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S. HRG. 112–80, PT. 5

DEPARTMENT OF DEFENSE AUTHORIZATION FOR APPROPRIATIONS FOR FISCAL YEAR 2012 AND THE FUTURE YEARS DEFENSE PROGRAM

HEARING

BEFORE THE

COMMITTEE ON ARMED SERVICES
UNITED STATES SENATE

ONE HUNDRED TWELFTH CONGRESS

FIRST SESSION

ON

S. 1253

TO AUTHORIZE APPROPRIATIONS FOR FISCAL YEAR 2012 FOR MILITARY ACTIVITIES OF THE DEPARTMENT OF DEFENSE AND FOR MILITARY CONSTRUCTION, TO PRESCRIBE MILITARY PERSONNEL STRENGTHS FOR FISCAL YEAR 2012, AND FOR OTHER PURPOSES

PART 5
EMERGING THREATS AND CAPABILITIES

MAY 10, 2011

Printed for the use of the Committee on Armed Services

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MAY 10, 2011

DEPARTMENT OF DEFENSE AUTHORIZATION FOR APPROPRIATIONS FOR FISCAL YEAR 2012 AND THE FUTURE YEARS DEFENSE PROGRAM

TUESDAY, MAY 10, 2011

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

PROLIFERATION PREVENTION PROGRAMS AT THE DEPARTMENT OF ENERGY AND THE DEPARTMENT OF DEFENSE

The subcommittee met, pursuant to notice, at 3:55 p.m. in room SR–232A, Russell Senate Office Building, Senator Kay R. Hagan (chairman of the subcommittee) presiding.

Committee members present: Senators Hagan and Portman.

Majority staff members present: Joseph M. Bryan, professional staff member; Madelyn R. Creedon, counsel; Richard W. Fieldhouse, professional staff member; and Jessica L. Kingston, research assistant.

Minority staff members present: Adam J. Barker, professional staff member; John W. Heath, Jr., minority investigative counsel; Daniel A. Lerner, professional staff member; and Michael J. Sistak, research assistant.

Staff assistants present: Kathleen A. Kulenkampff and Brian F. Sebold.

Committee members' assistants present: Roger Pena, assistant to Senator Hagan; Patrick Day, assistant to Senator Shaheen; and Brent Bombach, assistant to Senator Portman.

OPENING STATEMENT OF SENATOR KAY R. HAGAN, CHAIRMAN

Senator HAGAN. I would like to convene the second session of the Emerging Threats and Capabilities Subcommittee today. Good afternoon. We meet today to discuss proliferation prevention, nonproliferation, counterproliferation, and threat reduction programs at the Departments of Defense and Energy.

We began this hearing today in closed session to understand the threats these programs are designed to address, and in that session we learned more about why we worry about proliferation of weap-

ons of mass destruction (WMD), technology, and materials, and who is trying to get WMDs.

I want to welcome our witnesses to this session. We have Ms. Anne Harrington, the Deputy Administrator for Defense Nuclear Nonproliferation at the National Nuclear Security Administration (NNSA) at the Department of Energy (DOE); Mr. Kenneth Myers III, the Director of the Defense Threat Reduction Agency (DTRA); and Mr. Kenneth Handelman, the Acting Assistant Secretary of Defense for Global Strategic Affairs at the Department of Defense (DOD).

As I mentioned in the closed session, there is wide agreement that the use of a nuclear weapon by a terrorist would be a catastrophic event. The probability that this will occur, however, is unknown, but some, such as former Senator Sam Nunn, worry that it's just a matter of time—not if, but when.

President Obama has embarked on a three-pronged effort to reduce the spread of nuclear weapons, nuclear materials, and nuclear technology. As the President said in the Nuclear Posture Review, "The threat of global nuclear war has become remote, but the risk of nuclear attack has increased."

The most immediate and extreme threat today is nuclear terrorism. Today we will discuss the efforts at DOD and DOE to thwart the goals of these potential nuclear terrorists and reduce the chances that a nuclear or radiological device is detonated in a U.S. city or anywhere else.

At the end of the Cold War, DOD and DOE, at the direction of former Senator Sam Nunn and Senator Richard Lugar, established programs with Russia and the states of the Former Soviet Union to secure, dismantle, or destroy nuclear and chemical weapons and to secure or destroy biological weapons materials. That program, I'm pleased to say, has been a resounding success, with thousands of nuclear weapons and delivery systems destroyed, tons of nuclear material secured, tons of chemical weapons destroyed, and significant quantities of biological material secured. While there is still work left to be finished, this work is winding down.

Today the focus is shifting to address more global threats, not only from nuclear and radiological threats, but also biological materials. The biological threat is very different from the nuclear threat, but an attack using biological material would be devastating. As a result, DOD is increasing its work to prevent the biological threat. Almost half of the cooperative threat reduction program in fiscal year 2012 will be dedicated to preventing a biological attack.

We look forward to discussing with our DOD witnesses how this effort, particularly those new efforts in Africa and elsewhere, are progressing. We would also be interested in hearing from our witnesses today how the response to the threat is evolving and what is the next round of challenges in nonproliferation programs generally. States such as India, Pakistan, and North Korea continue to increase the size of their nuclear weapons stockpile and delivery systems. Other states, such as Iran, are still trying to hide their actions and expand their nuclear programs. We would be interested in the progress and programs such as the proliferation security initiative and export controls, which are designed to prevent the fur-

ther proliferation of nuclear technology and delivery systems, primarily among state actors.

While the United States has been a leader in threat reduction programs, the problem is not a U.S. problem only. As a result, many of the programs are designed to build capacity in regional partners to detect and interdict illicit trafficking in WMD and related materials. Is the United States getting good cooperation from these partners?

The two Departments seek to engage new partners, such as India and China, in preventing proliferation. How will these programs be different from the traditional programs and who will bear the cost?

I thank each of our witnesses for being here this afternoon. I look forward to you answering these and many other questions and generally having a good discussion on this important topic.

Senator Portman.

STATEMENT OF SENATOR ROB PORTMAN

Senator PORTMAN. Thank you, Madam Chair, for this hearing and for our previous one, where we had the opportunity to speak with some of your colleagues in closed session. I'd like to join you, Madam Chair, in welcoming those here today and tell you thank you for your service and for those who serve under you, for what they're doing every day to help protect us from the existential potential threat of nuclear proliferation.

Clearly, since the Cold War our approach has had to change with regard to the issues you deal with every day. At that time I think "weapons of mass destruction" referred to the Soviets almost exclusively in the possibility of a nuclear attack, and we had a mutually assured destruction approach that really has dissolved now, and now the threat in some respects is much more difficult because it's more diffuse, and of course includes chemical and biological weapons, as well as radiological and nuclear weapons.

Of course, it has become a lot less predictable, as we've seen recently with rogue nations like Iran or North Korea and so many non-state actors having the shared goal to develop these destructive capabilities to terrorize and maybe sometimes to coerce others. Although we had a great success by recently eliminating the most wanted terrorist in the world, there are lots of violent groups now without a home who are dedicated, not to a government or to a place, but to an ideology of extremism. So that proliferation, as the chair has said, would be top on our priority list today to talk about.

With regard to the funding, let me just say that we looked at some of these numbers and part of what we're doing here is building a record for the authorization bill. We do spend billions of dollars a year in securing the world's most dangerous materials and keeping them out of the hands of those who wish to do us harm. As we've said, that's extremely important.

This has been a bipartisan effort over time and we're all committed to countering these threats. Nonetheless, in this fiscal condition we find ourselves in we need to be sure those dollars are being spent most effectively.

There is currently a discrepancy that I just want to raise in my opening statement and then we'll have a chance to talk about. If you look at the 2012 budget request from DOE's NNSA, it is a

$2.55 billion request and as I look here, since 2009 this means these programs at DOE have expanded substantially. In fact, it's almost $1 billion a year, more than it was during the previous administration. So we have seen substantial increases in DOE's programs.

The Government Accountability Office (GAO) has raised some concerns about the effectiveness of some of these programs and I'm sure you have had the opportunity to look at GAO's report. It says that the 4-year global nuclear materials security initiative lacks specific details on implementation. As I read it, it also indicates it lacks measurement to be able to know whether performance is being met.

It talks about the three nuclear nonproliferation programs that they reviewed having made different levels of progress. Only one, the materials protection control and accounting program, did they consider to have made considerable progress in securing the Russian nuclear warhead and material facilities, which is of course one of the major objectives.

They thought that the materials consolidation and conversion and the global threat reduction initiative programs had only exhibited limited success in achieving their objectives in Russia. The report also said that, because of questionable high-level Russian political commitment to working with the United States, the future of these programs was unclear.

Again I think NNSA has a critical mission. The question is whether the increased funding is justified and what measures can be taken to address these concerns, assuming they are valid concerns.

On the other hand, DTRA has had its budget decreased in the fiscal year 2012 request, and again this is a discrepancy I just want to hear more on today. Again, this decrease in DTRA funding comes as DTRA is being asked to do more and more and more, including hosting and conducting on-site verifications of arms control treaties, which is very important, particularly given the New START Treaty, including looking at issues that were raised in the U.S. Senate and in the House in that process. I understand inspections are already underway and I look forward to getting an update on how things are progressing there.

In contrast to the increases for NNSA, I'm interested in hearing the reasoning for DTRA's budget reduction despite these increased responsibilities.

Again, Madam Chair, I thank you for having the hearing and I appreciate the witnesses being here today. I look forward to hearing your testimony.

Senator HAGAN. Thank you, Senator Portman.

Each of you have submitted a written statement that will be included into the record and I'd like you each to keep your opening comments to about 5 minutes or so. Ms. Harrington, if you would start, then will be followed by Mr. Myers and then Mr. Handelman. Ms. Harrington.

STATEMENT OF ANNE M. HARRINGTON, DEPUTY ADMINISTRATOR FOR DEFENSE NUCLEAR NONPROLIFERATION, NATIONAL NUCLEAR SECURITY ADMINISTRATION, DEPARTMENT OF ENERGY; ACCOMPANIED BY JOHN GERRARD

Ms. HARRINGTON. Thank you, Madam Chairman. Madam Chairman, Ranking Member Portman: Thank you for the opportunity to join you today to discuss the investments the President has requested for NNSA's defense nuclear nonproliferation programs. I will abbreviate that as "DNN" in my remarks.

More importantly, thank you for your continued support of the NNSA and the 35,000 men and women working across the enterprise to keep our country safe, protect our allies, and enhance global security. We could not do this work without strong bilateral support and engaged leadership from Congress.

Since I have submitted a more detailed written statement, I will keep my remarks short.

If I could, I'd like to start with a simple but important statement. Preventing the spread of nuclear weapons and keeping dangerous nuclear and radiological materials out of the hands of terrorists is a vital national security priority. These are without a doubt national security programs. As President Obama said in his speech in Prague in April 2009, the threat of a terrorist acquiring and using a nuclear weapon is the most immediate and extreme threat we face. Indeed, it is hard to imagine a more dangerous threat to our Nation.

That's the danger. Here's the good news. On any given day, we have some of our Nation's most talented and hard-working people engaged worldwide in more than 100 countries to reduce the global nuclear threat. In that work, we are joined by a network of similarly committed nations, international organizations, nongovernmental organizations, and individuals that support and enable and collaborate with us on these critical efforts. I'm honored to share this table with two of those.

President Obama has shown strong leadership in protecting the safety and security of the American people by working to reduce global nuclear dangers. As part of that effort, he has requested $2.5 billion in fiscal year 2012 and $14.2 billion over the next 5 years to reduce the global nuclear threat by detecting, securing, safeguarding, disposing, and controlling nuclear and radiological material, as well as promoting the responsible application of nuclear technology and science. This includes stemming the risk of expertise proliferation through innovative science and technology partnerships.

The President's request provides the resources required to meet commitments secured during the 2010 Nuclear Security Summit. NNSA, along with DOD and other U.S. Government departments and agencies, working with countries around the world, is implementing these commitments. As partners, we are engaged in a focused and intensified international effort to lock down or remove vulnerable nuclear materials. We are executing an integrated, prioritized strategy that aligns authorities, capabilities, and resources to address global nuclear threats.

This three-tiered strategy covers the site, country, and global levels. NNSA takes a lead role in many of the activities that meet this

goal, including removing or eliminating special nuclear material where possible, securing that material and providing critical support to the International Atomic Energy Agency.

For fiscal year 2012, our budget request includes more than $1 billion to remove and prevent the smuggling of dangerous nuclear material around the world and enable NNSA to continue leading international efforts to implement more stringent standards for the physical protection of nuclear material and nuclear facilities worldwide.

The President is also seeking $890 million for fissile materials disposition, which supports the continued construction of the mixed oxide fuel fabrication facility, waste solidification building, and efforts to baseline the pit disassembly and conversion project at the Savannah River site in South Carolina. Not only will these facilities be used to permanently eliminate more than 34 metric tons of U.S. surplus weapons-grade plutonium, this will be done in a way that produces electricity for American consumers. Similarly, as part of our broader nonproliferation effort, Russia will also be disposing of 34 metric tons of its surplus weapons plutonium in a way that will provide energy for Russia.

Finally, this budget request directs more than $360 million to support the research and development required to create new technologies for detecting nuclear proliferation or testing and for monitoring compliance with nuclear nonproliferation and arms control agreements. To me, this last point is key. Investing in the future of the scientific and technical underpinnings of our program is critical to implementing the President's nuclear security agenda. This is serious business and we need the best minds in the country working at our national laboratories and sites to develop new tools that will keep the American people safe and enhance global security. Investing in a modern 21st century nuclear security enterprise is essential to preventing nuclear terrorism or nuclear proliferation.

All of NNSA, including defense nuclear nonproliferation, defense programs, counterproliferation, and emergency response, and many other agencies outside NNSA, as we recently discussed, rely on the skills, people, and facilities of the DOE enterprise. For example, our nonproliferation mission to protect, remove, and eliminate weapon-useable material, the uranium and plutonium, depends on maintaining our scientific and technical capabilities in these areas. These infrastructure investments, such as the uranium processing facility and the chemistry and metallurgy research replacement facility, are critical to our enterprise and deserve your support.

Madam Chairman, these are the highlights of our budget request as it relates to our nuclear nonproliferation programs. We recognize that we are making this request at a time of acute financial stress for our entire Nation and that this committee has many competing requests.

As we work to invest in the future and implement the President's nuclear security agenda, we remain committed to improving the way we do business. We fully understand that we cannot come before this Congress and expect increased investments if we are not able to demonstrate our ability to spend those resources wisely.

I am proud to say that improving how we do business is a priority for defense nuclear nonproliferation programs and we're seeing results. Last year our global threat reduction initiative became the first Federal program to receive the Project Management Institute's coveted Distinguished Project Award. Two weeks ago, our MOX program was honored with an environmental stewardship award from the State of South Carolina.

This committee has also voiced concerns in the past about the level of our uncommitted carryover funds. I can report that we have made continuous improvements in that area over the past 6 years and through diligent management efforts we have reduced the end-of-year uncommitted carryover funds from 15.5 percent in 2005 to 10.1 percent in 2010, while at the same time, seeing budget increases of 40 percent. This reduction puts the nuclear nonproliferation program well below the 13 percent threshold for uncommitted carryover funds established by DOE.

The vision outlined in this budget request supports the full range of NNSA missions by investing in infrastructure, people, science, technology, and engineering required to fulfil our missions. I look forward to working with the members of the subcommittee to make NNSA's vision a reality and I look forward to any questions you may have.

Thank you.

[The prepared statement of Ms. Harrington follows:]

PREPARED STATEMENT BY ANNE M. HARRINGTON

Madam Chairman, Ranking Member Portman, members of the subcommittee, thank you for the opportunity to present the fiscal year 2012 President's budget request for the Department of Energy's (DOE) National Nuclear Security Administration's (NNSA) Office of Defense Nuclear Nonproliferation (DNN). This budget request will enable the NNSA to meet its commitments to the American people and our international partners to reduce nuclear and radiological dangers around the world. The request also provides the science, technology, and engineering capabilities necessary to allow us to address the broader national security challenges of the 21st century.

While recognizing the economic challenges facing our Nation, the President has demonstrated through this fiscal year 2012 budget request his strong commitment to nonproliferation and nuclear security. This unprecedented investment in DNN's mission represents a commitment to implement the President's nuclear security agenda, but does so in a way that balances our highest priorities with continued focus on efficiency and effectiveness.

During his speech in Prague in April 2009, the President unveiled an ambitious nuclear security agenda, which identified the need to prevent the proliferation of nuclear weapons and keep dangerous nuclear materials out of the hands of terrorists, as a top national security priority. Meeting this objective, however, requires international commitment and action. The success of the 2010 Nuclear Security Summit was the first concrete demonstration of broad international commitment, resulting in 47 heads of state coming together and jointly endorsing global nuclear security objectives. Today, there is a robust international effort underway to secure the most vulnerable nuclear material around the world and to build on the success of the 2010 Summit.

NNSA's vision is to make the world a safer place. The words are simple, but the challenges to realizing that vision are substantial. The Office of Defense Nuclear Nonproliferation's role in the NNSA mission is to leverage its technical expertise, creativity, and other unique capabilities and resources to confront the challenges of nuclear proliferation and the threat of nuclear and radiological terrorism around the world. Our strategy includes engaging our domestic and international partners in a global effort to secure the most vulnerable nuclear materials worldwide; impeding the proliferation of nuclear weapons technologies, information, materials and expertise; providing technical support to the President's nonproliferation and arms control agenda; developing a new framework for nuclear energy that minimizes proliferation

risks; and advancing the science, technology and engineering base that supports DNN's missions.

IMPLEMENTING THE PRESIDENT'S NUCLEAR SECURITY AGENDA

The fiscal year 2012 NNSA budget request includes $2.55 billion for Defense Nuclear Nonproliferation for fiscal year 2012 and $14.3 billion over the next 5 years to reduce the global nuclear and radiological threat by detecting, securing, safeguarding, disposing, and controlling nuclear and radiological material, as well as promoting the responsible application of nuclear technology and science. Each fiscal year from fiscal year 2012 until fiscal year 2016 has been analyzed for priorities to achieve Presidential and operational objectives. This includes stemming the risk of weapons-expertise proliferation through innovative science and technology partnerships. The budget request provides the resources required to continue making progress on the President's international effort to secure the most vulnerable nuclear material around the world within 4 years, a key national security goal.

This budget request recognizes significant accomplishments of NNSA's nuclear nonproliferation programs in the past year and seeks the resources needed to continue to work toward the President's goals. NNSA along with the Department of Defense and other U.S. Government departments and agencies, working with countries around the world, is implementing Prague speech commitments to a focused and intensified international effort to lock down or remove vulnerable nuclear materials. We are executing an integrated, prioritized strategy that aligns authorities, capabilities, and resources to address global nuclear threats. This three-tiered strategy covers the site, country and global levels. NNSA takes a lead role in many of the activities that meet this goal, including removing or eliminating special nuclear material when possible, securing that material when not and providing critical support to the International Atomic Energy Agency.

For example, this request provides the necessary resources to support commitments secured from international partners to remove all remaining highly enriched uranium (HEU) from Belarus, Ukraine, and Mexico by April 2012, and to carry out the removal of nuclear material from other countries. It also contributes to preventing nuclear terrorism by working with Russia and other countries to secure and eliminate vulnerable weapons-usable material. The budget request also provides resources to work with the Department of Defense to strengthen international nuclear security cooperation. It will enable NNSA, working with the International Atomic Energy Agency (IAEA), to continue leading international efforts to implement more stringent standards for the physical protection of nuclear material and nuclear facilities worldwide.

The request of $2.55 billion is an increase of 10 percent from the fiscal year 2011 Continuing Resolution, and an increase of 19.6 percent over the fiscal year 2010 appropriation. This 10 percent, or $230.8 million increase will support efforts to secure the most vulnerable nuclear materials within the President's stated timeframe. The NNSA budget request remains consistent with our overall strategy to ensure that programs supporting the President's commitment lead to an international effort to reduce nuclear dangers.

In addition, the budget request supports the efforts of the Global Threat Reduction Initiative (GTRI) related to radiological material, as well as the activities of the International Nuclear Material Protection and Cooperation (INMP&C) program to enhance the ability of our foreign partners to detect nuclear smuggling both at fixed border crossings and internal checkpoints. The budget request also continues to support the Fissile Materials Disposition (FMD) U.S. plutonium disposition mission to include the three construction projects, as well as the U.S. uranium disposition program.

Specifically, our $2.55 billion fiscal year 2012 request includes:

- More than $508 million for GTRI to remove and secure high-priority vulnerable nuclear material around the world in 4 years, accelerate additional conversions of HEU fueled research reactors to the use of low enriched uranium (LEU) fuel, and to provide a comprehensive approach to permanently deny terrorists access to nuclear and radiological material at civilian sites worldwide;
- More than $890 million for the FMD program to dispose of U.S. surplus plutonium and highly enriched uranium by constructing a MOX Fuel Fabrication Facility and a Waste Solidification Building, and developing a capability to disassemble nuclear weapon pits and convert the material for use in MOX fuel. The fiscal year 2012 request also supports programmatic activities that are not part of the line item construction projects but are essential to dispose of surplus weapon-grade plutonium, including: MOX fuel

qualification, executing utility contracts, obtaining plutonium feedstock from Los Alamos National Lab in advance of a full-scale pit disassembly capability, obtaining depleted uranium oxide feedstock, storage of feed materials, and transportation.

• Over $571 million for the INMP&C program for additional Material Protection Control & Accounting (MPC&A) upgrades and sustainability support, expansion of MPC&A cooperation with countries outside of Russia and the former Soviet Union, and additional deployment of radiation detection systems with enabling support for sustained operations to combat illicit trafficking of nuclear and other radioactive materials under the Second Line of Defense (SLD) program;

• Over $417 million for the Nonproliferation and Verification Research and Development (R&D) program to provide the key technical support for the President's arms control and nonproliferation agenda, as well as to provide funding for the University of California pension obligations; and

• Nearly $162 million for the Nonproliferation and International Security (NIS) program to safeguard nuclear material; ensure adequate security of U.S.-obligated nuclear material provided to other countries and enhance work with partners to strengthen security globally; control the spread of WMD technologies, equipment, and expertise; and verify nuclear reductions and compliance with international regimes, treaties, and agreements.

AN INTEGRATED EFFORT TO ACHIEVE THE GOAL

Different people perceive the "threat" in different ways; we all have our views on how to make the world safer. At NNSA, we have formed our view collectively through discussions with our counterparts from across the U.S. Government. Working with a strong team from the National Security Staff and with the intelligence community, we have developed strategies and identified priorities for programmatic and diplomatic engagement. No matter what the risks and threats are, the most effective approach is to integrate our efforts and capitalize on our unique capabilities to work effectively across NNSA, within DOE and the interagency, and with our foreign partners. In that respect, the threat priorities of our international partners are also taken into account.

As One-NNSA, all of NNSA's major components work together closely. For example, the Office of Defense Programs and DNN collaborate on approaches to transparency and monitoring for treaty-related purposes; DNN and the Office of Emergency Response work together to carry out training in partner countries. This pattern of collaboration is important because our missions are so closely interrelated and we because share resources across the Nuclear Security Enterprise. For example, investments that sustain the stockpile will also support our full range of nuclear nonproliferation missions. In addition to the substantial support that our National Laboratories and facilities receive from Defense Programs and other parts of DOE, DNN also makes a major contribution to preserving and developing world-class expertise that can support all of NNSA's missions. We must continue to invest in the future.

We also have important common ground with our colleagues in the Offices of Nuclear Energy and Environmental Management at DOE as we all develop strategies to address the expansion of nuclear energy and the disposition of nuclear and radiological materials in a safe and secure way. We maintain constant contact with our partners throughout the interagency, particularly at the Departments of Homeland Security, State, and Defense, the Nuclear Regulatory Commission, and the National Security Staff (NSS). For instance, the NSS currently leads a strong interagency team that meets regularly to prioritize activities and to assess risk by material type and country, which in turn informs how we execute our programs. As the largest nonproliferation account in the government, NNSA's fiscal year 2012 budget request was developed with the interagency effort in mind and in the context of a well-defined scope of work within the President's timeframe for the 4-year effort.

But no matter how coordinated and integrated our efforts are in the United States, none of our efforts would be possible without the full engagement and cooperation of our foreign partners. The United States cannot control knowledge, material and technology as we did in the past. Globalization requires us to pursue partnerships based on shared nonproliferation objectives.

NNSA is one of several U.S. agencies actively working on the President's nonproliferation agenda, and has taken the lead in a number of areas. These capabilities are reflected in our fiscal year 2012 budget request, including:

Securing Nuclear and Radiological Material from Theft and Diversion

NNSA is the interagency leader in making sure that nuclear material worldwide is secured from theft and diversion at its source.

Through GTRI, NNSA leads U.S. efforts to convert research and test reactors from HEU to LEU, remove excess or unwanted weapons-usable nuclear and radiological material, and enhance the security of risk-significant quantities of nuclear and radiological materials in use at civilian sites around the world to help prevent terrorists from acquiring what they need to make a nuclear weapon or radiological "dirty bomb." Since President Obama's April 2009 Prague speech, NNSA has removed 963 kilograms of HEU and plutonium from 19 countries around the world. That is enough material for more than 38 nuclear weapons. Six countries have had all of their HEU removed since the Prague speech. In November 2010, NNSA completed a large-scale campaign to move spent fuel from Kazakhstan's BN–350 plutonium production reactor to a secure storage facility in eastern Kazakhstan. The spent fuel contains 10 metric tons of HEU and three metric tons of weapons-grade plutonium—enough material for more than 775 nuclear weapons. NNSA plans to complete a number of important projects in fiscal year 2012, including the removal of all HEU from Ukraine, Belarus, and Mexico in cooperation with each of those countries. NNSA will continue efforts to remove HEU from Vietnam, Uzbekistan, Poland, and Hungary in 2013. In fiscal year 2012, NNSA will continue to lead U.S. efforts to secure or recover high-risk radiological materials, enhance security at an additional 158 buildings worldwide, and recover an additional 1,900 disused or unwanted radioactive sealed sources here in the United States.

The INMP&C program has two main components. Under Material Protection Control and Accounting (MPC&A), the program prevents nuclear terrorism by working in Russia and other regions of concern to secure and eliminate vulnerable nuclear weapons and weapons exploitable material. Under its SLD Program, NNSA works with international partners to deploy radiation detection systems at international crossing points, airports, and seaports, and to provide mobile systems for use at interior checkpoints to detect and deter the illicit transfer of nuclear and other radioactive materials. Training and sustainability support are also key components of this program. Since the President's 2009 Prague speech, the program has completed MPC&A upgrades to 33 buildings containing weapons-usable material in Russia; initiated new upgrades at a number of Russian facilities; placed a cumulative total of 25 MPC&A regulations in development in Russia and other FSU countries to strengthen nuclear security safeguards; cooperated with the FBI to provide mobile detection training in four countries; deployed radiation detection systems at 162 sites; downblended over two metric tons of HEU to LEU in Russia; and initiated cooperation with India and China to develop nuclear security Centers of Excellence to help those nations become regional centers on nuclear security culture and training. The budget request will allow INMP&C to: complete MPC&A upgrades at 3 additional buildings in Russia with weapons usable nuclear material; provide additional MPC&A upgrades at 25 Russian nuclear material sites; continue to support the transition of security upgrades to sustainable operations at 76 sites in Russia, Kazakhstan, Belarus, and Ukraine; complete Russian Ministry of Defense training centers (Ochakovo, Krasnoyarsk, Abramovo); continue Russian inspections support activities and training, and support for secure transportation sustainability, measurement methodologies, and protective force programs; and will downblend an additional 1 MTs of HEU. SLD plans to install detection systems in 30 foreign strategic transit and border sites (cumulative total of 448 of 650 planned), to complete 3 Megaports in Cameroon, Vietnam, and Italy (for a cumulative total 48 of 100 planned), and to deploy mobile detection systems in 8 more countries.

In fiscal year 2012, marking one of the first major accomplishments of the 2010 Nuclear Security Summit Work Plan, NNSA led the U.S. Government and international efforts to finalize the fifth revision of the IAEA's Nuclear Security Recommendations on Physical Protection of Nuclear Material and Nuclear Facilities (IAEA Information Circular 225). In fiscal year 2012, through the NIS Program, NNSA will lead U.S. and global efforts to implement INFCIRC/225/Rev.5 and work closely with foreign partners to operationalize its recommendations. Such efforts will include facilitating the exchange of information on best practices for securing nuclear material in facilities and in transport. NNSA's NIS program will continue to lead U.S. interagency physical protection assessment visits to other countries that have received U.S.-obligated nuclear material under Section 123 Agreements for Peaceful Nuclear Cooperation. In doing so, NNSA and its predecessor organizations will have led over 125 visits to 48 countries since 1974. Additionally, NIS will continue to engage foreign partners and multilateral organizations on nuclear security initiatives globally through technical projects and nuclear security training activities.

NNSA's Next Generation Safeguards Initiative (NGSI) is working to strengthen the international safeguards system, a central pillar of the global nuclear nonproliferation regime. Safeguards ensure the timely detection of diversion of nuclear materials from peaceful activities. As NGSI works to advance the President's call in Prague for "more resources and authority for international inspections," it is simultaneously creating the next generation of dedicated nonproliferation experts, developing cutting edge technology for use by the IAEA and other safeguards organizations, and working with international partners to strengthen the implementation of IAEA safeguards.

Preventing Nuclear and Radiological Smuggling

As a complement to our facility-based physical security efforts that serve as a first line of defense, NNSA executes a number of programs that provide an additional layer of defense by detecting and preventing illicit transfers of nuclear-related material, technology and equipment. These programs help implement the President's call during his April 2009 Prague speech call to build on efforts to break up nuclear black markets and detect and intercept dangerous materials in transit.

Within INMP&C, the SLD Core program cooperates with foreign partners to install radiation detection equipment at borders, airports, and strategic ports in Russia, other former Soviet Union states, Eastern Europe, and other key countries, and provides mobile detection capability to law enforcement as well as related training and support. The SLD Megaports Initiative likewise cooperates internationally to deploy radiation detection equipment and provide related training to key strategic and high-volume ports. The fiscal year 2012 budget request provides for SLD installations at an additional 30 sites in Estonia, Kazakhstan, Lithuania, Latvia, Romania, Bulgaria, Ukraine, Kyrgyzstan, Poland, Mongolia, Croatia, and Moldova, mobile detection capability to 8 countries, and completion of Megaports installations and activities at 3 additional foreign seaports with ongoing installation activities at an additional 13 ports. The SLD Program will continue to provide some level of sustainability support to over 250 sites in over 40 countries.

NNSA's R&D program funds research to deliver nuclear detectors that are more sensitive, have better discrimination and are easier to deploy facilitating the discovery and identification of contraband radiation materials. The R&D program also delivers state-of-the-art imaging equipment that identifies chemical trails at a distance.

Within NIS, the International Nonproliferation Export Control Program (INECP) supports U.S. Government efforts to combat illicit trafficking of dual-use commodities required to manufacture WMD and their means of delivery. Specifically, INECP improves partners' export control systems and their ability to prevent illicit smuggling—particularly threats posed by black market networks. Notably, INECP collaborates with partners to develop sustainable national training capabilities, including outreach to strategic industries to improve compliance and efforts to strengthen our partners' frontline inspection and other enforcement capabilities. Since 2001, INECP has trained over 17,000 frontline personnel to recognize WMD dual-use commodities in 65 countries, 19 of which have adopted domestic programs.

Moreover, to help governments investigate the illicit use of nuclear materials and deter illicit trafficking of those materials, NIS's Confidence-Building Measures Program is advancing international cooperation in nonproliferation nuclear forensics. Nuclear forensics applies scientific techniques to identify unique characteristics of nuclear and radioactive material. Promoting cooperation among countries in nuclear forensics can produce investigative leads to link a seizure by one country with diversion in another, helping to better prosecute those involved. NIS's Confidence-Building Measures Program sponsors technical collaborations to strengthening the global capacity for effective nuclear forensics and increase data sharing.

Permanent nuclear material disposition

Part of the challenge in making the world a safer place is to be ever mindful of the challenges associated with disposing of large quantities of Cold War nuclear weapons materials. Disposition not only permanently reduces the risk that these materials could be stolen or diverted for use by rogue nations or terrorists but it also allows us to reduce the number of sites where these materials are stored thereby significantly reducing the cost associated with guarding and storing the material. In this regard, the President is seeking $890 million for the FMD program, which supports continued efforts to down-blend surplus U.S. HEU as well as to continue construction of the MOX Fuel Fabrication Facility, Waste Solidification Building, and efforts to disassemble nuclear weapons pits at the Savannah River Site in South Carolina. Not only will these facilities be used to permanently eliminate more than 34 metric tons of surplus weapons plutonium, they will do so in a way that

produces electricity for consumers right here in the United States. Similarly, as part of our broader nonproliferation effort, Russia will also be disposing of 34 metric tons of surplus weapons plutonium in a way that will provide energy for Russia. As I like to say, this is the ultimate swords to plowshares program, and a key element of the President's nuclear nonproliferation agenda.

Ensuring Transparent and Verifiable Compliance

The budget request allows NNSA to provide national leadership with continuous, global, real-time assurance that nuclear test agreements are respected through the U.S. Nuclear Detonation Detection System satellite payloads. DNN is leading interagency re-evaluation of system requirements and implementation to sustain needed capability at an affordable cost. The Nuclear Detonation Detection seismic model and sensor development raises confidence of policy makers about the nature, magnitude, and location of explosions that could be tests of nuclear devices.

The budget request will also support the monitored elimination of an additional 30 metric tons of Russian weapons-grade HEU in fiscal year 2012. This is one of the final steps toward completing the U.S.-Russia HEU Purchase Agreement in 2013. The Agreement has been one of NNSA's most successful nonproliferation efforts to date and is on track to convert 500 metric tons Russian weapons-grade HEU, the equivalent of 20,000 nuclear weapons, into nuclear fuel used to generate nearly 10 percent of all U.S. electricity.

The 1997 Plutonium Production Reactor Agreement (PPRA) between the United States and the Russian Federation has a goal of eliminating plutonium production for use in weapons. The Agreement has monitoring provisions to ensure that shutdown U.S. and Russian production reactors remain shutdown and that at least nine metric tons of Russian plutonium oxide produced from the last three operating Russian production reactors is not used in weapons. DOE is the Executive Agent for the PPRA, is a member of the U.S. component of the bilateral Joint Implementation and Compliance Commission that oversees PPRA activities, supplies technical experts for the monitoring visits in Russia, and hosts the Russian monitors at DOE sites during the shutdown reactor visits.

An important PPRA milestone has been reached—the three remaining operating Russian plutonium production reactors recently were shut down. The two reactors in Seversk were shut down in 2008, and the closure of the last, at Zheleznogorsk, was announced at the Nuclear Security Summit in April 2010. In accordance with the Agreement, those reactors will be transitioned to the established PPRA monitoring regime to ensure that they remain permanently shutdown. Of the 27 plutonium production reactors covered in the Agreement, including 14 in the United States and 13 in Russia, 11 have already been decommissioned to the point that they have been removed from monitoring and will never be used again for plutonium production. The United States and Russia will continue to monitor the remaining reactors until they are similarly decommissioned and the subject plutonium oxide is transitioned to another monitoring regime or is eliminated.

Technical Support to the President's Nonproliferation and Arms Control Agenda

DNN provides technical expertise, drawing from NNSA's nuclear security enterprise, as well as negotiating and policy expertise, to support the development, negotiation, and implementation of treaties and agreements, including the New START Treaty with Russia. While contributing to overall U.S. national security objectives, our focus is to meet our current and potential future treaty commitments and obligations while at the same time continuing to ensure the safety, security, and effectiveness of the U.S. nuclear weapons stockpile.

Drawing upon our expertise, including work in support of past arms control and nonproliferation agreements, DNN is playing an essential role in technology development to address future arms control and nonproliferation challenges. This includes developing the next generation of radiation detection equipment, advanced tamper indication and unique identification capabilities, and methodologies to support potential future warhead and material identification and verification requirements. We are also capitalizing on the resources in place at the National Center for Nuclear Security in Nevada. Such resources enable us to advance and demonstrate capabilities to address verification, monitoring, and transparency requirements by increasing confidence in our ability to detect and discriminate signatures of interest and capabilities that address technical nuclear forensics requirements and other nonproliferation initiatives, as described in the Nuclear Posture Review. We work in close cooperation with NNSA's Defense Programs and our U.S. Interagency counterparts to develop initiatives that accomplish U.S. objectives while minimizing any potential impacts across our own enterprise.

Investing in our future

The Nuclear Science and Security Consortium builds a stable pipeline of highly trained nuclear nonproliferation technical expertise for the NNSA laboratory system, sponsors basic research in nuclear nonproliferation, and bridges the nuclear nonproliferation knowledge bases in academia and the NNSA Laboratory system. By ensuring DNN maintains a vital R&D program to fund cutting edge nonproliferation technologies in the National Lab complex, we also make an investment in human capital development at the labs. Challenging research opportunities and world class facilities enable our labs to attract and hire the best and brightest young research scientists, technicians, and engineers, and thereby renew the workforce for generations to come. In addition, the DNN programs engage with national laboratories and facilities across the DOE complex to ensure the long term capabilities and expertise necessary to serve all of our missions.

International Engagement

We are also continuing to build upon our existing partnerships with foreign colleagues and to initiate new partnerships. Our traditional defense partnership with the United Kingdom, for example, is decades old. Our collaboration on technologies and methodologies to support monitoring and verification initiatives is now in the beginning of its second decade, and provides an essential mechanism to evaluate and test approaches in alternative environments. We hope to build upon this success by engaging with other key allies and partners as we work toward addressing the range of global nuclear security challenges, including potential future arms limitations and reductions agreements.

NNSA strives to build strong cooperative relationships with our international partners, both old and new. DNN's NIS program provides training and other support to enhance the capabilities of our partners to meet the commitments they made at the 2010 Nuclear Security Summit. The pledges from Japan and the Republic of Korea to develop Centers of Excellence for nuclear security and nuclear nonproliferation are two examples as NNSA is collaborating with both to develop nuclear security training curriculum, nuclear security test beds, and international workshops in nuclear security for their respective centers. The Obama administration is also working closely with strategic partners such as China and India to advance regional centers of excellence, with the overarching goal of spurring deeper engagement in preventing the spread of WMD-related material, technology, equipment and expertise.

As outlined in his 2009 Cairo speech, the President has also called for a more comprehensive engagement with Middle East and North African countries, stressing science and technology partnerships focused on issues of common concern. Since 2003, NNSA has advanced regional security cooperation through the Middle East Scientific Institute for Security (MESIS), formerly known as the Cooperative Monitoring Center, in Amman, Jordan. As a regional center of excellence, MESIS provides a forum for training and dialogue on regional security and proliferation concerns, including export controls, border security, and nuclear safety, security and safeguards. It marshals regional, U.S., and international resources to cultivate indigenous nonproliferation expertise. The Institute also facilitates workshops and training efforts for other NNSA and U.S. Government nonproliferation programs, and leverages U.S. Government and international nonproliferation efforts in the region.

Preparing for the Threats We Don't Know

As threats evolve and our knowledge of the world changes, NNSA must constantly re-evaluate its efforts to ensure that we have the flexibility to accomplish our goals. This constant re-evaluation must stretch from advanced technology R&D to working with our international partners to prepare for unknown threats by asking them to consider the plausible range of adversary capabilities, strategies, and tactics—including insider and cyber capabilities—when designing security systems. In this way, all of DNN's programs, along with the complementary activities of our partners throughout NNSA, DOE, and the rest of the U.S. Government, are forward looking and prepared for any eventuality.

CONCLUSION

NNSA carefully evaluates its security needs in a fluid, uncertain, and challenging international landscape. In coordination with the rest of the U.S. Government, NNSA has charted a path forward for DNN that shows our unwavering commitment to our Nation's security and enhances our formidable capabilities to address broader security challenges.

The NNSA is a technically-based organization with a strong nuclear heritage that serves as the base for our contribution to a wide range of national security solutions. NNSA is rooted in the management of our Nation's nuclear weapons stockpile and the application of nuclear energy for naval propulsion. Additionally, NNSA capabilities support a broad range of U.S. and international activities that address existing dangers, identify and prepare for future challenges, and advise the U.S. Government and our international partners on nuclear security matters.

This budget request takes DNN into the future and strengthens the capabilities that are themselves integral elements of our national security. The challenge is to retain the capabilities that continue to be essential, and to identify and develop those capabilities that are needed for the future.

Senator HAGAN. Thank you.

Mr. Myers.

STATEMENT OF KENNETH A. MYERS III, DIRECTOR, DEFENSE THREAT REDUCTION AGENCY, DEPARTMENT OF DEFENSE

Mr. MYERS. Madam Chairman, Ranking Member Portman: It is an honor to be here today to address the countering WMD mission performed by DTRA and the U.S. Strategic Command (STRATCOM) Center for Combating WMDs. I serve as director for both of these organizations, which are collocated at Fort Belvoir, VA. We work together to reduce WMD threats at their source, provide capabilities to deter, detect, interdict, and defeat them, and develop means for minimizing the effects and consequences of such attacks. We provide subject matter expertise and capabilities at the global, national, and battlefield levels. We conduct technology development to counter WMD threats. We also help maintain a safe, secure, and effective U.S. nuclear deterrent.

The threat is very real. The consequences of a WMD attack would cause mass casualties, have a crippling economic impact, and cause major sociological harm. As General Bob Kehler, the Commander of STRATCOM, recently told the full committee: "Of the threats we face, WMD clearly represent the greatest threat to the American people, particularly when they are pursued or possessed by violent extremists or state proliferators."

We have an increasingly effective national strategy for countering this threat. It harnesses expertise across the whole government and the international community. Our focus is on building additional and more effective barriers between the threat and the American people. Our team is truly a unique, agile, and dynamic institution. As you walk down the halls of our facilities, you will see nuclear physicists, microbiologists, and special forces operators working together to solve complex problems.

If you spend a day with us, this is what you might experience: At 7:30 a.m., senior leadership assembles in our 24–7 operations center for briefings on ongoing activities around the world and intelligence updates. In the briefing a map is projected displaying the location of our teams around the world. Status updates are provided for ongoing real world exercises and testing, and a detailed overview of all requests for information for reachback support from across the entire government.

Next door in a vault, subject matter experts of the reachback team are working on a request from a combatant commander for plume modeling analysis on a threatened chlorine attack against U.S. forces. At the same time, we are overseeing the Nunn-Lugar program's elimination of a Typhoon-class missile submarine in

northern Russia. The submarine was armed with 20 intercontinental missiles carrying 200 nuclear warheads, each capable of destroying an American city. Today it is being dismantled piece by piece.

Two thousand miles to the southeast, at the Nunn-Lugar Chemical Weapons Destruction Facility in Siberia, 152-millimeter artillery rounds containing VX nerve agent are being destroyed as the program eliminates the 2 million chemical weapons stored there. In the Mediterranean, our personnel are observing a proliferation security initiative exercise, where they are focused on stopping the potential trafficking of nuclear weapons material.

Half a world away in the Straits of Malacca, together with the U.S. Navy and a Southeast Asian partner, we successfully completed the test of a new nuclear material detector developed by our research and development enterprise.

At the U.S. naval submarine base at King's Bay, Georgia, we are preparing for a Russian inspection under the terms of the New START treaty. Across the planet, an inspection team has just arrived in Russia, en route to a base in Siberia to inspect warheads of deployed ballistic missiles or heavy bombers.

In the Middle East, a team is supporting a U.S. Central Command exercise to interdict a WMD shipment, while another team is conducting a vulnerability assessment of a critical U.S. command and control facility. At White Sands Missile Range in New Mexico, personnel are preparing to oversee a live test drop of a 30,000-pound massive ordinance penetrator by a U.S. Air Force B–2 bomber against a tunnel facility that replicates a known underground target in a potentially hostile country.

In Africa, at the request of the State Department, we are assisting a central African nation in improving the safety, security, and accountability of its manportable anti-aircraft missiles and other small arms. In East Africa, we are part of a U.S. interagency team discussing plans with their host counterparts for safety and security improvements at a facility where dangerous pathogens are potentially vulnerable to terrorist threats.

Madam Chairman, Senator Portman, what I have described here are real examples of the practical differences made by our team on a daily basis. In closing, we could not do our job without your strong and continued support. I thank you for authorizing our full fiscal year 2011 budget request and hope that we will earn your support for the fiscal year 2012 request.

I'd be pleased to answer your questions.

[The prepared statement of Mr. Myers follows:]

PREPARED STATEMENT BY KENNETH A. MYERS III

INTRODUCTION

Madam Chairman, Ranking Member Portman, and members of the subcommittee, it is an honor to be here today to address the Countering Weapons of Mass Destruction (CWMD) mission performed by the Defense Threat Reduction Agency (DTRA) and 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. They have stated and demonstrated their intent to acquire and use WMD against us. For example, the fall 2010 issue of the magazine "Inspire . . . and Inspire the

Believers," published by al Qaeda, contains the following passage: "For those mujahid brothers with degrees in microbiology or chemistry lays the greatest opportunity and responsibility. For such brothers we encourage them to develop a weapon of mass destruction, i.e., an effective poison with the proper method of delivery . . . Due to the extreme importance of moving the war with America over to the next stage, the state of weapons of mass destruction, we shall In Shā' Allāh cover such topics in more detail in our upcoming issues."

The United States has a national strategy that harnesses the Counter WMD (CWMD) expertise and capabilities across the U.S. Government and the international community. The President has challenged us to secure vulnerable nuclear materials across the globe and reduce the likelihood and consequences of biological attacks. In addition, focused efforts by the U.S. Government and other parties to the Chemical Weapons Convention (CWC) are destroying their chemical weapons. The Department of Defense (DOD) in recent years has better organized itself to perform the CWMD mission to include more streamlined policy development, mission oversight, requirements identification, WMD intelligence fusion, investment prioritization, planning and exercising, and CWMD mission execution. Additionally, DOD is working more closely with partners across the U.S. Government and overseas to counter WMD threats.

DEFENSE THREAT REDUCTION AGENCY MISSION

The mission of DTRA is to safeguard America and its allies from WMD (chemical, biological, radiological, nuclear weapons) and from high-yield explosives by providing capabilities to reduce, eliminate, and counter these threats and mitigate their effects.

DTRA is the DOD's center of expertise for the CWMD mission and is a national asset in terms of its unique CWMD knowledge and capabilities. The agency's programs and activities span the scope of the full national response: nonproliferation—reduction of WMD threats at their source; counterproliferation—the deterrence, interdiction, and defeat of WMD threats; and consequence management—the minimization of the effects of WMD attacks and the mitigation of their consequences. DTRA provides CWMD subject matter expertise at global, national, regional, local, and battlefield levels; performs CWMD-related technology development and integrates that technology with operational needs; provides planning assistance for the warfighters; and helps maintain a safe, secure, and effective U.S. nuclear deterrent. Today, more than ever, DTRA is working closely with our DOD, interagency, and international partners to build more effective barriers between WMD threats and the American people and our allies.

The agency has approximately 2,000 military and civilian personnel located primarily in Virginia, New Mexico, and Florida, but also at 17 more locations across the globe. Our budget request for fiscal year 2012 is $1.487 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 $504.747 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, $1.021 billion. Therefore, the total DTRA resource portfolio is approximately $3 billion.

DTRA performs its programs in response to direction provided by the Office of the Secretary of Defense (OSD). 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. Because DTRA conducts CWMD-related S&T development, we also work in partnership with the Assistant Secretary of Defense for Research and Engineering. In addition, as we are executing programs that implement DOD and national security policy, DTRA has a close partnership with the assistant Secretary of Defense for Global Strategic Affairs in the Office of the Under Secretary of Defense for Policy. Our close relationship to the Intelligence Community is also vital in terms of assisting that community in better assessing WMD threats and, thereby, better informing our planning and mission support.

DTRA is also the DOD Combat Support Agency charged with providing CWMD expertise and support to the Joint Chiefs of Staff, the Military Services, and the combatant commanders. While we serve all combatant commanders, we work most closely with the six Geographic Combatant Commanders, U.S. Special Operations Command (SOCOM), and STRATCOM.

U.S. STRATEGIC COMMAND CENTER FOR COMBATING WMD

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 assistance was and continues to be provided to the Services and also STRATCOM.

In late 2005, the Secretary of Defense assigned the Commander, STRATCOM, the responsibilities for integrating and synchronizing DOD CWMD efforts in support of U.S. Government objectives. The Commander, STRATCOM turned to DTRA for its CWMD expertise and established the U.S. Strategic Command Center for Combating WMD (SCC–WMD). On 31 January 2006, the Secretary of Defense assigned the DTRA Director to serve in the additional capacity as the Director, SCC–WMD under the authority, direction, and control of the Commander, STRATCOM. The SCC–WMD is colocated with DTRA at the Defense Threat Reduction Center on Fort Belvoir to leverage the agency's technical expertise and to provide a seamless partnership between the two organizations.

The mission of the SCC–WMD is to synchronize planning for the counter-WMD mission across DOD in conjunction with the entire U.S. Government's effort in the field. The SCC–WMD is responsible for establishing technical support and providing analysis of the global CWMD mission to the combatant commanders, Office of the Secretary of Defense, and the Joint Staff. The Center's approximately 70 military and civilian personnel coordinate global CWMD operations support; plan against designated WMD threats; develop and maintain a global CWMD concept of operations; provide military representation to U.S. national agencies, commercial entities, and international agencies for matters related to CWMD efforts; advocate for CWMD capabilities; integrate theater security cooperation activities, deployments, and capabilities that support campaigns to combat WMD; and execute CWMD operations, as directed.

Twice each year, the SCC–WMD hosts the Global Synchronization Conference, a series of planning sessions that bring together hundreds of CWMD leaders from across the U.S. Government and several partner nations. Participants work on specific issues in focus groups, develop desired outcomes and solution paths, and make meaningful progress on solution implementation between conferences. Achievements across recent conferences include development of a DOD-wide CWMD Campaign plan from a framework document to a detailed plan with goals, tasks, and performance standards that will enable us to assess CWMD mission progress; the drafting of health-based chemical, biological, radiological, and nuclear (CBRN) decontamination clearance standards for unrestricted operations of U.S. Transportation Command airlifters; and an interagency biosurveillance indications and warning exercise that clarified for CWMD planners the roles of the intelligence and medical communities in responding to a biological event.

The SCC–WMD also supports WMD Elimination operations undertaken in a hostile or uncertain environment to systematically locate, characterize, secure, and disable or destroy WMD programs and related capabilities. Its Joint Elimination Coordination Element (JECE) provides joint expertise and support in the development, training, and exercising of WMD Elimination related plans, operations, and forces. The SCC–WMD and DTRA are providing assistance to the Commander, STRATCOM, who was tasked to establish and maintain Standing Joint Force Headquarters for WMD Elimination as called for by the Quadrennial Defense Review.

Additionally, the Center is a key facilitator of the Proliferation Security Initiative (PSI), an international effort by 98 countries to stop trafficking of WMD, their delivery systems, and related materials to and from states and non-state actors of proliferation concern. The PSI Support Cell assists combatant command staffs in developing, planning, and executing PSI exercises; assists OSD and the Joint Staff in planning and executing international PSI exercises involving other U.S. Government departments and agencies; and provides subject matter expertise to international PSI meetings and activities.

RECENT DTRA/SCC–WMD ACCOMPLISHMENTS

I am pleased to report that DTRA and the SCC–WMD work together as a fully integrated team. As a team we have assisted the development of more efficient and effective DOD and combatant commander CWMD plans; advanced the means for assessing and exercising CWMD capabilities; shaped and advocated for CWMD requirements; and provided improved PSI planning support.

Other recent accomplishments include:

- DTRA successfully transitioned the Massive Ordnance Penetrator (MOP) to the United States Air Force. The MOP is a 30,000-pound conventional penetrating weapon designed to provide substantial improvements in accu-

racy and lethality over current weapons in the arsenal to defeat hardened, deeply buried targets.

• DTRA responded this past year to over 1,600 "reach back" requests for CWMD expertise and WMD effects analysis from OSD, the Joint Staff, the combatant commanders, National Guard WMD Civil Support Teams (WMD–CSTs), and other DOD and interagency customers. This is an over four-fold increase in numbers of requests from when we began providing this expertise several years ago. In addition, our reach back customers are asking for more detailed information and analysis, and expecting faster turn around times. We have provided expertise and supported events ranging from the wars in Iraq and Afghanistan to the Gulf Oil spill to the Super Bowl and the State of the Union Address.

• Without missing a beat in executing our daily mission, we concurrently responded to events in Libya, supporting Operations Odyssey Dawn and Unified Protector, as well as the consequences of the earthquake and tsunami in Japan, by supporting Operation Tomodachi. At the peak level of activity, over 200 DTRA and SCC–WMD personnel daily supported 33 liaisons, CWMD planners, JECE personnel, and consequence management experts deployed to the U.S. Africa Command in Germany, as well as the U.S. Pacific Command, U.S. Forces Japan (USFJ) and the U.S. Embassy in Tokyo. We responded to well over 500 requests for information in support of both operations. In addition, we recommended consequence management technologies for consideration by the Commanders, U.S. Pacific Command and USFJ. Our ability to support these events at opposite ends of the earth, on short notice, and on a continuing basis while still meeting other mission requirements demonstrates the agility and professionalism of the DTRA/SCC–WMD team.

DTRA'S NEW STRATEGIC PLAN

Many organizations within DOD and across the U.S. Government contribute in some way to countering WMD threats. With a fulltime focus on CWMD, DTRA provides the core of the DOD expertise for countering WMD threats. Rather than duplicating capabilities and expertise that exist elsewhere inside and outside the department, DTRA partners with these organizations, leveraging their expertise and efforts and making the full scope of our knowledge and capabilities available to them. As threats evolve and budgets tighten, we must deepen existing relationships and build new partnerships across the department and throughout the U.S. Government and with our friends and allies overseas. We also understand that we need to be more effective and efficient in how we perform our mission. Two examples of this are our ongoing effort with the Department of Energy's National Nuclear Security Administration (NNSA) on opportunities for: (a) collaborative R&D on nuclear-related threats; and (b) joint offices that will reduce required space in U.S. embassies or the need to rent commercial office space abroad. Both departments and the United States will benefit.

The new DTRA Strategic Plan, released last November, recognizes today's realities. It will provide for forward movement in concert with our DOD, interagency, and international partners; facilitate more efficient and effective mission execution; and underpin our fiscal year 2012 budget request. At the heart of this plan are three goals.

Goal 1—Adapt to and shape the dynamic Global Security Environment

DTRA cultivates interconnected, mutually supportive partnerships to counter WMD threats. We must focus on developing new and expanding existing bilateral and multilateral partnerships to promote broader international cooperation on nonproliferation, counterproliferation, and consequence management; support the cooperative elimination of WMD threats abroad; improve the security and accountability of vulnerable nuclear, biological, and chemical material globally; and improve strategic global situational awareness to respond to emerging threats.

As the revolution in the life sciences advances enabling technologies and the ability to exploit these technologies becomes increasingly available, there is the urgent need to provide improved protection against naturally occurring extremely dangerous pathogens or newly created biological materials. As American troops are called upon to operate around the world, disease surveillance becomes an even more important aspect of force protection.

Guiding these efforts is a strategy built upon our success with the Nunn-Lugar CTR Program, which is expanding to include new partnerships beyond the former Soviet Union (FSU) and greater focus on reducing the threat of biological weapons.

This innovative cooperative program for reducing WMD threats has an impressive history of success. In the FSU, the Nunn-Lugar program has deactivated 7,599 nuclear warheads; and destroyed 2,367 ballistic missiles and strategic air-to-surface missiles, 155 strategic bombers; 32 ballistic missile submarines, and 678 silo and mobile missile launchers. In addition, 24 Russian nuclear weapons storage sites have received security upgrades as have 19 former biological weapons and health facilities. Four former Soviet biological weapon production facilities have been eliminated or converted. Twenty-three disease surveillance labs across the FSU have been built and equipped to enhance early detection of biological incidents. In addition, over 17,000 tons of chemical weapon agents and 819,000 chemical weapon rounds have been destroyed either in Russia or Albania.

While Nunn-Lugar activities will continue in the FSU, the program is expanding to new regions and increasingly focused on cooperative efforts to reduce biological threats. The Cooperative Biological Engagement (CBE) Program is working with new partner countries to build capacity that improves safe and secure diagnosis of dangerous disease outbreaks and to gain an understanding of their indigenous pathogens. These Nunn-Lugar efforts will directly contribute to improved force protection for our military personnel—a top priority for the Services and the combatant commands as expressed by the Commander, U.S. Africa Command, in a 4 January 2011 letter to Senator Richard Lugar, who had visited diagnostic and research laboratories in East Africa in November 2010. In this letter, General Kip Ward stated: "Your call for the United States to work together with African partners and provide financial support to mitigate potential bio-terrorism threats was very timely and highlights a key area for intensified engagement now. I share your concern that biosecurity should be enhanced, and quickly, so that al Qaeda and other terrorist groups in the region are denied access to deadly pathogens that may cause large-scale human suffering, death, and economic chaos."

To accomplish this, we rely on the knowledge, skills, capabilities, and, in some cases, existing relationships with these nations that our partners across the U.S. Government—including the Departments of State, Energy, Health and Human Services, and Agriculture—already possess. Our efforts simultaneously aid the regional strategic objectives of the combatant commands by increasing biosafety for partner nation populations.

Objectives under this goal include:

- In collaboration with the NNSA, support President Obama's 4-year nuclear lockdown goal, both with existing partners in the FSU and with new partners like China and India.
- Initiate and strengthen strategic relationships in conjunction with our interagency partners to explore collaborative efforts to prevent, reduce, and respond to WMD threats.
- Initiate and expand CBE programs and relationships with, among others, Kenya, Uganda, Pakistan, Afghanistan, and India to secure and consolidate collections of extremely dangerous pathogens and their research in the minimum number of secure laboratories and build capacity to quickly diagnose and report natural occurring or deliberate bio-threats.
- In concert with the CBDP develop and expand biosurveillance technologies that encompass early detection, early information sharing, and the ability to make informed decisions in near-real time.
- Develop bilateral and regional-level capacity to counter WMD proliferation through collaborative workshops, training, equipment enhancements, and regionally integrated counterproliferation efforts to include the International Counterproliferation Program, the Nunn-Lugar WMD Proliferation Prevention Program, and various counter-trafficking programs.
- Support Department of State Office of Weapons Removal and Abatement efforts to assess, reduce, and secure stockpiles of small arms and light weapons (SALW) worldwide. These efforts help foreign governments ensure that manportable air defense systems, other SALW, and related ordnance are properly secured and managed and that excess stockpiles are destroyed. DTRA performs assessments, provides technical advice, and presents best practices through training seminars. Although these weapons and munitions are not WMD, DTRA's on-site weapons inspection and accountability expertise has been applied to reduce the proliferation risks and advice countries on how to avoid accidental explosions in their munitions depots.
- In concert with the Department of State, develop and execute a "whole-of-government" supported program to build consequence management capacity with international partners.

Goal 2—Provide Counter WMD Capabilities to Meet Current Threats and Challenges

DTRA enables warfighters and allies to counter WMD threats swiftly, effectively, and as far from our borders as possible. Counterproliferation and consequence management activities account for the largest part of this second goal. Related objectives include:

- Expansion of near-real time technical "reach back" support to meet the increased number and sophistication of WMD related requests from a growing list of customers including OSD, the combatant commanders, and the WMD–CSTs.
- Priority attention on the safety, security, and accounting of the Nation's nuclear weapons under DOD's responsibility.
- Expanded development of WMD active and passive detection technologies and accelerated integration into operational concepts to measurably increase standoff detection capabilities and improve means for interdicting WMD on the move.
- Improved non-nuclear means of defeating underground facilities, particularly those associated with WMD. We have particularly close partnerships with the Services, SOCOM, and the Intelligence Community in this area.
- Accelerated development and transition of nuclear forensics and weapons effects capabilities that will increase the understanding of tomorrow's WMD threat environment and ensure the survivability and operability of systems and key infrastructure following WMD attacks.
- Enhanced combatant commanders' capability to eliminate and respond to WMD threats and vulnerabilities, including the improvement of the combatant commanders' ability to plan and execute CWMD responsibilities.
- Improved WMD technical analysis efforts with particular emphasis on modeling, simulation, wargaming, and tool development across the WMD spectrum.
- Better integrated intelligence data and WMD technical expertise to provide improved understanding of the characteristics, risks, and vulnerabilities of WMD threats.
- Develop a collaborative approach to CWMD education and training better focused on the needs of the combatant commanders, the Military Services, and our interagency partners.
- Improved capabilities to defeat WMD agents with minimal collateral damage.
- Accelerated development and transition of technologies to improve the protection of the warfighters through passive means and decontamination.
- In cooperation with the CBDP, develop medical technologies to protect the warfighter and the populace from emerging and genetically engineered biological threats by linking the identification of pathogens to the development of medical countermeasures and placing higher priority on vaccine development and production to counter disease pandemics.

Goal 3—Institutionalize a "whole-of-DTRA" approach to enhance the agency's mission performance

The third goal calls for the improvement and integration of strategic planning, management, and business processes; improved information technology infrastructure and knowledge management; and the development of increased intellectual capital to meet the future WMD threats and provide the required CWMD expertise.

FISCAL YEAR 2012 BUDGET REQUEST

I would like to thank the subcommittee for fully authorizing DTRA's fiscal year 2011 budget request. I request your support for our fiscal year 2012 budget request of $1.487 billion as follows: $432.133 million in Operations and Maintenance, Defense-wide funding; $13.006 million in Procurement, Defense-wide; $533.652 million in Research, Development, Test and Evaluation, Defense-wide funding; and $508.219 million for Nunn-Lugar CTR Program. I also urge your support for the request for the DOD Chemical and Biological Defense Program Science and Technology (CBDP S&T) program, which DTRA executes. These budget requests include efficiencies implemented as part of developing the President's budget submission. Highlights of the DTRA fiscal year 2012 budget request follow.

OPERATIONS AND MAINTENANCE FUNDING

Most DTRA Operations and Maintenance (O&M) funding directly supports the warfighters and national missions. The requested $432.133 million would be applied as follows:

• $71.731 million for Nonproliferation Activities including the New Strategic Arms Reduction Treaty, Conventional Armed Forces in Europe, Chemical Weapons Convention, and Open Skies missions; Defense Treaty Inspection Readiness Program; International Counterproliferation Program; and Secretary of Defense Support.
• $147.113 million for WMD Combat Support and Operations including combat support to the Joint Chiefs of Staff, combatant commands, and Services; operational and analytical support for nuclear weapons and WMD matters; direct technical support to the combatant commands for planning, exercises, and real-world operations; deployable subject matter expertise; targeting support and combat assessments; Balanced Survivability Assessments that provide mission survivability evaluations; Joint Staff Integrated Vulnerability Assessments to improve force protection at home and abroad; support to the Global Initiative to Combat Nuclear Terrorism; and support to Combatant Command Theater Security Cooperation planning and activities.
• $25.253 million for DTRA's support to the SCC–WMD including development and maintenance of a WMD common operating picture; synchronization of CWMD planning across DOD and with interagency partners to include the Global Synchronization Conference; access and continuity to national WMD expertise; DTRA Operations Center; and 24/7 technical reach back.
• $10.093 million for the Defense Threat Reduction University that provides unique training for students from all levels of DOD, Federal and state agencies, and allied countries in nuclear weapons; nuclear and radiological incident command, control, and response; counterproliferation with emphasis on operational support; and maintenance of the DOD source of information and analysis of CWMD and nuclear knowledge.
• $177.943 million for Core Mission Sustainment that provides for all agency mission essential functions including resource management, security and asset protection, information and knowledge management, and acquisition and logistics management. Special care was taken in preparing this request to ensure that much-needed information technology and knowledge management upgrades essential to DTRA's global mission execution were funded to the fullest extent possible.

RESEARCH, DEVELOPMENT, TEST AND EVALUATION FUNDING

DTRA research and development programs respond to the most pressing CWMD challenges including stand-off nuclear detection; modeling and simulation; support to Special Operations Forces; WMD intelligence, surveillance, and reconnaissance; support to the Intelligence Community; hard target defeat; and system survivability against WMD effects.

The requested $533.652 million would be applied as follows:

• $47.737 million for Basic Research to discover and develop CWMD-related fundamental knowledge and understanding by DOD and other U.S. Government laboratories, industry, and academia—to include partnerships with foreign universities. This program manages over 200 active basic research awards on a 3- to 5-year cycle. Since 2007, DTRA has made 205 basic research awards worth $97.2 million in 36 States, thereby funding the CWMD-related research projects performed by more than 500 students and 100 post-doctoral researchers and resulting in more than 500 publications and 25 patents.
• $196.954 million for WMD Defeat Technologies Applied Research including systems engineering and innovation; counter-terrorism technologies; detection technology; advanced energetics and CWMD weapons; nuclear survivability; nuclear and radiological effects; WMD battle management; test infrastructure; and CWMD fundamental research.
• $283.073 million for Counterproliferation Initiatives Advanced Technologies Development including systems engineering and innovation; counter-terrorism technologies; detection technology; advanced energetics and CWMD weapons; nuclear survivability; WMD battle management; and target assessment technologies.
• $5.888 million for WMD Defeat Capabilities Development and Demonstration on nuclear and radiological effects.

CBDP S&T BUDGET REQUEST

Defending the homeland and improving CBRN defense capabilities are top national and DOD priorities because it is not possible in a practical sense to distinguish between public health and warfighter protection. The CBDP is a key part of a comprehensive, national strategy to prevent, protect, and respond to emerging 21st century threats posed by an ever-evolving spectrum of chemical and biological threats. Directed by the National Strategy for Countering Biological Threats, the White House Initiative on Reinventing the Medical Countermeasures Enterprise, the 2010 Quadrennial Defense Review, and the Defense Planning and Program Guidance, the CBDP supports comprehensive DOD 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 the funding for the CBDP is not part of the DTRA budget request, the agency does execute the S&T portion of this program, for which the department has requested $504.747 million in fiscal year 2012.

This S&T funding provides for technology development to advance CBRN detection, decontamination, medical treatments and diagnostics, battle analysis and management, modeling and simulation, integrated early warning and medical surveillance, individual and collective protection, and medical prophylaxes. I will highlight four significant programs and initiatives:

- The Medical Countermeasures Initiative (MCMI) will address unique operational medical countermeasures (MCM) requirements; establish a Public-Private Partnership for advanced development of MCM candidates to achieve Food and Drug Administration (FDA) licensure, priority manufacture of FDA-licensed products, and surge production capacity to respond to a national emergency. This program is vital to staying ahead of WMD threats and I urge your strong support for it.
- The Transformational Medical Technologies (TMT) Program represents a paradigm shift for biodefense through the rapid identification of known and unknown pathogens and the corresponding rapid discovery of effective countermeasures. The TMT has demonstrated an "end-to-end" capability to respond to emerging infectious diseases and genetically engineered threats. This highly successful effort has demonstrated abilities to: perform threat identification, characterization, and evaluation within 24 hours; manufacture and test materials in 72 hours; and initiate animal efficacy testing within 2 weeks, to be completed within 1 year.
- Since time is the key critical factor in responding to biological threats, enhancing global biosurveillance capabilities is a priority for DOD. Biosurveillance activities performed by the department include research, development, and acquisition of medical diagnostics, data fusion and management, and environmental biodetection capabilities. DOD biosurveillance activities are enhanced by establishing strategic partnerships and scientific cooperative efforts with partner Federal departments and agencies as well as nations across the globe.
- Nontraditional Agents (NTAs) are chemicals and biochemicals reportedly researched or developed with potential application or intent as chemical warfare agents, but which do not fall in the category of traditional chemical warfare agents or Toxic Industrial Chemicals/Materials. NTAs pose unique risks and challenges for our chemical defense capabilities and the NTA Countering Advanced Threats initiative addresses emerging and future capabilities.

It is important to emphasize that DOD CBDP programs are conducted in partnership with, and leverage the expertise and capabilities of, departments and agencies across the U.S. Government.

PROCUREMENT FUNDING

The DTRA Procurement, Defense-wide request replaces mission essential vehicles and equipment and procures new investment items required to perform agency missions. The fiscal year 2012 request is for $13.006 million, $0.949 million higher than the fiscal year 2011 estimate. As with the DTRA O&M account, special care was taken in preparing this request to ensure that critically essential information technology and knowledge management upgrades essential to DTRA's global mission execution were funded to the fullest extent possible.

NUNN-LUGAR COOPERATIVE THREAT REDUCTION FUNDING

The Nunn-Lugar program's overarching mission is to partner with willing countries to reduce the threat of WMD and related materials, technologies, and expertise. This program has expanded its activities beyond the FSU as authorized in the National Defense Authorization Act for Fiscal Year 2008. For fiscal year 2012, the Nunn-Lugar program has been restructured to clearly link efforts to established national security strategies, gain efficiencies among related project efforts, and enable and promote the expansion of the program beyond the FSU.

The $508.219 million, a 3-year appropriation, requested for this program in fiscal year 2012 would be applied for 3 years as follows:

- $63.221 million for Strategic Offensive Arms Elimination in Russia to include 20 SS–19 Intercontinental Ballistic Missiles (ICBMs), 11 SS–19 silos and launch control centers, 36 SS–25 ICBMs, 27 SS–25 road-mobile launchers, and 20 SS–N–18 Submarine-launched Ballistic Missiles (SLBMs). This request is a $10.311 million less than the fiscal year 2011 estimate. In addition the funding would decommission one SS–25 ICBM regiment; complete the dismantlement of nuclear reactor cores and launcher sections of 1 DELTA III Ballistic Missile Submarine (SSBN) and eliminate 16 SLBM launchers; and complete the dismantlement of the nuclear reactor cores and launcher sections of one Typhoon SSBN and eliminate 20 SLBM launchers.
- $9.804 million for Chemical Weapons Destruction technical support to the Chemical Weapons Destruction Facility at Shchuch'ye, Russia. This is $6.204 million more than the fiscal year 2011 estimate. To date, this effort has resulted in the destruction of 1,680.4 metric tons of declared chemical weapon agents.
- $121.143 million for Global Nuclear Security. This is $43.136 million less than the fiscal year 2011 estimate. This program area renames and consolidates all activities related to nuclear warhead and weapons-grade nuclear material security within selected countries. These efforts provide enhanced physical security, including associated inventory management and security training support, for strategic and non-strategic (tactical) nuclear weapons and fissile materials. The program also improves security for nuclear material that meets specific criteria for enrichment and quantity and is judged to be vulnerable. In addition, it assists in the secure transport of nuclear warheads and other qualifying material to dismantlement facilities, consolidated secure storage areas, or processing facilities for disposition. This program also assists with the establishment of Centers of Excellence with partner countries to enhance training capabilities for nuclear security, material control, and inventory management that is consistent with best international practices, and installs additional security measures in Kazakhstan.
- $259.470 million for Cooperative Biological Engagement. This is $50.436 million more than the fiscal year 2011 estimate. This program was formerly titled Biological Threat Reduction. The CBE program counters the threat posed by pathogens (as delineated in the U.S. Select Agent List); related materials and expertise; and other emerging infectious disease risks. It helps prevent these pathogens from reaching any foreign state or non-state actors who may use them against the United States and its allies. The CBE program focuses on delivering tailored approaches that recognize and build upon partner countries' indigenous capacities. The CBE program builds capacity and advocates best practices for the safe and secure handling of extremely dangerous pathogens. It supports transparent responsible research to understand indigenous dangerous pathogens in partnership with the whole of U.S. Government and international partners. These collaborative partnerships enhance global capacity to detect, diagnose, and mitigate biological risks of concern. These partnerships also facilitate an ability to initiate timely and effective disease control measures to contain trans-border global disease threats. The program is engaged with Ukraine, Georgia, Azerbaijan, Armenia, Kazakhstan, Russia, Pakistan, Afghanistan, Kenya, and Uganda. In fiscal year 2012, it will partner with Iraq, Tanzania, Djibouti, South Africa, and India.
- $28.080 million for Proliferation Prevention by building partner capacity in Armenia and Moldova, in collaboration with counterproliferation capacity building programs across the U.S. Government, and expanding ongoing efforts within the FSU, to include additional land border assistance and bolstered regional training capacities in Ukraine; land border assistance in Armenia; and possible land border training and equipment assistance in Moldova. This is $1.919 million more than the fiscal year 2011 estimate.

Additionally, it is envisioned that this will support project assessments for future land border and maritime efforts that enhance CWMD command, control, communications, surveillance, and detection and interdiction capabilities.

• $2.5 million for Threat Reduction Engagement opportunities in new geographical areas. This is $2.500 million less than the fiscal year 2011 estimate.

• $24.001 million for Other Assessments/Administrative Support including audits and examinations of provided assistance, contractor advisory and assistance services, and U.S. Embassy support in partner countries. This is $0.961 million more than the fiscal year 2011 estimate.

CONCLUSION

Madam Chairman, Senator Portman, and members of the subcommittee, the DTRA/SCC–WMD team has an impressive record of reducing, deterring, defeating and countering WMD threats. We have strong partnerships with the combatant commanders, the Joint Staff, across the U.S. Government, and with allies and friends overseas. DTRA has made and continues to make the world safer—whether we are performing on-site inspections as part of the U.S. arms control treaty obligations; overseeing the destruction of FSU WMD weaponry; conducting imaginative and unprecedented threat reduction activities; developing new capabilities for defeating WMD in place or on the move; protecting people, systems, and infrastructure; improving CWMD planning; enabling CWMD operations; and supporting the U.S nuclear deterrent.

In the years ahead we will be expanding cooperative threat reduction and engagement on a worldwide scale with new partners. We will enable the warfighters and our allies to more effectively and efficiently counter WMD threats by providing the intellectual, technical, and operational expertise that will permit far more effective decision making and mission execution.

I hope that we continue to earn your trust and support. I would be pleased to respond to your questions.

Senator HAGAN. Thank you.

Mr. Handelman.

STATEMENT OF KENNETH B. HANDELMAN, ACTING ASSISTANT SECRETARY FOR GLOBAL STRATEGIC AFFAIRS, DEPARTMENT OF DEFENSE; ACCOMPANIED BY JED ROYAL, DIRECTOR, OFFICE OF COOPERATIVE THREAT REDUCTION POLICY, DEPARTMENT OF DEFENSE

Mr. HANDELMAN. Madam Chairman, Senator Portman: It's an honor to testify today on DOD's nonproliferation activities and on our efforts more broadly to counter the threat of WMDs. It's a personal pleasure to be joined by Mr. Jed Royal, who is sitting behind me to my left, who is the Director of the Office of Cooperative Threat Reduction Policy. It's Jed and his team, working with Ken Myers and his team, who actually make things really happen in the Nunn-Lugar cooperative threat reduction program.

I'd like to focus my opening remarks on an area that has attracted significant attention and indeed to which you referred, Madam Chairman, in your opening remarks. That is DOD's work in biodefense. Now let me be clear about the administration's WMD priorities overall. The President has said that the greatest threat to the United States is a nuclear weapon in the hands of a terrorist. However, the President has also given a similar high priority to biodefense. The December 2009 national strategy for countering biological threats highlighted the significant threat to our people, our coalition partners, and our forces posed by especially dangerous pathogens.

Sometimes it is not so obvious why DOD should care so much about biodefense issues. Let me briefly highlight why we care and

very much. First, biodefense is not merely about the health of U.S. troops and their families. It's about the ability of U.S. troops to fight and win in an environment that might be compromised by diseases against which we have no protection or treatment.

Second, even if U.S. forces are prepared to fight in such an environment, our doctrine and our force structure require that we fight alongside coalition partners. If our partners are vulnerable to biothreats, then we can count them out of the fight right from the start.

Third, biodefense is an area where we can use modest investments prior to a conflict to maximize our capabilities during a conflict. Here are some of the things that we are already doing in this area. To limit proliferation of especially dangerous pathogens, we're working with partner countries in areas where dangerous diseases are endemic to improve laboratory physical security and security practices.

To improve our understanding of dangerous diseases that can impact our troops, we're expanding cooperative research projects with partner countries and leveraging the U.S. military's overseas lab network. To improve our early warning posture, we're pursuing a disease surveillance capability that will give us a heads-up about the origin and potency of outbreaks that could spread in our forces or our population.

These are just a few examples of how DOD is trying to get ahead of what we believe is an underaddressed security challenge. I want to emphasize how closely we coordinate with our colleagues in the public health business without getting into their business. We have been careful to maintain our focus on national security and to avoid overlap with the efforts of established U.S. public health outreach overseas. But it is very important that DOD engage aggressively in this global biodefense effort. DOD and State are the only U.S. agencies with authority to develop biodefense relationships with partners around the globe in support of U.S. national security, and DOD has a special equity, given how frequently and far afield we deploy our military members.

Our work in this area is still in its infancy. We have a great partnership with other U.S. agencies and we are learning important lessons. I want to leave you with two of those lessons as I wrap up.

First, we've learned that, as with other WMD, threats to the health of our forces are best addressed at the source, in regions where dangerous diseases originate.

Second, we've learned that, even as we carefully deconflict our biodefense work with activities of our public health colleagues, there really is no way to draw a bright line distinction between public health and national security.

Madam Chairman, Senator Portman, I wanted to use my opening remarks to focus on DOD's biodefense activities because this is a conversation that we need to expand with the committee. As biological science becomes more accessible and borders less secure, we believe that the bio threat will only increase, and DOD's biodefense activities will increase as well.

I look forward to your questions.

[The prepared statement of Mr. Handelman follows:]

PREPARED STATEMENT BY KENNETH B. HANDELMAN

Madam Chairman, Ranking Member Portman, members of the subcommittee, it is an honor to appear before you to discuss the Department of Defense's (DOD) countering weapons of mass destruction (CWMD) efforts. The Department is building on its legacy of counterproliferation and threat reduction work while adjusting activities to meet new proliferation challenges and emerging threats. I welcome the opportunity to discuss these developments with you today.

It is a special honor to appear with two colleagues with whom I work very closely: the Director of the Defense Threat Reduction Agency (DTRA), Ken Myers, and the National Nuclear Security Administration's (NNSA) Deputy Administrator for Defense Nuclear Nonproliferation, Ms. Anne Harrington.

DTRA and the office I oversee—OSD-Policy's Global Strategic Affairs organization—serve complementary roles in the development, execution, and oversight of the Department's CWMD mission. In general terms, my office develops strategy and policy guidance, manages interagency and international relationships, and sets Department CWMD priorities. DTRA is the entity responsible for implementing the CWMD strategic guidance which my office has developed. DTRA accomplishes this mission with acquisition oversight of the Assistant Secretary for Nuclear, Chemical and Biological programs. As a practical matter, all of these DOD components execute responsibilities at all levels in close coordination with each other, and with combatant commanders, especially U.S. Strategic Command.

Our missions are executed with essential support from the Department of State, and in cooperation with Ms. Harrington and her team at NNSA. I do not claim complete success in all we do, but it is not an exaggeration to say that the U.S. Government's CWMD "community" is a successfully integrated interagency team.

GLOBAL ENVIRONMENT AND DOD'S STRATEGY

The threat posed by proliferation of weapons of mass destruction (WMD) remains complex. The intent of states and non-state actors to acquire WMD, combined with the availability of sensitive materials and increased access to scientific expertise make WMD more accessible than ever to potential adversaries.

President Obama made clear in his April 2009 speech in Prague that overcoming the threat posed by WMD—especially the nexus between WMD and terrorism—requires a comprehensive approach. This is reflected in the broad strategic framework that guides our efforts.

- The 2009 National Strategy for Countering Biological Threats, a comprehensive approach to prevent or respond to the proliferation and use of biological weapons by states or non-state actors. A key part of this strategy is a broad effort to increase capability worldwide to conduct effective and timely disease surveillance and to improve capacity to counter both naturally occurring and deliberately-caused disease outbreaks through the application of targeted and proven tools for biological risk management.
- The 2010 National Security Strategy, which outlines a comprehensive nonproliferation and security agenda, including reducing the U.S. nuclear arsenal and reliance on nuclear weapons, promoting regional stability, and ensuring the effectiveness of our deterrent and defensive capabilities.
- The 2010 Quadrennial Defense Review, which devotes more attention to this challenge than any prior defense review, establishes "Preventing Proliferation and Countering WMD" and "Defending the United States and Supporting Civil Authorities at Home" among the Department's top six priority mission areas.
- The 2010 Nuclear Posture Review, which seeks to better align our nuclear policies and posture to our most urgent priorities—preventing nuclear terrorism and proliferation while ensuring the maintenance of a safe, secure, and effective nuclear deterrent for as long as nuclear weapons exist.

In support of these efforts, DOD is aligning its CWMD programs to become more flexible and responsive. Here our approach is three-fold: First, we are supporting the administration's broader effort to reinvigorate multilateral nonproliferation initiatives and treaties. Second, we seek to secure or eliminate WMD threats at their source and in transit. Third, we seek to enhance our ability to detect and respond to emerging threats, and to ensure our troops, along with coalition partners, can fight and win in an environment contaminated by chemical, biological, radiological or other hazards. These three lines of effort can be summed up as touchstones: leadership, partnership, and innovation.

STRENGTHENING THE NONPROLIFERATION REGIMES

This area of effort is about enhancing U.S. leadership in global non-proliferation forums.

For years we have worked with our allies and partners to develop a nonproliferation infrastructure that can reduce our collective vulnerability to these weapons. The current network of initiatives, regimes, and treaties offers important tools for advancing this critical agenda. The administration's efforts to strengthen the global non-proliferation regime through the Nonproliferation Treaty (NPT), Comprehensive Test Ban Treaty (CTBT), and Fissile Material Cutoff Treaty (FMCT) are instrumental to raising barriers to WMD proliferation. In this area we are not naïve: the worst actual or potential proliferators won't meet non-proliferation obligations under any circumstance. However, a number of nations face choices about their role in the world's WMD nonproliferation "conversation"; with strong U.S. leadership we can convince them from staying on the sidelines, or worse, from becoming proliferators themselves.

We are actively working to strengthen the NPT—the cornerstone of the nuclear nonproliferation regime. The May 2010 NPT Review Conference reaffirmed parties' commitment to the Treaty and significantly achieved consensus on an Action Plan for future progress. This Action Plan endorsed a balanced approach to advance the three pillars of the regime: nonproliferation, peaceful uses of nuclear energy, and nuclear disarmament. DOD will continue to actively participate with State and our interagency colleagues in international activities to implement this Plan. The United States' "negative security assurance" set forth in DOD's 2010 Report of the Nuclear Posture Review is clear: "The United States will not use or threaten to use nuclear weapons against non-nuclear weapons states that are party to the Nuclear NPT and in compliance with their nuclear non-proliferation obligations." This assurance underscores the security benefits of adhering to, and complying fully with, the NPT.

In addition, the administration is committed to ratification of the CTBT. The CTBT would limit countries without nuclear weapons from confidently deploying such weapons; it would hinder existing nuclear powers from developing new types of warheads. As a sign of our commitment to the CTBT regime, we will continue to maintain our unilateral moratorium on nuclear weapons testing, and will remain fully engaged in development of the Treaty's verification regime. At the same time, we remain committed to maintaining a safe, secure, and effective nuclear deterrent for our security and that of our allies.

We also seek a FMCT that would ban production of fissile material for use in nuclear weapons. DOD continues to support discussions among technical experts in the U.N. Conference on Disarmament. These discussions are not a substitute for actual negotiations, but hopefully they will foster greater appreciation of key technical issues.

Further, we are engaged actively in efforts to ensure that the upcoming Biological and Toxin Weapons Convention Review Conference strengthens the global norm against possession and use of biological weapons. We hope to expand membership in the Convention and strengthen its implementation to meet the bioweapons challenges of the 21st century. As part of this effort, DOD has taken steps to increase the transparency of our biological defense activities; the United States is encouraging other treaty parties to do the same.

Finally, the administration recognizes the importance of multilateral activities and mechanisms that help to prevent proliferation, such as the Proliferation Security Initiative (PSI). Since its creation in 2003, nearly one hundred countries have endorsed the PSI Statement of Interdiction Principles, which commits signatories to take action individually and cooperatively, as necessary to interdict WMD related materials in transit to states of proliferation concern. The PSI also continues to help build states' individual and collective ability to fulfill this commitment, using military exercises, table top workshops and ship-boarding training. This year we are focusing our efforts to promote key interdiction capabilities, identify resources to support these capabilities, and design strategies to proactively engage nations in the capacity-building process.

Last year the U.N. Security Council imposed the toughest sanctions to date against Iran. As with the case of North Korea, the Security Council called on states to inspect suspicious cargo bound from or to Iran at airports, seaports, and on the high seas. This illustrated the utility of PSI and related activities to non-proliferation success. U.N. members are now obligated to block North Korean and Iranian transfers of WMD and related cargoes, to include missile parts, explosives, and other nuclear-related technology. Exercises and training provided under the PSI

help increase the international community's collective capability to execute these activities.

United States multilateral non-proliferation leadership was punctuated last year by the April 2010 Nuclear Security Summit, attended by 47 countries. The momentum and specific non-proliferation accomplishments generated by the Summit were impressive, and we are supporting the Republic of Korea as it prepares to host the next Nuclear Security Summit in spring 2012.

REDUCING AND ELIMINATING THREATS

This area of effort focuses on our essential partnership with governments dealing with legacies of WMD on their territory, or which are interested in building the capacity to prevent WMD and related materials from crossing their borders illicitly.

Since its inception in 1992, the Nunn-Lugar Cooperative Threat Reduction (CTR) Program has worked with states of the former Soviet Union (FSU) to address nuclear, radiological, biological, and chemical threats. Since 2005, CTR has evolved to keep pace with the changing global security environment, and that evolution has accelerated recently. In December 2010, the Secretary of Defense, with the concurrence of the Secretary of State, determined that CTR partnerships with Iraq, India, China, and the countries of Africa will assist the United States in achieving longstanding nonproliferation goals, as well as sustaining long-term partnerships that enhance security. The Secretary's action adds to his 2009 determination to pursue CTR cooperation with Afghanistan and Pakistan. This work beyond CTR's "traditional" area of operations in the FSU reflects opportunities we see for expanded partnerships on WMD security issues. Four principles guide evolution of CTR as we expand geographically: integration, responsiveness, stewardship, and cooperation.

Integration

In the past, CTR was often the lead U.S. interlocutor with a foreign government on a particular project. In the future, CTR needs to build on work that other U.S. and international agencies have accomplished, taking care to leverage others' success without reinventing-the-wheel. This is especially true in CTR's expanding bio-engagement.

Responsiveness

CTR has typically taken a very methodical approach to its activities. Should the need arise, we are revising procedures to in order that we can be agile enough to accept targets of opportunity and flexible enough to utilize CTR in new regions and for new projects.

Stewardship

We are working closely with DTRA to ensure that partner countries can join effectively in sustaining the capacity that many new CTR projects are intended to create.

Cooperation

CTR is about protecting U.S. interests. However, we increase our risks when our solutions are devised with an inside-the-Beltway perspective. We can better leverage partners' local creativity to meet common goals.

Having just described the principles governing CTR's geographic expansion, it is worth highlighting two other points of principle. First, we are expanding the program beyond its traditional area of activity because we believe that a threat persists which CTR can help address. CTR has built important interagency relationships and global experience working in remote locations; this is a valuable asset we are redeploying in relevant, modernized ways in pursuit of U.S. interests. Second, our geographic expansion of CTR does not necessarily imply significantly increased costs. We appreciate Congress's support last year for a substantial increase in CTR's budget. We believe that step addressed a prior mismatch between CTR's missions and resources. However, at this time we believe the fiscal year 2012 budget request and the program's future years projected baseline is well-balanced against likely demands. DOD will do its part in the national deficit reduction effort, and we are prepared to make hard choices in the CTR program should they be necessary.

The President has requested $508.2 million for CTR in fiscal year 2012. This figure supports a variety of counter-WMD efforts described in my testimony, within the context of Secretary Gates' imperative to maximize efficiencies in the Department. DTRA and the NNSA have also presented balanced requests, well-synchronized across the CWMD community. I urge the committee's support for these requests; I'd like to highlight a few of the activities these funds will support.

CTR's strategic nuclear systems elimination work in the FSU has largely been concluded; however, work continues in Russia as ballistic missiles, launchers, and

ballistic missile submarines are being dismantled in verifiable fashion. With the entry into force of the New START Treaty, we anticipate that the Russian Federation will request continued CTR assistance to ensure strategic systems are properly disposed of with no residual proliferation-sensitive components remaining.

CTR also assists Russia with safe, secure, and environmentally sound destruction of a portion of its nerve agent stockpile that is most vulnerable to theft or diversion. Russia is responsible for meeting its commitments under the Chemical Weapons Convention; CTR's involvement focuses only on the most dangerous, most proliferable portion of the former Soviet stockpile and related infrastructure. Our current chemical weapons-related work in Russia involved primarily technical assistance: we are ensuring proper maintenance at the Shchuch'ye Chemical Weapons Destruction Facility constructed by CTR, which began eliminating chemical weapons in March 2009. This protects our investment, as well as the contributions of other donor countries.

Through CTR's work in Russia, DOD is contributing to the "site-level" approach of the interagency strategy for the President's global nuclear lockdown agenda, described by my DOE colleague. CTR continues to assist Russia with transport of nuclear warheads from operational locations to dismantlement facilities or more secure, consolidated storage sites. We are also assisting Russia with secure transport of spent naval fuel that is both enriched and vulnerable to a degree that gives rise to proliferation concern. CTR's successful partnership with the Department of Energy and the Russian Federation Ministry of Defense to secure warhead storage sites also continues. Although primary activity for this effort (the so-called "Bratislava Initiative") concluded some years ago, CTR is ensuring that Russia can sustain the modernized physical protection systems that were installed for the long term. This sustainment work is nearing completion, and we are working with DOE to transition responsibility for their sustainment to the Russian Federation.

CTR considers each Russian request independently; not all requests for support are granted. We continue to believe that engagement with Russia through the CTR program supports U.S. nonproliferation and strategic interests. Moreover, cooperation with Russia funded through CTR has endured as a steady, open channel even when the success of other aspects of the U.S.-Russia relationship have been inconsistent.

We are also leveraging our nuclear security experience in the former Soviet Union to support the implementation of the "country-level" and "global-level" approaches of the global nuclear lockdown strategy. Alongside DOE and other interagency stakeholders, CTR is supporting a "Center of Excellence" for Nuclear Security in China, and will participate with India in the nuclear security component of its Global Center for Nuclear Energy Partnership, both announced at the April 2010 Nuclear Security Summit. Through these Centers we hope to be able to exchange nuclear security best practices, demonstrate equipment, and contribute to national and regional training programs. DOD is also active in multilateral nuclear security collaborations, such as the Global Initiative to Combat Nuclear Terrorism, as well as the Nuclear Security Summit process.

The most dynamic area of CTR activity for the foreseeable future will be biodefense. CTR's Cooperative Biological Engagement Program (CBEP) (formerly designated Bio-Threat Reduction Program) is pursuing four lines of effort. First, CBEP consolidates and secures collections of especially dangerous pathogens that might serve as the source for biological weapons. Second, CBEP provides laboratory safety enhancements and training to prevent accidental release of especially dangerous pathogens. Third, CBEP strengthens partner countries' detection, diagnostic, and reporting systems with training, technology upgrades, and improvements to laboratory detection networks. Finally, CBEP promotes collaborative research projects to increase capacity to understand and recognize the most dangerous pathogens. Collectively, these four areas help address the growing human and animal biodefense challenge which we believe has heretofore lacked appropriate resources and attention from U.S. agencies with national security missions. CBEP activities are synchronized with the National Security Strategy for Countering Biological Threats, specifically, its goals of strengthening global health security, obtaining timely insight on emerging outbreaks, reducing the potential for exploitation of life sciences material and technology, and reinforcing norms of safe and responsible conduct.

The Cooperative Biological Engagement Program (CBEP) continues to partner with countries of the FSU and is active in Armenia, Azerbaijan, Georgia, Kazakhstan, Russia, and Ukraine. In Georgia, we recently opened a new Central Reference Laboratory (CRL) and are in the process of helping it become an internationally recognized center for disease surveillance and diagnostics. A similar effort is underway in Kazakhstan. In Ukraine, the CBEP consolidate Ukraine's human es-

pecially dangerous pathogens at an upgraded, secure facility, with an eye toward taking similar action for Ukraine's animal especially dangerous pathogens.

Earlier, I mentioned Secretary Gates' approval of CTR expansion to Africa for biodefense work; and I'd like to say a bit more about why DOD views Africa as a priority for this kind of engagement. Africa is a continent that is rich in indigenous, naturally-occurring especially dangerous pathogens, which local scientists and health professionals must work with on a routine basis. Limited funding for training, infrastructure and other needs means that this work is all too often performed with less than ideal safety and security standards in place. Security of borders is also a challenge in many parts of Africa. These factors make Africa a tempting destination for both state and non-state organizations that seek biological weapons.

The United States and its allies have had a longstanding public-health presence in Africa, a base of experience and familiarity that facilitates CTR's activities on the continent. Potential African partner governments are both enthusiastic and creative about the opportunities for Nunn-Lugar CTR program activities, and we are working with them to pursue a regional approach for our cooperative engagement program that would have a lasting impact beyond traditional bilateral relationships. The U.S. military has important relationships in the Horn of Africa and elsewhere, so we view our activities as directly supporting U.S. troops' security, in addition to furthering larger non-proliferation goals. Our work has been aided greatly by the support of State Department colleagues and country teams as CTR managers build relationships in the program's first major expansion outside the FSU.

While securing WMD materials at their sources is an important component of the CTR program, our strategy requires a layered defense against WMD proliferation threats. CTR's WMD Proliferation Prevention Program (PPP) can enhance partners' ability to detect and interdict WMD "on the move" through provision of detection, surveillance, and interdiction capabilities. DTRA's International Counterproliferation Program (ICP) complements the capital-intensive investments of the WMD–PPP program through its modest "train and equip" efforts. ICP is unique in its legislative authority to partner explicitly with the Federal Bureau of Investigation (FBI) and U.S. Customs and Border Protection (CBP) in furtherance of deterring the proliferation of WMD across the FSU, the Baltic States, and in Eastern Europe. We are currently working to determine how best to expand both border security programs to new partners.

DETECTING AND RESPONDING TO EMERGING THREATS

This area of activity will depend for success on innovation in technology, intelligence, and planning; innovation which we will need to foster. Our attention in this regard has focused on re-looking the Nation's defenses against the threat of loose nuclear material, plus consideration of new defenses against emerging biological threats.

As President Obama said in his April 2009 Prague speech, "the threat of global nuclear war has gone down, but the risk of a nuclear attack has gone up. More nations have acquired these weapons. . . . Black market trade in nuclear secrets and nuclear materials abound. Terrorists are determined to buy, build or steal" a nuclear weapon. The President's charge to executive agencies was to look again at what heretofore had been viewed as a reliable whole-of-U.S. Government response should we suspect a terrorist organization has obtained one or more nuclear devices. Faced with such a threat, we will potentially need a globally-synchronized response to detect, interdict, and contain the effects of nuclear weapons. This could include activities such as securing material at the source, intercepting material on the move, and increasing defenses to protect against an attack on the homeland.

The threat of nuclear terrorism is also closely intertwined with state challenges. For instance, the instability or collapse of a nuclear-armed state could quickly lead to proliferation of nuclear weapons or materials well beyond the country of origin and involve multiple state and non-state actors as it moves. Our plans for these potential challenges need to be revised to reflect the ever-increasing velocity of information, new challenges and capabilities in intelligence collection, and enduring technical hurdles related to nuclear detection and forensics.

Within DOD, we seek to synchronize a layered defense against these threats that includes enhanced protective posture of the homeland; better identification of likely proliferation pathways; and, new abilities to detect and characterize sources and properties threats. We can be certain that in a nuclear or other WMD crisis, all these activities would be occurring simultaneously, under withering media scrutiny. Our focus in DOD is to improve capacity among top leaders, the combatant commanders, and the providers of key expertise to coordinate efforts as a potential threat is tracked from remote parts of the globe.

The emerging biodefense threat lacks the signature characteristics of a "loose nuke," but is no less dangerous.

An important priority of the President's National Strategy for Countering Biological Threats is increasing capability to conduct effective and timely disease surveillance worldwide. This will improve our capacity to respond successfully to both naturally occurring and deliberate disease outbreaks. A 2009 report by the National Research Council noted that countries which lack the public health infrastructure necessary to detect, diagnose, and report naturally occurring disease outbreaks are substantially less able to effectively deal with a bio-terror attack. I spoke earlier of efforts of the CTR program to address the bio-surveillance shortfall. In addition, we have worked with the Army and Navy to restructure DOD support for its overseas laboratory system beginning in fiscal year 2012. These labs are DOD's primary means to discover novel pathogens or characterize pathogens that are not generally found in the United States. Within the military medical community these labs have long been well-known for their intrepid work protecting U.S. military members from disease. The innovation we will implement in 2012 is to begin leveraging these important facilities for non-proliferation purposes, as an addition to their original clinical missions.

Other innovations reflect an array of concerns about the changing WMD threat and how best to prepare our troops and coalition partners to confront it:

- The revolution in biotechnology and the chemical industry is undermining our confidence in defenses currently protecting our forces. With growing access to expertise, equipment and precursors needed to produce new chemical or biological compounds, we sought more RDT&E funding to develop improved countermeasures, personal protection gear, and research new decontamination techniques to mitigate the effects of novel chemical and biological agents.
- We have recognized a need for innovation in our military organizational capacity to counter WMD threats. The 2010 QDR called for a new standing Joint Force Headquarters for Elimination which will serve as a permanent, join advocate for training, exercising and refining military tactics, techniques and procedures related to WMD elimination. The Secretary designated U.S. Strategic Command as the lead, and the command is currently completing its mission analysis. The standing headquarters will greatly increase DOD's capability to locate, characterize, secure, disable or destroy hostile WMD capabilities in a non-permissive or semi-permissive environment.
- We have also made a down-payment on innovative approaches to building partners' WMD defense capabilities. For fiscal year 2012, the DOD budget request includes a small start-up fund for "counter-WMD Cooperative Defense Initiatives." These funds are dedicated for each Geographic Combatant Command to provide an initial capacity for interoperability among U.S. forces and regional partners, and ensure partner nations can survive an attack, eliminate further threats, and manage the humanitarian consequences of a WMD attack. This initiative is supported strongly by our COCOM counterparts and we look forward to reporting to Congress in future years on its progress.
- Finally, at the North Atlantic Treaty Organization (NATO), the new Strategic Concept adopted by Heads of State and Government at the November 2010 Lisbon Summit reaffirmed the Alliance's commitment to further develop NATO's capacity to defend against the threat of chemical, biological, radiological, and nuclear weapons. At the United States' behest, the Strategic Concept directed NATO to assess how it can improve capacity to counter proliferation of WMD and their means of delivery. DOD is working closely with State to assist NATO in this important effort.

CONCLUSION

Congress has provided authorities and resources which allow DOD to address the WMD threat to our troops and our people. It is an evolving threat that spans traditional counter-proliferation and non-proliferation responses. Our mission is to ensure that DOD's responses stay ahead of the threat in order that our troops and those of our coalition partners can fight and win in a WMD environment, and that our people are protected from WMD threats. We are committed to working closely with our interagency and international partners, and with Congress in this endeavor.

Senator HAGAN. Thanks to all three of you.

What I'd like to do is to now take maybe 6-minute questions each, and then we'll have a second round.

Let me just mention budgets for a quick question. NNSA did not receive all of the funding requested in its fiscal year 2011 budget. What is the programmatic impact of not receiving the amount requested? What will not get done, and will not having all of the requested funding in fiscal year 2011 have an impact on the fiscal year 2012 funding and programs?

Ms. Harrington.

Ms. HARRINGTON. Thank you very much for that question. Fiscal year 2011 has been a management challenge. I will not mince words about that. The successive continuing resolutions have caused us to rebalance our programming on a very regular basis throughout the year so far. We're very pleased and grateful that we're now on solid footing for the remainder of the year.

Through good management and creative distribution of available funds, we have preserved all of the critical activities that are scheduled under the 4-year lockdown effort. We feel confident right now that we will be able to meet all of the high-level presidential commitments that were made. So in that regard, we have been able to successfully preserve that piece of our programming.

That is not to say that none of our programming was affected. Certainly when you simply don't have the money certain things will suffer. So the radiological source recovery and security activities that we typically undertake in the United States have been cut back, and we have also eliminated some of the funding for the Russia piece of the fissile material disposition program. But we have done that without sacrifice to those programs. We will see some of those funds come back in future years, so it's not that those weren't important items to fund. It's just that we had to postpone certain things because of budget realities this year.

Senator HAGAN. Mr. Myers, I understand the DTRA is in a similar position. What impact will the reductions in fiscal year 2011 have on DTRA's mission and what won't get done?

Mr. MYERS. Thank you. Let me take one step back before I discuss 2011 and 2012. I think it's important to put this in the proper context. DTRA was flat-lined for approximately a decade. So the 2011 budget that was submitted by the President for DTRA represented a significant increase, approximately 17.5 percent, and we are very appreciative of the fact that the vast majority of those resources were provided. A small cut was made, but the vast majority of those were provided.

So when you compare the 2010 to the 2011 to the 2012 budget request that Senator Portman suggested, you will see a spike. So the 2012 request is not necessarily a cut. It is not as high as the correction, if you will, of the 2011 budget.

Now, I will tell you we have taken the Secretary of Defense's challenge very, very seriously. We are working very hard to become more effective, more efficient, with the resources that we have. We are prioritizing. We have taken a very long, hard look at what we're doing and how we're doing it, to ensure that we're getting maximum efficiency out of every effort currently underway.

We have shut down a number of offices because we believe we can support them equally well from our headquarters with foreign

trips or TDY efforts or the like. We've also looked at a number of our efforts and narrowed the technological paths that we're following in those areas. We've also done a complete rack-and-stack prioritization of all the things that we do at DTRA.

The item that came out at the bottom was the Advanced Systems and Concepts Office. This is an organization that has sponsored dialogues and conferences and studies in the past, and we identified that as our lowest priority. That is going to be significantly cut back in the future. We will continue some support for those efforts in coordination with Policy and our friends at the NNSA. But those are the ways that we have identified savings, so we can continue to place the highest priorities in our role as a combat support agency directly to the warfighter and continue our threat reduction activities and our research and development activities as well.

Senator HAGAN. I appreciate your comments on having to be more efficient and more effective, and I think every agency and every entity has to be doing that. So thank you.

Ms. Harrington, every year the subcommittee hears that there are countries that want to participate in the Megaports program, but there is not enough money to fund all of these agreements. Is that true this year, and why is the Megaports program important? Are there other countries helping in the cost of Megaports oversight or the program? Does NNSA know if there has been any detection of nuclear materials that could be used in a dirty bomb or an improvised nuclear device?

Ms. HARRINGTON. Thank you very much for your question. I'd like to ask John Gerrard, if I could, to answer your specific question about the Megaports program and countries that would like to participate or not.

Also, on the detection piece of it, yes, our equipment has in fact detected various shipments, sometimes false alarms, sometimes not. But these are tracked, working in coordination with our Office of Emergency Response, and the recipient countries are alerted. The system actually works quite well. In fact, in a closed session we could describe perhaps more in detail, but there was a recent detection in fact with the contents being identified as to what the problem was.

So this is an ongoing but effective program that I believe does deserve support, including, for example, in countries like Pakistan, where this is one of our active programs with them. Certainly we don't want anything exported to us from Pakistan that has a surprise in it. So we are very serious about that program there.

John.

Mr. GERRARD. We have 100 Megaports in our baseline program right now to be completed by 2018. I can't say that we have countries that are requesting assistance at the moment that we are not currently engaging, but if we did outreach to additional countries it would probably generate interest.

Senator HAGAN. Thank you.

Senator Portman.

Senator PORTMAN. Thank you, Madam Chairman.

I thank the witnesses today for giving us some great information about their work and their budgets. As I said in my opening, I'd

like to talk a little about this GAO report and some of the concerns that were raised.

But let me start, if I could by talking about again the fiscal situation. By the way, I have to commend you, Mr. Myers. I don't think I've ever heard an agency head say, including in my time at the Office of Management and Budget (OMB), that a 5 percent reduction in spending was not a cut. I understand what you're saying about last year's budget, but you're a good soldier. I wish you'd been working there when I was at OMB, so your agency would have been more understanding.

The concern about cost-sharing and particularly sharing the overall cost burden associated with monitoring and securing material is a challenge. There was a summit in 2010 when there seemed to be a lot of global support for nonproliferation efforts. But my understanding is that very few nations have stepped up.

Ms. Harrington, maybe you're the best one to answer this one about cost-sharing. What countries do we currently have cost-sharing arrangements with and how much are they doing?

Ms. HARRINGTON. Thank you very much. I'd like to start that, that cost-sharing and coordination, by pointing out to you that I think we have the best example of that sitting here at the table. Between our organization, DOD Policy, and DTRA, we have quarterly what we call bridge meetings. We have five standing working groups that are addressing various elements that are in common among our organizations. We look at everything from the strategic planning level to what can we be doing in specific countries together. So we really are trying to work very hard as U.S. Government agencies across the government to make our nuclear security work more effective.

On your specific question about what impact has the nuclear security summit had and what assistance are other countries providing, there is a fairly detailed accounting of what different countries are putting into their commitments for the nuclear security summit. It's one of those circumstances, which I'm sure you understand well, that when you get heads of state or heads of government together and they make commitments, they don't like to look foolish 2 years later when they show up at the follow-up summit with nothing in hand.

So we actually have seen some real movement. For example, the Chinese, who are working with us on a center of excellence, are putting many tens of millions of dollars into both the land and construction of that facility. Other nations, including The Netherlands, the U.K., Denmark, Norway, have over time provided I believe it's either $61 or $71 million. It's a little bit over $61 million to our programs.

So that often comes in half a million or million dollar pieces, but it has been a very steady trend over the past years that these countries are providing additional funding directly to us. That is allowable because you gave us the authority to accept the foreign funds and that has in fact opened the gate to providing those additional funds to us.

But we can provide you with a detailed breakout of the countries, the amounts, and the programs to which the funds came.

[The information on commitments was not available. The information on foreign contributions follows:]

Foreign Contributions to the Office of Defense Nuclear Nonproliferation

to Strengthen International Nuclear Security

($ in thousands)

FY	Org Code	Program for Cooperation	Partner	Contributions
2005	NA-23	EWGPP	Canada	7,319,453
2005	NA-23	EWGPP	UK	5,508,000
Total FY 2005				**12,827,453**
2006	NA-23	EWGPP	Finland	628,900
2006	NA-23	EWGPP	South Korea	250,000
2006	NA-23	EWGPP	Netherlands	1,190,200
2006	NA-23	EWGPP	New Zealand	308,000
2006	NA-23	EWGPP	UK	10,300,000
Total FY 2006				**12,677,100**
2007	NA-21	GTRI - RTG Removal in Russia	Canada	1,738,800
2007	NA-23	EWGPP	South Korea	250,000
2007	NA-23	EWGPP	UK	5,147,964
2007	NA-25	INMP&C (SLD)	Canada	4,419
2007	NA-25	INMP&C (SLD)	New Zealand	497
Total FY 2007				**7,141,680**
2008	NA-21	GTRI - RTG Removal in Russia	Canada	1,975,400
2008	NA-21	GTRI	South Korea	250,000
2008	NA-23	EWGPP	South Korea	250,000
2008	NA-21	GTRI - RAD Security in Ukraine	UK	3,997,968
Total FY 2008				**6,473,368**
2009	NA-25	INMP&C (SLD) (Kazakhstan)	Norway	837,600
2009	NA-25	INMP&C (SLD) (Ukraine)	South Korea	300,000
2009	NA-25	INMP&C (SLD) (Ukraine/FSU)	Canada	4,067,065
2009	NA-25	INMP&C (SLD) (Kazakhstan)	New Zealand	386,956
2009	NA-21	GTRI	Canada	3,918,000
2009	NA-21	GTRI	UK	5,722,212
Total FY 2009				**15,231,833**
2010	NA-25	INMP&C (SLD)	South Korea	250,000
2010	NA-25	INMP&C (MPC&A)	UK	140,000
2010	NA-25	INMP&C (SLD)	Finland	308,775
Total FY 2010				**698,775**
2011	NA-25	INMP&C (SLD)	South Korea	300,000
2011	NA-25	INMP&C (SLD)	Norway	512,076
2011	NA-25	INMP&C (SLD)	New Zealand	540,602
2011	NA-25	INMP&C (MPC&A)	UK	117,000
2011	NA-25	INMP&C (MPC&A)	Canada	5,168,912

2011	NA-21	GTRI	Canada	5,207,791
2011	NA-21	GTRI	Canada	3,000,000
2011	NA-21	GTRI	Netherlands	499,970
Total FY 2011				**15,346,351**
Total Contributions to Date:				**70,396,560**

By Program:	EWGPP	$ 31,152,517
	GTRI	$ 26,310,141
	MPC&A	$ 5,425,912
	SLD	$ 7,507,990
	Total:	$ 70,396,560

By Country:	Canada	$ 32,399,840
	Finland	$ 937,675
	Netherlands	$ 1,690,170
	New Zealand	$ 1,236,055
	Norway	$ 1,349,676
	South Korea	$ 1,850,000
	UK	$ 30,933,144
	Total:	$ 70,396,560

Senator PORTMAN. I'd appreciate that, if you could give us what the commitments were and then where they are in terms of their cost-sharing obligations.

Ms. HARRINGTON. Yes.

Senator PORTMAN. Any information you have as to the future. As you say, maybe some of these countries are going to come through before the next meeting. I assume that's in 2012. I'd like to see what they're actually doing.

Since you mentioned China, let's go to China. The GAO report said that political sensitivities in China and in India have limited your efforts in both countries to the relatively noncontroversial exchange of nuclear security best practices, training, demonstration projects, instead of implementing these activities directly at nuclear sites. So my question would be, to the extent the American taxpayer is paying for the nuclear center of excellence in China, and my understanding is we are paying the bulk of that, and to the extent that China is not cooperating per the GAO report, what confidence do you have that there is going to be cooperation going forward that justifies this expense?

Ms. HARRINGTON. I'll be happy to share this, to share the answer, with my DOD colleagues. First, I think we need to be aware

that cooperation with China is extensive in the nuclear security, nuclear energy, and nuclear safety areas. I was recently in China for a meeting of our peaceful uses of nuclear technology joint coordinating committee, and also spent time during that visit with China Customs going over plans for a new radiation detection training center that we're developing with them.

But we have a very deep and professional relationship with the Chinese in a number of nonproliferation areas. The center of excellence is simply another layer on top of that. So I would say that we are already working on collaboration at many levels.

Senator PORTMAN. You disagree with the GAO analysis saying that this relatively noncontroversial exchange of nuclear practices and so on and training and so on is problematic, that they're not moving ahead because of political sensitivities?

Ms. HARRINGTON. That does not at all track with my discussions a month ago, when there was uniform enthusiasm for proceeding with the center of excellence and for exploring how broadly we can use that as a new mechanism, not just for bilateral, but also for regional and international activities in the nonproliferation area.

Senator PORTMAN. Back to the first question I raised in my opening statement, when the GAO looked at two of your three programs and said they had only limited success in achieving their objectives in Russia, how do you respond to that? Do you disagree with that as well?

Ms. HARRINGTON. The GAO report came out at a time when there was a lot of work that was midstream, and since that report was published a great deal has happened. For example, since the April 2009 Prague speech we've removed 963 kilograms of nuclear weapons-useable material from a variety of countries, 21 countries. We've eliminated all material from six countries: Romania, Libya, Turkey, Taiwan, Chile, and Serbia. We also were able to secure a number of shipments, again after the GAO report came out. There were multiple shipments out of Ukraine to Russia in December of 2010 and again from Belarus. That material, with our cooperation with the Russians, was removed in November and December of 2010.

So at the point when the GAO data collection was complete for their report, that was one point in time. We're in a very different point in time now.

Senator PORTMAN. It might be helpful if you could give the committee that in writing, relative to the GAO analysis.

[The information referred to follows:]

Supplemental Information* on DNN Activities since the December 2010 GAO Report on Securing Vulnerable Nuclear Materials Worldwide

Global Threat Reduction Initiative

In the December 2010 report, GAO stated that GTRI has had limited success in achieving its objectives in Russia and GTRI faces challenges in converting Russian research reactors from HEU to LEU. However, the GAO stopped collecting data inputs after September 2010 and several significant activities took place between September and December 2010 regarding cooperation with Russia on removal of Russian-origin highly enriched uranium and conversion of Russian research reactors from HEU to LEU fuel. The additional activities are listed below.

- In October 2010, 41 kilograms of vulnerable Russian-origin spent HEU fuel was transported from Belarus to Russia for secure storage and processing.

- In November 2010, 47 kilograms of vulnerable Russian-origin fresh HEU fuel was transported from Belarus to Russia for secure storage and processing.

- In December 2010, all remaining Russian-origin HEU was removed from Serbia and returned to Russian for secure storage and processing. Serbia is now the 6th country to be cleaned out of all HEU since President Obama's April 2009 Prague speech announcing a new international effort to secure all vulnerable material around the world within four years.

- In December 2010, three separate shipments were completed to remove more than 50 kilograms of Russian-origin fresh HEU from 3 different sites in Ukraine. In particular, 25 kilograms of fresh HEU was transported from Sevastopol University in Ukraine to Russia, 9.7 kilograms of fresh HEU was transported from the Kiev Institute to Russia, and 16 kilograms of fresh HEU was transported from the Kharkiv Institute to Russia. These three shipments contained enough Russian-origin HEU to make two nuclear weapons.

- And as noted in the official response to GAO, in December 2010, an Implementing Agreement was signed between the U.S. Department of Energy and Rosatom State Corporation to conduct feasibility studies relating to the conversion of six HEU research reactors in Russia.

In sum, there were a considerable number of successes with Russia to both remove Russian-origin HEU and convert Russian research reactors that were not reflected in the December 2010 GAO report.

Material Consolidation and Conversion

In the December 2010 report, GAO recommended persuading Russia to expand its cooperation with the Material Consolidation and Conversion (MCC) project by finalizing a government-to-government MCC agreement that would provide a legal framework for the continuation and expansion of the project.

The program agrees with GAO that expanding the project is an important goal, but believes that the work conducted by the project has achieved notable nonproliferation successes and that there is enough excess highly enriched uranium (HEU) to downblend to low enriched uranium in the immediate future that the pilot project remains a critical nonproliferation activity. Since 1999, the Material Consolidation and Conversion (MCC) project has supported the downblending of non-weapons high enriched uranium (HEU) to low enriched uranium (LEU), thereby significantly reducing the proliferation attractiveness of this material. In 2004, the Russian Federation indicated that there are at least 17 metric tons of excess, non-weapons HEU that can be downblended under the MCC project. As of the second quarter of FY11, 13.6 metric tons of such HEU has been downblended and the MCC project is on schedule to downblend the projected 17 MTs by the end of FY 2015.

Over the years, the Russian Federation has discussed the need for a formal MCC Agreement. Several meetings have taken place to work out possible language for such an Agreement, but these discussions have never produced a mutually acceptable outcome. However, to date, the absence of such an Agreement has not negatively impacted the amount of material available to be downblended under the MCC Project. In addition to the 17 MT of HEU, the MCC Project has supported the removal and downblending of all HEU from one Russian site and continues to support the downblending of returned Russian-origin fuel that has been consolidated to Russia from the FSU and other countries.

On a cost-sharing basis, the MCC Project is supporting the creation of additional downblending capacity at one Russian site in order to increase the amount of excess HEU that can be downblended into LEU. In this activity, Rosatom will fund the additional downblending line, and the MCC Project will support the associated security requirements. This additional capacity is expected to become operational at the end of CY 2012. MPC&A management is currently discussing with Rosatom the potential to include additional excess material for downblending under the MCC Project, which would expand the universe of HEU that will be processed.

The MCC Project has worked well for the last twelve years, eliminating a significant amount of proliferation-attractive nuclear material, and continues to work effectively in promoting U.S. nonproliferation objectives.

Prepared by: Alex Sunshine, 8-29-11

Senator PORTMAN. One final question. Last year you testified that the Russians have resisted granting us access to their serial production plants, the plants where weapons are actually built. My question is, do you think these facilities are adequately secured? This time last year, the list you had for securing facilities in Russia was down to 19. What's your number now? How much progress has been made, and what's the time frame for securing the remaining facilities?

Ms. HARRINGTON. I'll turn to John Gerrard for that one.

Mr. GERRARD. With regard to the serial production enterprises, we are not working with those facilities, so that situation continues.

Senator PORTMAN. You're not working with those facilities?

Mr. GERRARD. We are not. We haven't been granted access to those facilities, so we've not visited them and we have very little information about the conduct of security operations at them.

Senator PORTMAN. So you can't tell us whether they're adequately secured?

Mr. GERRARD. No.

Senator PORTMAN. Is Russia covering the cost of sustaining a security infrastructure at those facilities and others?

Mr. GERRARD. Yes, yes. We believe a lot of our nationally-oriented programs, like our training programs and our regulatory programs with the Russian Rosatom complex, affect the serial production enterprises. So we think we are touching them indirectly, but we are not on the ground at them.

Senator PORTMAN. What are your plans for being able to access the serial production plants to know whether they're being adequately secured?

Mr. GERRARD. We have a continuing desire to dialogue with Russian officials on that subject. But there is no particular path forward right now with regard to gaining access to those facilities. They have assured us several times, including in writing, that they are doing that on their own.

Senator PORTMAN. My time has expired. I have some questions about START that I hope maybe, Mr. Myers, you can get back to us in writing on. Again, I thank you for your hard work and your testimony today.

Senator HAGAN. I think we'll take two more quick rounds of 4 or 5 minutes.

Biological surveillance. Mr. Handelman and Mr. Myers, DOD is expanding its biological surveillance and early warning efforts. How are these activities coordinated with other health care-focused activities to ensure that there is no overlap, and why has DOD decided to do work in Africa, if you can comment on that? Are other countries providing funds to help with the biological surveillance work?

Mr. HANDELMAN. Senator, let me take those in reverse order. I think there were three questions. Your last point touched on this issue of cost-sharing.

Senator HAGAN. Right.

Mr. HANDELMAN. As I was listening to Secretary Harrington discuss it with Senator Portman, I wanted to chime in and make what I think is a really important point about these programs. These programs are not foreign assistance. Now, I'm not trying to be pejorative about foreign assistance. We engage in these activities because they benefit the United States interest and they're supposed to be in pursuit of U.S. interests.

Now, in a time of fiscal austerity, and certainly if you're trying to build a mutual relationship that's built on commitments and trust, cost-sharing is a good thing. However, I can tell you from my perspective, my experience with the Nunn-Lugar program, you get what you pay for, and when you want to meet certain milestones on a certain time line, sometimes you have to just go and do it.

Now, when we were working in Russia and the other former Soviet states, that had sometimes colossal cost implications because we were dealing with a very heavy infrastructure and complex projects. As we move into Africa or other areas outside the former Soviet states, particularly with respect to biodefense, it's our expectation that those cost implications are going to be less.

Let me hesitate to say, you gave us authority for cost-sharing. We're not ignoring that. I'm not trying to say that we're just not going to pursue that.

Why did we look at Africa? Well, first of all, why did we look so much at biodefense? You have a large part of the U.S. Government

in the nonproliferation business that's worrying about nuclear and radiological issues. The vast expertise in the entire DOE, for example. As I said in my opening comments, though, there really are not very many U.S. agencies with authority to deal with biodefense issues overseas. Department of Homeland Security does a fine job domestically. So this really, as we looked at it, was an underaddressed area and it was something we wanted to pursue, and there was a huge base of experience dealing with what was known as Biopreparat. This is the old Soviet bioweapons complex in the former Soviet states. Africa is not the first time that the U.S. is addressing biosecurity.

But when we looked outside the former Soviet states, African countries first were a place where the United States already has a significant perch or presence. Public health agencies have been working there for many years. Second, needless to say, highly dangerous pathogens are endemic. Africa is also a continent where borders are less secure.

So from our perspective, if we wanted to dip a toe in the water, so to speak, outside the former Soviet states, this was a continent where we could leverage preexisting U.S. presence and also one where a mosaic of factors contributed to a potential threat profile. We are not aware of any particular terrorist organization raiding labs in a particular African country right now, but all the pieces and parts are there for that kind of threat to emerge.

Senator HAGAN. Mr. Myers, did you have any comments on that?

Mr. MYERS. Just two quick ones. Mr. Handelman and I had the opportunity to join Senator Lugar on a trip to Kenya and Uganda last fall, and I think the thing that became very clear to me was that that region of the world, that's the birthplace for a lot of these pandemics and deadly diseases. I mean, they occur naturally in that region.

Many of the weapons programs around the world have gone to East Africa to collect samples, take them back home, and begin to develop weapons programs. So that our goal is to keep the terrorists as far away from the weapons or the pathogens or the diseases as possible. In a lot of cases when you're talking about East Africa, that really is one of the places that an organization could find those kind of diseases occurring naturally.

Mr. MYERS. Thank you.

Mr. Portman, Senator Portman.

Senator PORTMAN. Just briefly on the biological side. On your trip, my understanding is that you found certain facilities, particularly laboratories, which were not laboratories focused on weaponization, but rather just focused on research facilities, much as we have here in this country; and that some of them were not as well secured as you would have hoped. What, if anything, has the United States done with regard to those labs and others in Kenya, Uganda, and other countries?

Mr. HANDELMAN. Well, I introduced Mr. Jed Royal in my opening remarks. He's made a number of trips out to those countries.

Senator PORTMAN. Would Jed please raise his hand? Is it J-e-d?

Mr. ROYAL. Yes, sir, J-e-d.

Senator PORTMAN. I have a son Jed who's in town right now. It's a very prestigious name, and unusual.

Mr. HANDELMAN. I hope you claim credit for your son's good works, as I do for this Jed.

Senator PORTMAN. Yes, you're talking him up.

Mr. HANDELMAN. So we are in the phase where we're building the relationship. We have yet to formally exchange diplomatic notes. One thing we're trying to get away from is the cumbersome overarching sort of legal frameworks that were necessary in some of the former Soviet projects. We just want to get on with the work.

The first step will be physical security. That's easy. The harder parts and the longer term part of it are cooperative research programs, giving these laboratories the capability, for example, to do surveillance. As I alluded to in my opening statement, the hard part about this is we can give them a PCR machine, which is the thing that figures out some genetic aspects of a sample. They could use that for measles. I'm not going to tell you otherwise. But they could also use it for ebola, depending on what's happened out in the countryside, assuming a sample can be brought into the laboratory.

I will say, in some of those countries they actually have quite an advanced science capability already, particularly in Kenya. Our goal is to be able to work with them so they know to communicate this stuff—well, first of all do the science correctly, and then communicate it through the World Health Organization, through the relationships with us, in order that we have a bit of a heads up on whether an outbreak is naturally occurring or manmade.

Senator HAGAN. Ms. Harrington, Mr. Myers?

Mr. MYERS. I would just follow up with one quick point, and that is when we're talking about the cooperation that we are seeking to engage with African partners on, we're really talking about a different scale and scope of the cooperation that we had with states of the former Soviet Union. In the states of the former Soviet Union (FSU), we were talking about a massive infrastructure, the Biopreparat system that Mr. Handelman referred to earlier. It was a very large undertaking, a very complex undertaking.

When we're talking about providing the equipment that Mr. Handelman referred to and security and safety upgrades, we're talking about a much more straightforward, much simpler, much less expensive process. So I really want to point out the difference in the scale and scope of the efforts that we have underway or had underway in the FSU as compared to those that we are engaging Kenya, Uganda, and other countries in today.

Senator HAGAN. Ms. Harrington, Mr. Myers, and Mr. Handelman, thank you very much for your testimony today. The hearing is adjourned.

[Whereupon, at 4:52 p.m., the subcommittee adjourned.]

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