

HEARING TO RECEIVE TESTIMONY ON PROLIFERATION PREVENTION PROGRAMS AT THE DEPARTMENT OF ENERGY AND THE DEPARTMENT OF DEFENSE IN REVIEW OF THE DEFENSE AUTHORIZATION REQUEST 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.

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. Sistik, 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, non-proliferation, counterproliferation, and threat reduction programs at the Departments of Defense and Energy.

We begin this hearing today—we began it 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 pro-

liferation of weapons of mass destruction, technology, and materials, and who is trying to get WMDs.

I want to welcome our witnesses to this session. With us we have Ms. Ann Harrington, the Deputy Administrator for Nuclear Nonproliferation at the National Nuclear Security Administration at the Department of Energy—welcome—Mr. Ken Myers III, the Director of the Defense Threat Reduction Agency; and Mr. Ken Handelman, the acting Deputy assistant Secretary of Defense for Global Strategic Affairs.

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 the Departments of Defense and Energy 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, the Departments of Defense and Energy, 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, the Defense Department 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 U.S. 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, biological, weapons as well as radiological and nuclear weapons.

Of course, it's 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. And 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 that.

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's currently a discrepancy that I just wanted to raise in my opening statement and then we'll have a chance to talk about, but if you look at the 2012 budget request from the Department of En-

ergy's National Nuclear Security Administration, NNSA, it's 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 a billion dollars a year more than it was during the previous administration. So substantial increases in the Department of Energy's program.

GAO, the General Accounting Office, as you know, 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 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 U.S., the future of these programs was unclear.

Before hearing from you on this, 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 United States Senate and in the House and that process. I understand inspections are already under way 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 report 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. Handelmann. Ms. Harrington.

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

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 the National Nuclear Security Administration'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 the Department of Defense 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 when not, and providing critical support to the International Atomic Energy Agency.

For fiscal year 2012, our budget requests include 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 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 be-

fore 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 the Department of Energy.

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:]

Senator HAGAN. Thank you.

Mr. Myers.

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

Mr. MYERS. Madam Chairwoman, Ranking Member Portman: It is an honor to be here today to address the countering weapons of mass destruction mission performed by the Defense Threat Reduction Agency and the United States Strategic Command Center for Combatting Weapons of Mass Destruction. I serve as Director for both of these organizations, which are collocated at Fort Belvoir, Virginia. 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 the U.S. Strategic Command, recently told the full committee: "Of the threats we face, weapons of mass destruction 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.

2,000 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 CENTCOM 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 ordnance 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 man-portable anti-aircraft missiles and other small arms. In East Africa, we are part of a U.S. inter-agency team discussing plans with their host counterparts for safety and secu-

rity improvements at a facility where dangerous pathogens are potentially vulnerable to terrorist threats.

Madam Chairwoman, 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:]

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 weapons of mass destruction. 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 weapons of mass destruction, 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.]

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. The National Nuclear Security Administration 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, the Defense Threat Reduction Agency I understand 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. Defense Threat Reduction Agency 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 SECDEF's, 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 under way.

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 gone and did a complete rack and stack prioritization of all the things that we do at Defense Threat Reduction Agency.

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 got 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 this, the Megaports program, important? And are there any help with other countries in the cost of this, the Megaports oversight or the program? And does the National Nuclear Security Administration know if there's 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 do have—where's John? There is he. I'd like to ask John Girard, 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. GIRARD. 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, 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 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 various of 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. And 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 referred to follows:]

[SUBCOMMITTEE INSERT]

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. And 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 area. I was recently in China for a meeting of our peaceful uses of nuclear technology joint coordinating committee, and as well 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—

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 during my opening, when they 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, 19 countries, I think. 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, responsive to the GAO analysis.

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 Girard for that one.

Mr. GIRARD. 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. GIRARD. 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. GIRARD. No.

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

Mr. GIRARD. Yes, yes. And 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. GIRARD. 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, 4 or 5 minutes. I don't know if you have to leave.

Biological surveillance. Mr. Handelman and Myers, the Department of Defense 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? And 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 be-

cause they benefit the U.S., the United States, and they're supposed to be in pursuit of United States 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've got a large part of the U.S. Government in the nonproliferation business that's worrying about nuclear and radiological issues. You know, the vast expertise in the entire Department of Energy, 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 U.S. 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 the region, 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 a weapons program. So that our goal is to, A, keep the terrorists as far away from the weapons or the pathogens or the dis-

eases 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, 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 under way or had under way in the FSU as compared to those that we are engaging Kenya, Uganda, and other countries in today.

Senator HAGAN. Thank you.

Due to the lateness of the hour, Ms. Harrington, Mr. Myers, and Mr. Handelman, thank you very much for your testimony today. Thank you. The meeting is adjourned.

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