efforts in Russia: (1) Nuclear Weapons Storage Security; (2) Nuclear Weapons Transportation Security; (3) Spent Nuclear Fuel/Fissile Material Disposition; (4) Chemical Weapons Destruction; and (5) Strategic Offensive Arms Elimination. At the end of the current agreement, it is likely that some of these efforts will shift to Russian responsibility or will shift to a post-CTR, peer-to-peer exchange. If, however, the Umbrella Agreement lapses before follow-on arrangements can be applied, each of these efforts would need to be suspended.

In addition to the DOD efforts, DOE also conducts nuclear material protection control and accountability activities that are subject to the Umbrella Agreement.

CHEMICAL WEAPONS DESTRUCTION IN LIBYA AND SYRIA

26. Senator INHOFE. Mr. Myers, what is the status of the destruction of chemical weapons in Libya?

Mr. MYERS. On May 4, 2013, the Libyan National Authority (LNA) for the Chemical Weapons Convention completed destruction of Libya's bulk liquid mustard using the hydrolysis and neutralization system they had previously procured (destroyed 8,819 metric tons).

The LNA accepted the U.S. offer of destruction assistance for Libya's recently discovered munitions shortly after it was offered in early 2013. DOD's CTR will perform the work through a team of contractors, with the intent of completing destruction of Libya's category 1 munitions stockpile by December 2013, though that is an extremely tight timeline. The team commenced work at the Ruwagha Chemical Weapons Storage Facility in May 2013. Their efforts build on work that has been done by DOD CTR since early this year to strengthen the safety and security of the stockpile at that site. In support of the destruction efforts, a team of contractors is currently in country (a mix of U.S. and non-U.S. citizens) to coordinate logistics, perform soil sampling, clear unexploded ordnances, and conduct/oversee preparations for the destruction equipment site and worker camp. We anticipate continuing these efforts through 2013. We will respect all security guidance from the DOS, United Nations Department of Security Services, the U.S. Africa Command, and other key sources, when assessing the ability of our contractors to continue their work.

27. Senator INHOFE. Mr. Myers, what lessons learned will you transfer to the situation in Syria?

Mr. MYERS. [Deleted].

28. Senator INHOFE. Mr. Myers, in his briefing on Syria to the Senate Armed Services Committee last week, Secretary Hagel indicated DOD is funding over \$70 million for activities in Jordan, "including providing training and equipment to detect and stop any chemical weapons transfers along its border with Syria and developing Jordanian capacity to identify and secure chemical weapons assets." I assume this is part of the WMD proliferation prevention program under CTR. Can you give me more details on the kind of work that DTRA has been doing in Jordan under this program?

Mr. MYERS. DTRA's work through the DOD Nunn-Lugar CTR program, and through close coordination with the U.S. Central Command, is focused on building the capacities of relevant Jordanian military and civilian ministries to interdict, secure, identify, and manage the consequences of chemical weapons through the provision of training and equipment. Specifically, DTRA is expanding upon the existing Jordan border security program to provide additional remote sensor equipment and

relevant training to improve Jordanian capabilities to detect and track attempts to cross green borders. This effort extends the 110km surveillance system along the final 256km of the Jordan-Syrian border, and supplements the existing system with chemical detection and identification equipment and training. In addition, CTR supported a series of workshops that trained the Jordanians on the protection of personnel and critical equipment in the event of a chemical, biological, radiological, nuclear, and explosives (CBRNE) hazard release. This capability is further supplemented through the replacement and refitting of outdated Jordanian decontamination equipment and the provision of new personal protective, identification, and sampling equipment with associated training.

DTRA's CMAP has also worked with the Colorado National Guard and the Jordanian Armed Forces Chemical Support Unit to conduct an exchange of information about mission, capabilities, and operations of the Colorado National Guard WMD Civil Support Team and CBRNE Enhanced Response Force Package during March 2013. Another event is currently being planned to be held in Centennial, CO in June to continue to develop a National Guard Bureau/State Partnership Program CBRNE Exchange on June 17–21, 2013. Also, a CMAP, State Partnership Program, Defense Security Cooperation Agency, and Jordanian National Centre for Security and Crisis Management exercise planning workshop is scheduled for August 15–20, 2013. Finally, CMAP recently completed a Collective Protection of Critical Infrastructure, High-Value Resources, Personnel, and Civilian Population from Chemical Threats and Contamination workshop with the Jordanian Armed Forces in April 2013.

THREAT REDUCTION ENGAGEMENT PROGRAM

29. Senator INHOFE. Secretary Creedon, only \$2.4 million was requested for the Threat Reduction Engagement program that builds relationships for CTR program development in new geographic areas. But this looks potentially like an outreach program that might already be covered by other departments or agencies, such as the DOS. Can you please explain why a separate funding line is required for this program?

Ms. CREEDON. The Threat Reduction Engagement Program (TREP) is a unique, low-cost tool in the CTR program's toolkit that allows us to initiate and establish relationships with new partners prior to obtaining Secretary of Defense determination, with Secretary of State concurrence, to establish a full CTR partnership. It also allows us to maintain strategic relationships after CTR projects and activities are completed. All TREP-funded activities directly advance the CTR program's mission and have some connection to eliminating or preventing the proliferation of WMD or related materials. For example, this year we utilized TREP funding to jump-start our deepening border security relationship with Jordan, to support an important joint WMD-interdiction exercise with the United Arab Emirates, and to continue our countering WMD engagement with Yemen.

SECURING CHEMICAL WEAPONS IN SYRIA

30. Senator INHOFE. Mr. Myers, what specific areas is DTRA providing support to Syria planning efforts in order to help secure chemical weapons in Syria should the chemical weapons sites become unsecure and manage the consequences should Assad use chemical weapons on his own people?

Mr. MYERS. [Deleted.]

31. Senator INHOFE. Mr. Myers, in the briefing on Syria to the Senate Armed Services Committee last week, when Senator McCain asked Chairman Dempsey if he could secure chemical weapons in Syria, Chairman Dempsey said, "Not as I sit here today simply because they have been moving it and the number of sites is quite numerous." What are the capability gaps that you see as the experts in countering WMD proliferation in Syria?

Mr. MYERS. [Deleted.]

32. Senator INHOFE. Mr. Myers, what efforts are we doing to close those gaps?

Mr. MYERS. [Deleted.]

33. Senator INHOFE. Mr. Myers, if contaminated refugees begin approaching Jordan, Turkey, and Iraq borders, are these countries prepared to handle them?

Mr. MYERS. [Deleted.]

34. Senator INHOFE. Mr. Myers, what are we doing with our partners in the region (Jordan, Turkey, Iraq, and Israel) and partners outside the region (United Kingdom, France, Canada, and the North Atlantic Treaty Organization) to address Syrian chemical weapons issues?

Mr. MYERS.[Deleted.]

[Whereupon, at 3:25 p.m., the subcommittee adjourned.]

