[H.A.S.C. No. 111–79]

ADDRESSING A NEW GENERATION OF THREATS FROM WEAPONS OF MASS DESTRUCTION: DEPARTMENT OF ENERGY NONPROLIFERATION PROGRAMS AND THE DEPARTMENT OF DEFENSE COOPERATIVE THREAT REDUCTION PROGRAM

HEARING

BEFORE THE

FULL COMMITTEE

OF THE

COMMITTEE ON ARMED SERVICES
HOUSE OF REPRESENTATIVES

ONE HUNDRED ELEVENTH CONGRESS

FIRST SESSION

HEARING HELD
JULY 15, 2009

U.S. GOVERNMENT PRINTING OFFICE

57–429 WASHINGTON : 2010

For sale by the Superintendent of Documents, U.S. Government Printing Office
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ADDRESSING A NEW GENERATION OF THREATS FROM WEAPONS OF MASS DESTRUCTION: DEPARTMENT OF ENERGY NONPROLIFERATION PROGRAMS AND THE DEPARTMENT OF DEFENSE COOPERATIVE THREAT REDUCTION PROGRAM

HOUSE OF REPRESENTATIVES,
COMMITTEE ON ARMED SERVICES,
Washington, DC, Wednesday, July 15, 2009.

The committee met, pursuant to call, at 10:03 a.m., in room 2118, Rayburn House Office Building, Hon. Ike Skelton (chairman of the committee) presiding.

OPENING STATEMENT OF HON. IKE SKELTON, A REPRESENTATIVE FROM MISSOURI, CHAIRMAN, COMMITTEE ON ARMED SERVICES

The CHAIRMAN. Good morning. Let me start by officially welcoming our colleague, Representative Buck McKeon, from California for his honest-to-goodness first hearing as a ranking member of this committee. He got off to a great start during our markup. And here we are at our first hearing, so we would like to officially welcome him in the first of many hearings that we will work together.

We welcome our witnesses, Honorable Thomas D'Agostino, Under Secretary for Nuclear Security with the Department of Energy and the Department's Administrator for National Nuclear Security Administration; Dr. Michael Nacht, Assistant Secretary of Defense for Global Strategic Affairs with the Department of Defense.

And we welcome both of you for being with us. This is a highly important hearing, and we look forward to your testimony.

The risks associated with the proliferation of weapons of mass destruction, particularly the risk that such weapons can fall into terrorists' hands, are some of the gravest threats facing our country. Since the end of the Cold War, the world has experienced a new era of proliferation. In the last eight years alone, North Korea has tested a nuclear weapon, expanded its nuclear arsenal and proliferated weapons of mass destruction, technology, and expertise to Iran and to Syria.

Iran has rapidly developed capabilities that may enable it to build nuclear weapons.

A far-reaching nuclear proliferation network run by Dr. A.Q. Khan of Pakistan was uncovered and dismantled.

Nuclear arms rivalries have intensified in Asia and the Middle East.

Changes in civil nuclear power programs have challenged the nonproliferation regime. The spread of biotechnology has increased

the availability of technologies for sinister purposes. Dangerous chemical, nuclear, radiological and biological materials have remained poorly secured. At the same time, terrorist networks around the globe have taken a deep interest in obtaining and using these materials.

The Department of Energy nonproliferation programs and the Department of Defense Cooperative Threat Reduction Program undertake critical work to address the serious weapons of mass destruction threats facing our country today and must be a top national security priority. Unfortunately during the past eight years these programs have suffered from a lack of effective policy guidance and leadership as well as programmatic and funding constraints. The 9/11 Commission gave the U.S. a grade D on average to prevent weapons of mass destruction proliferation and terrorism, and emphasized that Congress should provide the resources needed for these efforts as quickly as possible.

This committee has taken a number of important steps to address the 9/11 Commission's concern and move weapons of mass destruction nonproliferation and threat programs in the right direction over the last two years. The committee has also urged a strong national commitment to reinvigorate these programs and ensure that they are a top national security priority going forward. I am pleased that the President has now made that commitment and has already undertaken an ambitious effort to ensure that the U.S. does whatever we can do to reduce the risk that weapons of mass destruction and related material could ever fall into terrorist hands. This includes an international effort to secure all vulnerable nuclear material around the world within four years, and an effort to expand U.S. cooperation with Russia and pursue new partnerships to lock down sensitive material.

When the House passed the National Defense Authorization Act for Fiscal Year 2010 this committee provided the President with additional funding, new authorities and other tools to further the President's goals and objectives in this area. This includes a $403 million funding increase for Department of Energy nonproliferation programs and a $30 million funding increase for the Department of Defense Cooperative Threat Reduction Program.

Gentlemen, we look forward to hearing about the good work that your departments are doing. And under the new administration, we hope you will address the new generation of weapons of mass destruction threats facing our country. We are especially eager to hear about opportunities that exist to get a jump start on the President's initiatives.

I would like to remind our members and remind our witnesses that, directly following the end of this hearing, we will move to Rayburn 2337 for a follow-on classified briefing for members only.

Before I begin, we turn to my good friend, the ranking member, the gentleman from California, Mr. Buck McKeon, for any comments that he may wish to make.

Mr. McKeon.

STATEMENT OF HON. HOWARD P. "BUCK" MCKEON, A REPRESENTATIVE FROM CALIFORNIA, RANKING MEMBER, COMMITTEE ON ARMED SERVICES

Mr. MCKEON. Thank you, Mr. Chairman, for holding today's hearing on addressing a new generation of threats from weapons of mass destruction, with a particular focus on efforts under way in the Department of Energy's nonproliferation programs and the Department of Defense's Cooperative Threat Reduction Program. I would also like to welcome our witnesses, Thomas D'Agostino, the Undersecretary for Nuclear Security at the Department of Energy, and Administrator of the National Nuclear Security Administration; and Dr. Michael Nacht, the Assistant Secretary of Defense for Global Strategic Affairs.

Gentlemen, thank you for being here this morning. We look forward to your testimony. As the Chairman said, since this is my first full committee hearing as ranking member, I wanted to take a brief moment and express my sincere enthusiasm and commitment to work with Chairman Skelton and our members on both sides of the aisle to ensure that America's men and women in uniform have the direction, tools and resources they need to succeed and that our defense policies meet the evolving security demands facing our nation.

Today we are focused on the next generation of weapons of mass destruction (WMD) threats. I think it is fair to say that many would agree that we live in a complex security environment that includes nuclear-capable states, nations determined to be nuclear powers, and terrorists who seek nuclear materials and know-how. If we look to the latest headlines in the news, we will find a defiant North Korea which ignores the international community with its nuclear tests, multiple ballistic missile launches and proliferation of WMD technology and expertise; a calculating Iranian regime that is determined to develop its capabilities to build nuclear weapons; and Al Qaeda and their affiliates who seek to undermine the Pakistani government, a nation with a nuclear weapons program.

It is how we approach this WMD threat where we may have some disagreements. From my perspective, we need a balanced and effective toolkit filled with unilateral and multilateral tools of nonproliferation, counterproliferation, and military preparedness, including missile defense and emergency response.

Today we are focused on one set of tools at our disposal—defense nonproliferation programs managed by the Department of Energy and the Cooperative Threat Reduction Program managed by the Department of Defense.

Gentlemen, I look forward to hearing your individual assessments of the major proliferation challenges facing the United States and the international community and how your respective organizations prioritize to meet these challenges.

I am also interested in learning your thoughts on U.S.-Russia nonproliferation cooperation. As you know, earlier this month President Obama met with Russian President Dmitry Medvedev, and in a joint statement, both nations confirmed their commitment to strengthen cooperation to prevent the proliferation of nuclear weapons and stop acts of terrorism. Based on this renewed commit-

ment, what will be the impact, if anything, on your existing programs with Russia and in terms of cost-sharing?

At this time, I would also like to raise two concerns. First, while I recognize that addressing the WMD proliferation threat is in U.S. national security interests, our success depends on our partnerships with Russia and other nations. I am concerned that the United States often gets stuck paying the bills, especially for those nations who have the financial means to contribute. Let me emphasize that a partnership is not a one-way street; it is not an assistance program, and it is not effortless.

Please describe how you are working with other nations to ensure they take the proliferation threat seriously and how they are contributing, both in terms of capital and financial—political and financial capital, to address our shared proliferation interests.

Second, in the recently passed National Defense Authorization Act, both the National Nuclear Security Administration (NNSA) and the Department of Defense (DOD) received funding above the President's budget request for their nonproliferation programs. While I support the bill that we passed, I am concerned that the additional $402.6 million provided to the NNSA came without a formal request from the Administrator or Secretary of Energy and was based on a vague commitment made during President Obama's April 5th speech in Prague where he outlined his vision, "to secure all vulnerable nuclear material around the world within the next four years." My concern is that we are funding programs before the President's rhetoric has translated into an integrated interagency strategy or plan that has been shared with Congress.

As further evidence of my concerns, neither our colleagues on the Senate Armed Services Committee nor the House appropriators provided additional funding for NNSA's defense nonproliferation programs. In addition, both of these committees also reduced funding for an NNSA program to disable and dismantle North Korea's nuclear program next year. North Korea's rejection of the Six-Party talks and recent provocative actions are strong indicators that the international community will be in a stalemate with North Korea for the foreseeable future.

Considering these circumstances, Republicans would rather see this funding and additional increases designated by the committee for these programs be shifted to other priorities, such as missile defense, given the current threat.

Before closing, I want to reiterate that our nonproliferation programs are essential to U.S. national security interests, especially our efforts to keep nuclear materials out of the hands of terrorists.

Gentlemen, I look forward to your testimony and a candid discussion that follows and thank you for being here.

I yield back.

The CHAIRMAN. Thank the gentleman.

Our old friend, the Honorable Tom D'Agostino, we will call on you first, sir.

STATEMENT OF THE HON. THOMAS P. D'AGOSTINO, UNDER SECRETARY FOR NUCLEAR SECURITY, DEPARTMENT OF ENERGY, AND ADMINISTRATOR, NATIONAL NUCLEAR SECURITY ADMINISTRATION

Secretary D'AGOSTINO. Thank you, Mr. Chairman.

Chairman Skelton, Ranking Member McKeon, members of the committee, I appreciate the opportunity to appear before you today to discuss NNSA's vital role in supporting the administration's efforts to address weapons of mass destruction threats.

Mr. Chairman, under your leadership the committee has been a strong supporter of NNSA's nonproliferation activities.

The CHAIRMAN. Excuse me, would you move the microphone just a little closer? We are going to have this room renovated, and it is going to be a lot easier for witnesses as well as the committee to hear witnesses some six months from now.

But, right now, we will have to do with what we have. So please proceed. Thank you.

Secretary D'AGOSTINO. Yes, Mr. Chairman.

The committee's assistance will become even more critical as the NNSA seeks to expand and accelerate efforts, consistent with the President's nuclear security strategy. The nonproliferation activities that I will address today are a subset Department of Energy's overall capabilities to address the weapons of mass destruction threat. These activities complement the Department's other recognized nonproliferation, arms control and counterterrorism capabilities. However, my remarks today focus on our first and second line of defense activities to prevent the spread of weapons of mass destruction, of materials and of technology.

The President made clear in his April speech in Prague in joint statements with our Russian partners and elsewhere that nuclear weapons remain a fundamental issue facing the international community in the 21st century. He has stated that the most immediate and extreme threat to global security is the potential acquisition of nuclear weapons by terrorists. To address this threat, the President has outlined an ambitious strategy: deal with the nuclear arsenals, halt the proliferation of weapons to additional states, and prevent terrorists from acquiring weapons or the materials to build them.

I have had the opportunity to speak to members of this committee on the important work that the NNSA has done and the enterprise carries out to ensure that the United States' nuclear weapon stockpile remains safe, secure and reliable to deter any adversary and to provide the appropriate defensive umbrella to our allies.

While I am speaking today about a major separate component of the NNSA, the nonproliferation component of our national security mission relies upon similar scientific and technical expertise. It is that scientific and technical nuclear expertise, combined with our proven track record on implementing programs both domestically and abroad, that makes the NNSA defense nonproliferation program a leader in nonproliferation activities around the world.

The NNSA nuclear security programs provide an important means to achieve a number of President Obama's objectives. His April Prague speech provides a priority list of areas in which NNSA will focus future nuclear security activities. Chief among

those is the President's call to secure all vulnerable nuclear materials around the world in four years, expand our cooperation with Russia, and pursue new partnerships to lock down these sensitive materials.

This is an urgent and ambitious goal. However, it is one that we stand prepared to support. Our work scope includes a priority-based assessment of activities required to address security concerns at specific sites worldwide. NNSA will undertake the following actions to expand nuclear security cooperation with Russia and other key partners; secure nuclear material at the most vulnerable sites worldwide; remove and eliminate weapons-useable nuclear materials where possible; strengthen international security standards, practices and international safeguards; improve international capabilities to detect and intercept smuggling of nuclear materials; and to prevent terrorists and proliferators from poaching on the international market in the dual use of nuclear-weapons-related equipment and technologies.

To start addressing the four-year time line to secure vulnerable material, some existing NNSA activities will be accelerated, including our Material Protection Control and Accounting Program, our Global Threat Reduction Initiative and our Nonproliferation and International Security programs. Other aspects of the present agenda will require new or expanded efforts, but in short, we have our to-do lists.

This NNSA plan of work alone will not accomplish all of the President's nuclear security objectives. Under the leadership of the White House, we will work closely with the Department of State, Department of Defense, Homeland Security and others in achieving these goals. The joint statement on nuclear cooperation issued by Presidents Obama and Medvedev in Russia just last week, as well as the March 2010 Global Nuclear Security Summit, announced at the G8 summit in L'Aquila, Italy, likewise will provide a solid foundation for work with our international partners.

In closing, as the Administrator of the NNSA I am very proud of the work and accomplishments of the nonproliferation program that we have. For the sake of not taking up too much of the committee's time today, I have not covered our other numerous activities and accomplishments in my oral statement. However, I have included the details of our nonproliferation programs and the achievements in the written testimony. You have my assurance that, as we continue on our important work to achieve the President's nonproliferation goals, while closely working with our interagency partners, NNSA will do its best to make the world a safer place. Mr. Chairman and members of the committee thank you very much, and that concludes my remarks.

[The prepared statement of Secretary D'Agostino can be found in the Appendix on page 35.]

The CHAIRMAN. Without objection, the written testimony of the witnesses will be included in the record.

Dr. Nacht, please. We welcome you.

STATEMENT OF DR. MICHAEL L. NACHT, ASSISTANT SECRETARY OF DEFENSE FOR GLOBAL STRATEGIC AFFAIRS, OFFICE OF THE UNDER SECRETARY OF DEFENSE FOR POLICY, U.S. DEPARTMENT OF DEFENSE

Dr. NACHT. Thank you, Mr. Chairman. And I, too, have submitted written testimony for the record.

Mr. Chairman and members of the Armed Services Committee, I am very pleased to appear before you today to discuss these terrible threats posed by weapons of mass destruction and explain how the Department of Defense Cooperative Threat Reduction Program plays an important role in the overall U.S. strategy to mitigate these threats.

We all know that weapons of mass destruction pose a tremendous threat to our nation, our interests and even our way of life, and the Department of Defense is seized with this challenge, and we are determined to ensure that we develop and maintain the plans, strategies, capabilities and programs necessary to prevent WMD proliferation wherever possible.

The Under Secretary of Defense for Policy has identified four strategic priorities that provide our Department with the mechanism for examining WMD challenges. These four priorities are: Increasing barriers to WMD proliferation and use; identifying and mitigating emerging WMD threats; developing an integrated, layered WMD defense; and managing WMD threats emanating from failing or fragile states or from ungoverned spaces.

These priorities provide a valuable framework to support the President's ambitious nuclear security agenda from his Prague speech. Within DOD, these priorities are shaping our efforts to address WMD related issues in the Quadrennial Defense Review, the QDR, which is currently under way. The QDR provides an unparalleled opportunity to communicate the importance of WMD issues to the broader defense community.

Let me briefly offer the committee a report on our current and future Cooperative Threat Reduction (CTR) activities. And before I begin, I do want to thank the committee for its continued strong support for the Cooperative Threat Reduction Program and the National Defense Authorization Act for Fiscal Year 2010, and we take this as a vote of confidence in the Department's efforts thus far to implement the CTR Program.

Mr. Chairman I know you and your colleagues are well acquainted with the history and activities of the Program. I just want to bring you up to date briefly on the status of some current projects, some recent achievements, and then some new initiatives.

CTR today is in a period of transition from a nuclear-centric effort focused on the former Soviet Union to a more expansive effort to respond to WMD threats throughout the world. CTR continues to oversee the destruction of strategic weapons delivery systems and associated infrastructure in accordance with all relevant stock provisions and agreements. Security systems at 24 nuclear weapon storage sites in Russia have been upgraded in partnership with the Department of Energy, with the final upgrades completed in late 2008 last year. DOD and the Department of Energy (DOE) are now coordinating closely to give the Russian military the means to sustain operational readiness into the future.

On March 5th of this year, the first chemical munitions were destroyed in the Shchuch'ye chemical weapons destruction facility. By 2012, the facility will destroy the chemical weapon stockpile at the nearby Planovy military base, which contains approximately one-seventh of Russia's chemical arsenal. In Azerbaijan, CTR is helping the Coast Guard interdict WMD smuggling in the Caspian Sea, and we are installing a comprehensive surveillance system that will cover the major shipping lanes in the Caspian.

And by the way, Congressman McKeon, I can cite some specific cost-sharing examples here perhaps after I finish my testimony. The Biological Threat Reduction Program, the BTRP, continues its work to consolidate and secure pathogen collections, develop a capability for disease detection, diagnostics and reporting and enhancing strategic research partnerships.

We have negotiated an implementing agreement with Armenia which is pending signature. There is construction of the Central Reference Laboratory in Tbilisi, Georgia, which is on track to be completed this year. And at the request of the Georgian government, CTR was working to make the lab a joint disease surveillance and research center. These are ongoing activities today.

What about the future? First, we must continue to have a strong CTR presence in Russia, as the President attempts to reset our relationship with Russia, where the CTR Program should be a central part of that resetting process. CTR is working with an interagency forum to meet the President's goal of nuclear lockdown within four years, as Administrator D'Agostino has already discussed.

This group is currently assessing known locations of nuclear material to determine the best way forward. This initiative is a high priority for the President, and CTR looks forward to assisting in this effort. In addition, the CTR Program is bracing for a wide range of emerging WMD threats beyond the former Soviet Union.

A recent National Academy of Sciences study recommended that CTR expand geographically and evolve in form and function to confront emerging WMD threats. In conjunction with an interagency committee on bioengagement, CTR has identified four countries, Pakistan, Afghanistan, Kenya and Uganda, as potential partners in future bioengagement efforts.

A National Research Council report on the Biological Threat Reduction Program noted that countries that lack the infrastructure necessary to detect, diagnose, and protect disease outbreaks are at a greater risk of succumbing to a bioterror attack. Dual-use technologies, materials and expertise flow freely across international borders. Dangerous pathogens exist in nature and can be weaponized without special equipment or advanced technical skills.

So the increasing threat of animal-to-human transfer of pathogens underscores the importance of reporting on animal disease outbreaks as well as human. To meet this threat, the Biological Threat Reduction Program has built facilities, such as the Joint U.S.-Georgia Disease Surveillance and Research Center, that will have the unique capability of conducting research in both human and animal especially dangerous pathogens.

BTRP will continue to grow and evolve as CTR shifts from a nuclear focus to a more expansive vision for threat-reduction efforts.

Let me conclude my remarks by endorsing the new legal authorities this committee has included in the National Defense Authorization Act (NDAA). I wish to emphasize to the committee that DOD understands the sensitivities associated with the use of these authorities, and we will only utilize them within the guidelines set forth in the legislation.

So, in conclusion, Mr. Chairman, I would say CTR is one piece of an overarching national strategy to counter WMD. We have made significant progress over the history of the Program, but we have more to do across the growing spectrum of WMD threats. The Department of Defense looks forward to continued close coordination with Congress and its interagency partners as we seek to address the threats posed by WMD. And I welcome your questions and look forward to a productive discussion. Again, thank you for giving me this opportunity.

[The prepared statement of Dr. Nacht can be found in the Appendix on page 45.]

The CHAIRMAN. Doctor, thank you very much.

Let me ask each of you, in your considered opinion, what is the greatest existing or emerging threat posed by the proliferation of weapons of mass destruction?

Go ahead, please.

Secretary D'AGOSTINO. Why don't I start, Mr. Chairman?

In my view, obviously, it is a complicated question. I don't want to point to a particular region in the world, but I would like to answer it in the following way. This is all about the material. Preventing terrorists, nonstate actors, rogue states from having the kind of material that can prove to be dangerous; fissile material and, in some cases, certain types of radiological material, can cause also panic, if you will, but may not have that destructive power that fissile material may have.

Our priorities are to look at both areas, but it is all about the material. So we have a program working with the Defense Department that integrates the whole material spectrum problem. Looking to secure material where it exists around the world is a key part of it, and reducing the number of locations of the material, eliminating material, trying to get rid of that fissile material that has no energy value, if you will, and converting material from highly-enriched uranium to low-enriched uranium; detecting material as it moves around the world, having a specific program to focus on material detection; and then ultimately stop adding to the material problem with programs and ideas, such as the Fissile Material Cutoff Treaty and reopening it to discussion internationally to get those pieces together.

So the threats come down to the material. It is kind of like that old real estate add, which is location, location, location. I think it is material, material, material. Obviously technology and policies are a big part of that. But that is how I like to think about this problem sir.

The CHAIRMAN. Thank you.

Dr. Nacht.

Dr. NACHT. Of course, President Obama to some degree answered that question in Prague when he said the most immediate and extreme threat to global security is a nuclear weapon in the hands

of terrorists. Within the Department of Defense, we are very much emphasizing that it is most expeditious to stop the proliferation of WMD at its source, because once it gets out into a transportation network, it is much harder to interdict.

Let me give you several examples of how we are trying to do this. In cooperation with the Department of Energy, we, last year, finished physical protection upgrades at every Russian nuclear weapon storage site for which U.S. assistance has been requested to enhance the security of those sites and make it less feasible for material to be stolen.

Currently, the two departments continue to work closely with the Russian ministry of defense to develop a cadre of military personnel capable of operating, maintaining and repairing those security systems far into the future. In an effort to address the insider threat, which is really central to stopping the flow of material from the source, we work closely with the Russian—the three agencies. The Ministry of Defense (MOD) in Russia and DOD and DOE are involved in further developing MOD personnel reliability programs intended to ensure that personnel with access to nuclear weapons are fit for duty.

The DOD and MOD together have developed and installed an automated system to inventory and to track the location and condition of Russia's nuclear weapons. We also continue to support the transport of nuclear warheads from operational locations to dismantlement facilities and to consolidate its secure storage. So we remain engaged with the Russian Federation on multiple fronts, including eliminating strategic nuclear arms and their delivery vehicles.

Of course, nuclear weapons are not the only form of WMD that pose such a threat, even in the hands of terrorists. So as I mentioned in the past already, the first processing building at Shchuch'ye Chemical Weapons Destruction Facility began to destroy agents in March of this year. A second processing building will be completed by the end of this year. So interdicting and stopping the proliferation of the weapons at its source is our primary approach to this problem.

The CHAIRMAN. Thank the gentleman.

Mr. McKeon.

Mr. MCKEON. Thank you, Mr. Chairman.

Gentlemen, in following up on my opening remarks, there has been a great deal of attention focused on the President's goal of securing all vulnerable nuclear material worldwide in four years. Again, it is my understanding that, at this time, neither the Department of Energy nor the Department of Defense nor this Congress has seen a formal strategy, plan or timeline to meet this goal. Would you please tell us when should the Congress expect to receive such a formal strategy or plan?

Secretary D'AGOSTINO. I will start, sir, and then shift over. What we have done at the Department of Energy, and we are very familiar with the Cooperative Threat Reduction Program and work closely with Dr. Nacht and his team, is we looked at our program, which is structured as I mentioned earlier around securing material, addressing that and being able to detect movement of items across the world, frankly; and looked at accelerating those elements

of our program, trying to push the end dates, some of which are out in the 2016 to 2018 time frame, and moving them closer within the next four-year period.

So the scope of work that we have laid out we don't have an approved plan. My team, headed by Mr. Baker, has put together a draft plan. I have asked him to put together a draft plan, but that draft plan is not approved yet by me. It is, frankly, we are negotiating both internally within the Department and in the interagency process.

However, in the meantime, I don't need to have a final approved plan to know what work I have in front of me because I have a good sense of it. And so we are looking at recalibrating the internals of our program to address what we think are the most vulnerable and most important areas to address first.

And then the interagency process, as you have described in your opening remarks, are exactly where ultimately I would like to see this go. This is not just about the NNSA or this is not just about the Department of Defense and the NNSA solving, addressing this problem. This is about the whole federal government and, quite frankly, all of our international partners who are part of this solution. It will take a little bit of time to get to the point, and unfortunately, I can't give you a date, but it will take a bit of time to sort out all those pieces. But in the meantime, I think Dr. Nacht and I know about our work that we have cut out in front of us, and we want to accelerate those pieces that we can, particularly with our Global Threat Reduction Initiative in the National Nuclear Security Administration, as well as with our Material Protection and Accounting Program that we have. Those two pieces coupled with the right policy and safeguards framework will ultimately get us a lot closer to where we need to be four years from now.

Dr. NACHT. Let me follow on with some remarks from the Defense Department's perspective. As Dr. D'Agostino has said, the staffs of several of the agencies involved in this work are collaborating and developing an overall strategy, which is in progress. There are several parts to this process that I can cite. First, we are defining and scoping the problem in terms of the definitions and thresholds for vulnerable materials. What is it we really are looking for? What is included in our effort to lockdown? And what is excluded? We are refining and prioritizing the list of key facilities and sources of vulnerable materials worldwide.

We are defining where the problem is best addressed, to expanding and accelerating existing programs, and where new activities and programs will be required, to include an evaluation of roles and missions of the major departments in the federal government. And I believe that we could be able to return to you in September and provide a more detailed report on the proposed way forward.

Mr. MCKEON. So you are expecting by September to give us the plan?

Dr. NACHT. I am optimistic that we will have something to report to you in September. The NNSA, of course, is overseeing this. They are taking the lead on it in terms of coordination, and we are all on the job on this. We know how critically important it is. It is not only something that has been restated by President Obama; it was

now endorsed at the G8 summit in L'Aquila, so it is becoming a global initiative. So we know it is a very high priority.

Mr. MCKEON. Will the four years start when the President gave his speech or in September when you give us an update or a draft of a plan?

And Mr. D'Agostino, you said it would take some time. Would you be able to report back in September?

Secretary D'AGOSTINO. I think what we would be able to—we have an element of our plan, we have our work scope identified, and the key will be making sure that our priorities are not just within the Department of Energy, but are consistent with the rest of the federal government, quite frankly, and having those things line up and mesh up nicely.

I believe we will have a plan that I am comfortable with. As you obviously know, sir, we are in the process of defining our fiscal year 2011 and outyear program in details. I have a personal desire, and I know Dr. Nacht does as well, to make sure that things get settled as quickly as possible on this plan because it helps inform the kind of program I will ultimately submit to the White House and negotiate to get into the President's budget next January.

So I think I will have enough information from a draft standpoint. I don't know if it will be ready for Congress yet, but quite frankly, I am pushing very hard, and I know Dr. Nacht is pushing very hard, to get this thing done. We understand that this is a focal point, and we understand that this is the thing that is going to help us shape the details of our program. And whether more money needs to be put in category A versus category B and where the priorities are, we are right on top of that because it is important to get this done.

Mr. MCKEON. Is the President asking both of you to—is this just something that sounded like a good thing to do, or is he really serious and he wants this done in four years from the time he gave the speech, and you are working on it and you will have the plan back September or January? I think the Congress is very interested in seeing that and then monitoring it because I think we all agree that that is something that should be done, and four years is a good time to have it done. So is this something that he is pushing you on, that he wants this plan and the date started from when he gave the speech?

Secretary D'AGOSTINO. The President is quite serious about this plan, sir. I haven't talked to him personally about it, but I have talked—my contacts at the National Security Council are very clear that we are going to put together a plan, we are going to work the details of it. I don't know when, quote-unquote, the official start date might be. My view is the President said he wants the plan done within four years. I know the date he said. I think it is April 4th. And I am working to that end.

Mr. MCKEON. Thank you very much.

The CHAIRMAN. I think we are running out of time. We will run and vote in just a minute. But I have one request following up on Mr. McKeon. You will, the minute the plan is fully ready, communicate it to this committee, am I correct?

Dr. NACHT. Yes, of course. As soon as the plan is fully ready, we will communicate this to the committee. And there may be ways we can brief you off line or in closed session on the progress.

The CHAIRMAN. Of course, the sooner the better. A briefing would be excellent. But we would like to have the full plan. I am sure we would consider a full hearing on that issue the minute that it is given to us. We will return after the vote, and Ms. Sanchez will be the lead questioner. We will be adjourned until we come back.

[Recess.]

The CHAIRMAN. The hearing will resume. The gentlelady from California, Ms. Sanchez.

Ms. SANCHEZ. Thank you, Mr. Chairman.

And thank you, gentlemen, for being before us today.

I have sat on this subcommittee that deals with these issues now for I think 11 of the 13 years that I have been in the Congress. And there are really two issues that worry me today, and I continue to try to understand and get my hands around it. So I will start with the first.

The START treaty will expire December 5th of this year. And I know that your agency is the one that deals with giving the technical information about numbers and capabilities and delivery systems, et cetera. So my question is—it is my personal opinion that it is very difficult to reach a renegotiation and then extension treaty by December 5th. So my question to you would be, what is it that we as Congress can do to ensure that we meet this December 5th, that we get something that we meet this December 5th deadline, because I think it is very, very critical? It exposes us to a new arms race, if you will, if we don't do something about this.

Dr. NACHT. Well, Congresswoman, obviously, you are aware that there have been very intensive negotiations.

Ms. SANCHEZ. I have been to Russia several times.

Dr. NACHT. Right. And Rose Gottemoeller from the State Department chairs our negotiating team. They are actually leaving again next week for the first round of negotiations post-summit. I think the calendar is daunting, as you suggest. We are making every effort, and the Russians have been told this, and they are fully aware of this, that we don't want to go through a process of extending the treaty.

We want a new treaty that will be completed by the time the START treaty expires. Now, then, we think probably it is unlikely that the treaty will be completed and the ratification process will be completed by the time the treaty expires, the START treaty. So we would seek an extension from the Congress to continue the treaty while the ratification process goes forward. But we are hopeful, very hopeful, that a treaty will be reached, an agreement will be reached on a new treaty before December 5th. We will submit it to the Senate and to relevant House committees as well, but for consent for ratification, which will then take place. Senator Lugar has stated publicly it might take four months. So sometime before the spring of 2010, we would hope to have a new agreement.

Now, the summit, as you know from the joint understanding, did reflect a lot of hard bargaining that has already taken place. We have an agreed range of operationally deployed strategic nuclear weapons of 1,500 to 1,675. We have an agreed range of strategic

nuclear delivery vehicles 500 to 1,100. Each side has argued for one side or the other. At least we have now bounded the problem, and I think we can see our way through to an agreement on both those characteristics of the forces which are critically important.

There are other elements of the treaty as well and definitional issues that have to be resolved, so there is a lot of hard negotiating ahead. But I think our readout of the summit was that the Russians, although they are challenging to work with, want an agreement. Actually, their nuclear delivery vehicle programs are lagging ours by quite a lot numerically. Just the atrophying of their systems; they are putting more weapons on fuel delivery vehicles, which actually is quite destabilizing. We would prefer to have single-warhead weapons on delivery vehicles so it is not seen as a first-strike weapon. So this suggests to me—I mean, there are other issues. There is a missile defense issue in Europe.

Ms. SANCHEZ. Yes, I know about that also.

Dr. NACHT. So I don't want to in any way sugarcoat it. It is not going to be simple. But I think this is an important next step.

We had the London meeting between President Medvedev and the President in April. We had the Moscow summit last week. I think it is promising—I spent a lot of time negotiating it with the Russians in the past, in the 1990s—that we will have a treaty before the START treaty expires.

Ms. SANCHEZ. Let me stop you right there because I have a second question. I am very concerned—my number one priority has always been the concern over Iran getting nuclear weapons. What do you think the Congress can do? I think it is not just an ability for them to get the ability to send missiles off, but their ability to put it in the hands of somebody who might walk it into our country or into another ally's country. What should the Congress be doing?

The CHAIRMAN. Doctor, answer the question, please, and then we will go to the next witness.

Dr. NACHT. Well, this is a large subject. Obviously stopping Iran from acquiring nuclear weapons or transmitting them to others is obviously a top national security priority for the President. We have had this recent—now where Iran is going through sort of our people domestically.

One of our issues is, we are seeking to impose an effective sanctions regime on Iran, so that they will find it in their interest to come to the table. But it is not easy to do. Germany alone exports $6 billion worth of goods and equipment to Iran. A lot of our European allies are deep negotiating commercial partners with Iran.

Ms. SANCHEZ. We have been working with them through the dialogues that we have in the Congress.

Dr. NACHT. The Chinese buy a lot of oil from Iran. So whether you are looking for a U.N. Security Council resolution, if you are looking for a multi-party sanctions regime, we are talking to the people who are selling the Iranians a lot of high-priced systems. So anything the Congress can do, frankly, to shore up our ability to enforce a sanctions regime we think would be very valuable.

Ms. SANCHEZ. Thank you.

The CHAIRMAN. I thank the gentlelady.

Mr. Bartlett—but before I call Mr. Bartlett, let me again reiterate, gentlemen, we would appreciate continued briefings on the

progress on the four-year plan. And when it is finalized, at the earliest moment, please, communicate it to this committee because we wish to follow through at that time.

Mr. Bartlett.

Mr. BARTLETT. Thank you.

Several years ago, I spent three days in North Korea. They may be evil; they are not stupid. They know, and I suspect the same is true of Iran, they know that if they launched a missile from their soil, nuclear tipped, that the consequences of that would be that we would vaporize their country.

Gentlemen, they are just not going to do that. I have no idea why we are watching to see when they get a missile which could reach us from their soil. They are not going to launch a missile from their soil toward us. If they launch a missile toward us, it will be from the sea. And if it is nuclear-tipped, the most probable use of that weapon is going to be to produce an extra atmospheric electromagnetic pulse (EMP) lay down. Their weapon and their missile is unlikely to have much precision. If they miss their target by 100 miles for extra atmospheric detonation, it really won't matter, will it? The most probable place the weapon is going to be launched from is the sea. And the most probable use of the weapon is going to be an EMP attack. Why am I not seeing any meaningful preparation to protect us against either one of these?

Dr. NACHT. Well, let me just take a piece of what you have said. When the North Koreans started testing these missiles, most recently after they tested a nuclear device, Secretary Gates ordered redeployment of missile defense systems, the Terminal High Altitude Area Defense (THAAD) system and an Aegis system, to protect the Hawaiian islands. We are working on——

Mr. BARTLETT. Sir, if I might interrupt. That is because we thought they were going to launch from their soil, and the current missile would only reach Hawaii; it wouldn't reach our mainland. I am saying, sir, that they are not going to launch from their soil. They may be evil; they are not stupid. They are not going to launch from their soil. They are going to launch from the sea, which means that all up and down both of our coasts, we are vulnerable. Why am I not seeing any meaningful preparation to protect us against that? And if they do launch there, sir, the most probable use of that weapon—it is in all of their open literature and all of their war games—and if a nonstate actor had it, that it is absolutely what they are going to do, it is going to be an extra atmospheric detonation-producing EMP. I am not seeing any meaningful preparation to prepare for that attack either. Why am I not seeing any preparation for either of these two, which is the most probable way the missile is going to be used and the most probable way the nuclear weapon is going to be detonated?

Dr. NACHT. With respect to possible EMP attacks on the United States, there is work being done which we could discuss in another venue. With respect to a sea-based system, there are no current platforms or delivery vehicles available to the North Koreans to launch an attack on the U.S. homeland from sea.

Mr. BARTLETT. Sir, that just isn't true because any tramp steamer and a Scud launcher, which they can buy for $100,000, can launch a missile to an apogee of 180 miles. That is perfectly ade-

quate, sir, for an EMP attack which would devastate all of New England. They do have platforms. Any tramp steamer and a Scud launcher is an adequate platform.

Dr. NACHT. Congressman, of course, you are aware, take the recent following of the Korean ship from the North Korean port toward Burma that turned around just recently; we have excellent surveillance of all North Korean naval vessels.

Mr. BARTLETT. Sir, there are thousands of commercial ships out there. And if a canvas is over it, you cannot tell whether it is a stack of bananas or a missile launcher on the deck. We can't see through the thinnest covering on the deck. There is no way, in today's world, that we could detect whether that cargo on the deck is a launcher or Caterpillar tractors.

Dr. NACHT. I think, Congressman, you raise some good points, and I think we can continue this perhaps with members from the Defense Intelligence Agency and others in a closed session and I'd be happy to go into more detail on exactly your concerns.

Mr. BARTLETT. Thank you, sir.

The CHAIRMAN. I thank the gentleman.

Mr. Marshall, please.

Mr. MARSHALL. Thank you, Mr. Chairman.

I second, third and fourth what my colleague Mr. Bartlett had to say. This is so obvious. One of the reasons why I agreed to cochair the Missile Defense Caucus; we are not adequately prepared to deal with rogue missiles. And a rogue missile launched the way Mr. Bartlett described would just be absolutely devastating to the United States, would significantly weaken the United States. It would, obviously, be in the interest of all of our adversaries to do that. And the possible consequences, the human consequences, within the United States are just too horrible to even contemplate. And so I look forward to closed session discussions of this problem and what we are doing about this problem.

CTR and the evolution of CTR, Mr. Nacht, if you had additional funds available to you, what would you be doing with those funds? How would you modify the Program, improve the Program, expand the Program, those sorts of things? I understand we have moved significantly away—well, not away from—but we have broadened the scope of our inquiry beyond nuclear to bioterrorism, chemical, et cetera. And if you could describe what you would do with additional resources, that would be helpful.

Dr. NACHT. Well, you raised one point immediately. We are moving substantially into the bioterrorism threat space, and we are still at the early stages. It is not easy to collaborate with other countries on this, although we have made some progress. A lot of the systems we are talking about are dual-use systems. They can be used for perfectly legitimate commercial research activities. We could really scope out a broader effort to try to develop something that might begin to move down the road toward a lockdown of pathogens even though it would be even more ambitious than the nuclear lockdown.

Mr. MARSHALL. When you say it is not easy to coordinate with other countries on this particular subject, is it because of lack of resources or there is just lack of interest on their part to cooperate with us?

Dr. NACHT. I would say it is a mix. You know, if we speak to some governments, they find that we are being excessively intrusive on what they are doing in certain areas, or they deny that there is any malevolent intent or any military application. Sometimes we can't prove that. We don't have the intelligence to know definitively.

So we need collaboration that sometimes comes actually from a broader framework. Take for example the case of Georgia. Georgia was invaded by Russia last summer. Georgia has all kinds of security concerns. We have signed an agreement that basically pledges to maintain their security. They are very keen on collaborating with us, even though it is a very sensitive matter dealing with their Russian neighbors on all of this. So there we have a substantial new program for a biological laboratory in Georgia.

But other countries don't have that sense of security needs or concerns. They don't think they are a transit point for bioterrorism, and they are just more reticent. Now, sometimes funds can help. If we say, we will put a downpayment down on this activity or we will pay the majority share in the first tranche, they might be more interested. So I think additional funds could help. But we have been very careful not to go to the committee or the Congress for request of funds that we know we can't use effectively.

And, you know, you have been generous enough to support beyond our request. So, you know, we have not submitted—we don't have a list, really, of unfunded priorities that we have in our pocket that we could go to. It is unusual, unlike a lot of other areas. But if you are urging us to do it, we could develop it.

Mr. MARSHALL. That would be great, if you would develop it. We may not fund it, but it would be nice to know what additional steps—where would you go from where you are right now.

Dr. NACHT. Sir, we will follow up on that with NNSA.

Mr. MARSHALL. Thank you, Mr. Chairman.

The CHAIRMAN. Mr. Thornberry, please.

Mr. THORNBERRY. Thank you, Mr. Chairman.

Mr. D'Agostino, I appreciate what you and your colleagues at NNSA have done over the years on nonproliferation. I have thought that if the federal government were going to waste money in one area that that would probably be the area to waste it in, because any chance of reducing slightly the odds of a terrorist getting a weapon of mass destruction would be worth a lot. But, at the same time, we want to make sure our money is spent smartly and effectively.

Secretary D'AGOSTINO. Right. Right.

Mr. THORNBERRY. And I have some concerns that a lot of this is moving so quickly that we have the risk of throwing money at problems and not spending it as smartly and as effectively as we might—could.

For example, it seems to me that the clearest, easiest program to defend is Material Protection, Control, and Accounting (MPC&A), where we put greater security around nuclear fissile materials. But the question is, how much is enough? How much do we keep upgrading, for example, Russian facilities when they are spending a tremendous amount of money to upgrade their own military and it is becoming much more effective over time?

And what I really want to get to is, do you have an objective standard of metrics that can help evaluate where different facilities are, partly as a way to know where to put the money, but partly as a way to know whether we are making progress or not?

Secretary D'AGOSTINO. Mr. Thornberry, thanks very much for the question.

The answer to that is, yes, we do have an objective set of metrics. The nonproliferation program is driven, in fact, by metrics.

With respect to MPC&A or even our Global Threat Reduction Initiative, we have a very clearly laid out scope of work that goes out into the future. Much of this work, as you know, takes some time to do. I mean, you have to start with usually country-to-country negotiations, and in each country it is unique and different.

But in the end, we know how many facilities we have said we were going to work on in Russia. We have laid out that scope. We know how many buildings we said we want to secure in Russia. We know how many ports and land transfer crossings we have in Russia and around the world that we plan on doing. And we are literally working our way through that menu. And so, at any given point in time, we know how well we are doing, are we getting a B-plus or an A-minus or a C or what have you.

Mr. THORNBERRY. And can you say that this facility in Russia and this other facility in wherever, Bulgaria, meet category III security standards, for example? I mean, is there a standard set by which you can measure across the different countries where security is relative to perfect security, which doesn't exist?

Secretary D'AGOSTINO. Yes, sir. We use the International Atomic Energy Agency (IAEA) Circular 225, Rev. 4, which is an international security guidelines that go off and help guide our program. We make sure that those facilities meet that bare minimum set of security standards. And we work our way through that list.

So it is very much metric-based. At any given point in time, for example, we have 73 out of 123 sites that we said we are going to finish off in Russia are actually done; 73 are completed——

Mr. THORNBERRY. And you have walked away from them?

Secretary D'AGOSTINO. We have sustainability agreements. This is the key point, though, and I think you are absolutely right, is making sure we have a transition plan with Rosatom, for example, which is one of our major partners in Russia. We have a transition plan in place to work that off. Right now they pick up 40 percent of the load on maintainability, and the plan is to get them off of the U.S. approach out into the next few years. The Ministry of Defense, which we work closely with the Defense Department, has already agreed that they are taking care of 100 percent of the security upgrades that we have jointly worked on.

So I am very much in the mind of making sure that this is not the gift that keeps on giving, if you will. This is something where we expect a partnership relationship. And, frankly, I am quite pleased with the partnership relationship.

I will give you one more example, the Federal Customs Service in Russia, for example. Right now, with them we are working on putting security upgrades at 370 land border crossings, with the agreement right off the bat that they do 50 percent of the work, we do 50 percent of the work. And on the 50 percent of the work

that we do, they are picking up the maintenance costs on those facilities bit by bit, so that over the next three years they will have 100 percent of the maintainability on that covered.

Now, of course, we are going to watch them to make sure they follow through on that—that is my own parochial interest—but I think it is happening.

The CHAIRMAN. Thank the gentleman.

Dr. Snyder.

Dr. SNYDER. Mr. Chairman, I am sorry I was late because of the Veterans Committee. If Mr. Thornberry would like another five minutes, I will yield my time to him. He is one of the experts and zealous advocates. If he only has five minutes of information, then he is done—I will let you have my time.

Okay. Well, I am just going to pass.

Mr. THORNBERRY. Well, all right.

Dr. SNYDER. There he goes.

Mack has been a leader in this program. There were political threats to this program 10, 12, 13 years ago, and Mack lead action both in this committee and on the floor of the House because of the importance of these programs. And I want to recognize him.

The CHAIRMAN. The gentleman is recognized for another five minutes.

Mr. THORNBERRY. I appreciate the gentleman from Arkansas. He and I have traveled together with some of your folks and seen some of this, particularly in the early days, which, again, seems to me to be eminently defensible. I am worried, though, again, that, as we move ahead, that it continues to be eminently defensible.

And let me just pursue a little bit—you were talking about Russia, and you talk about Russia a lot in your statement, and the partnership we have with Russia. You talk in your statement that Russia is bringing back some civilian fuel that it has produced from neighboring countries. Other than that example, is Russia doing anything for anybody else other than itself?

Secretary D'AGOSTINO. Well, we work with Russia on the Global Initiative to Combat Nuclear Terrorism, which talks about the training and export control and making sure—since we obviously have the majority of the material and the warheads, we have a certain obligation, we feel a significant obligation in that manner, to essentially get the whole world up to a certain level of standards with respect to nuclear counterterrorism.

Essentially, we work obviously very closely with repatriating material, as you have described. Russia is very keen and has been very helpful with us, kind of with some other states that I would rather talk about in closed session. I would be happy to do that in closed session because of the sensitivity of the discussion.

But also they have—because of our partnership with Russia, other nations have watched this, and we have agreement with our second line of defense activities where this isn't just a matter of the United States going over to some foreign port and saying, "We will take care of everything; we are going to install this equipment." We typically provide the equipment and the know-how on the operations, but those other countries pick up the rest of the work, which is significant. It is not only the installation, but the operations and the maintenance of that stuff.

So we are—I am very confident overall with our partnerships.

Mr. THORNBERRY. Well, I appreciate it.

And I appreciate, again, Dr. Snyder yielding.

I would just say, to keep bipartisan support, it will be very important for the administration to make sure we are not just funding Russian military modernization and that they do not only what they say they are with their own materials and facilities, but they are genuinely helpful, whether it is public or not, are genuinely helpful in getting better control of materials in other places.

Secretary D'AGOSTINO. Thank you.

Mr. THORNBERRY. So, with that feedback, I appreciate the gentlemen. Yield back to the gentleman from Arkansas.

The CHAIRMAN. Mr. Heinrich, please.

Mr. HEINRICH. Thank you, Mr. Chair.

Gentlemen, what do you see as the role of the Congress in motivating our allies and partners, countries like Germany, to pursue a more effective sanctions regime with Iran?

Dr. NACHT. This is a tough nut. And it has been an issue that has been addressed at least going back to the early Clinton years, so we are talking about at least a 15-year-old problem here.

The fact of the matter is that there are many lucrative commercial arrangements between private entities in a number of ally countries with Iran whose behavior has not been altered by any government persuasion by their host government, by their own government.

What the U.S. can do in that regard, you know, we have tried various forms of consultation and negotiation and dissuasion, but so far I would say we have, you know, mixed results, very mixed results.

I don't know if some more draconian legislation coming out of the Congress would actually be helpful, because there are so many dimensions to our relationships with the European partners, with the Chinese, that, you know, we can go—it is a very important matter, but if we go overboard in this area, we may pay a price in another area.

So I think this is an area under review. We are struggling with it, and we are looking for—it is a very tailored approach. You can't have an overall sanctions policy, I think, because the situations are so different. I mean, to alter Chinese behavior about acquisition of oil resources from Iran is one whole problem. Dealing with heavy machinery from Siemens in Germany to Iran is a different problem. Dealing with the Russians on their nuclear technology is still a third problem. So we have not derived an umbrella approach to this problem, but we are open to ideas. It is critically important.

Obviously, as long as Iran believes and knows that they are not really being hurt very much economically—and their economy is not in good shape, as we all know—then it gives them less of an incentive to alter their behavior or to sit down and talk with us in a meaningful way about their nuclear program.

Mr. HEINRICH. To shift gears a little bit, we saw with the outbreak of H1N1 in Mexico that we have places right in our own backyard where there is no effective surveillance and reporting detection when it comes to both animal and then animal-to-human pathogens.

Where do you see the most acute needs for more effective detection and reporting as sort of a first line to prevent both bioterror outbreaks and also to manage natural animal-to-human pathogens that can have huge public health ramifications as well?

Dr. NACHT. That is a very important subject and could be very, very important this fall. It is a little outside of my particular lane. There is an Assistant Secretary of Defense for Homeland Security, Paul Stockton, who works these issues in close consultation with the Department of Homeland Security and with Health and Human Services (HHS). And that is really——

Mr. HEINRICH. I guess, what do you see as the relationship between early detection and reporting and how that can maybe help both with natural outbreaks but also having a surveillance system in place that potentially can be helpful in bioterror attacks as well?

Dr. NACHT. I mean, obviously, the earlier we can detect the outbreak and the better surveillance systems we have in place, the more likely we will be prepared to deal with these matters.

I think that we are looking very carefully at division of labor on exactly what kind of systems and what should we request from the Congress, what should be deployed, who is in the information loop. Because, as you know, I mean, take the catastrophe of 9/11, how many different governmental and other players are involved? If this became a major outbreak in the fall, I mean, it would be a national emergency.

So it is a large subject. It is a subject that is under interagency review currently.

Mr. HEINRICH. Okay.

I yield back, Mr. Chair.

The CHAIRMAN. Thank the gentleman.

Before I call on Mr. Turner, Dr. Nacht, let me follow through on the discussion you had with Mr. Thornberry a few moments ago.

He asked about the Department of Energy cost-saving with Russia on nonproliferation activities, and we received several examples of such cost-sharing. But are you able to give us examples of such cost-sharing for the Department of Defense Cooperative Threat Reduction programs?

Dr. NACHT. Yes, Mr. Chairman. I can cite a few examples.

In Azerbaijan, the government there is paying the cost of the Cooperative Threat Reduction bio facility that has been established there.

Of course, all of our Cooperative Threat Reduction partners provide land for facilities. They provide in-kind services, such as security forces to protect the facilities. Russia is actually paying a portion of the cost for the dismantlement of their ballistic missile submarines, which is a CTR program.

And our friends in Canada and Britain have contributed financially to the nerve agent elimination plant in Russia. So they are helping to pay for the elimination of a plant in Russia that we are helping with the Russians to eliminate, but it is British and Canadian funding that is supporting that.

So there is a mix of different cost-sharing arrangements across the many different programs under CTR in the defense area.

The CHAIRMAN. Thank the gentleman.

Mr. Turner.

Mr. TURNER. Thank you, Mr. Chairman.

And I appreciate both of you gentlemen being here. I have a great deal of respect for Mr. D'Agostino. And, Mr. Nacht, you have an incredible record of service to your country and substantively on these issues. And I have a topic that perhaps the two of you might be able to help me with.

I am very concerned about North Korea's nuclear weapons programs. I certainly respect Mr. Bartlett's issue that he had raised of alternative ways that they might attack us, but at the same time we have the evidence of their full pursuit of a nuclear weapons program and a very aggressive missile program that appears to be, I believe and I think others and perhaps you believe, is a direct threat to the national security of our country.

In the budget that was put forth by the President, he requested funding for the disablement and dismantlement of North Korea's nuclear weapons program. Now, during our committee's markup, I noted that the request for the disablement and dismantlement of North Korea's nuclear weapons program totaled $80 million. That was the President's budget request, $80 million.

At the same time, the President requested a cut of $120 million in missile defense funding that would have completed part of the missile field at Fort Greely, Alaska. So we are setting aside $80 million for the disablement and dismantlement of North Korea's nuclear weapon program, and we are eliminating $120 million to finish a missile defense field that was two-thirds of the way complete in Fort Greely, Alaska.

I offered an amendment that was defeated to offset that, to take the $80 million for North Korea and offset it on the $120 million that we were losing to actually defend ourselves.

Now, while I support nonproliferation programs and I certainly support the dismantlement and the disablement of North Korea's nuclear program, I am highly skeptical that Kim Jong-il will return to the negotiation table and allow either the United States or the International Atomic Energy Agency to disable and dismantle North Korea's nuclear program.

It is my understanding that Secretary of State Clinton expressed similar pessimism in April, when she told a Senate committee that North Korea's return to the six-party talks was "implausible, if not impossible."

So I believe that those funds could be better spent. I fear that we are going to get to the end of the year and that $80 million is still going to be sitting there.

You only have to look at North Korea's recent actions. The Six-Party talks have come to a complete halt. North Korea conducted another nuclear test. North Korea ejected U.S. International inspectors. North Korea reversed most of the initial disablement work that was under way. North Korea has repeatedly tested cruise and ballistic missiles, to include an intercontinental ballistic missile which threatens our homeland.

It appears that many senior officials within the Obama administration are coming to the realization that the Six-Party and diplomatic engagement with Kim Jong-il are ineffective. According to the Los Angeles (LA) Times, they have all but lost hope that North

Korea will cooperate, and some are arguing that it is time for a new approach. Others agree with my assessment.

And so, gentlemen, you have a great deal of expertise in this, and I was wondering what your thoughts were, if you thought that this year, that the $80 million designated in NNSA's budget to verify, disable, and dismantle North Korea's nuclear program, has any likelihood of being used.

Secretary D'AGOSTINO. Thank you, sir, for the question.

The direct answer to your question, whether it has any likelihood of being useful, I think is dealt with—and I will also offer some comments on North Korea, if I could.

And I think, yes, there is an element of the work that we were planning on doing—North Korea kind of being the lead horse in the race, if you will—for working on equipment, tools, and technologies that we think are important for the United States to have at the ready to deploy, kind of, anywhere, frankly, to work on disabling and dismantling nuclear weapons programs or nuclear material programs around the world.

As Dr. Nacht stated earlier, and I completely agree, that we have looked at—the best place to solve security problems is where the material is or as close as possible to the source. The further away you get from the problem makes it a much harder. The security problem becomes much more difficult; it is harder to detect the material.

And so, we feel—and particularly as the budget was developed in February, we were, of course, in the middle of engaging directly. But a significant portion of that $80 million was not North Korea-specific but was nuclear security-specific. It is the equipment, the tools, the technology for us to be able to determine how far a nation-state has gone; buying the containers, if you will, some of the long-lead material that we would ultimately use to repatriate, whether it is North Korean material or whether it is material from another country, and bring it back to a secure location.

So there is a tremendous amount of what I would call dual country capability—in fact, more than dual. These are the things that we would have done around the world. But that is my sense of the situation. I will defer my thoughts on missile defense.

Dr. NACHT. Yes. Let me first say a word about the missile defense budget situation. Obviously, it is controversial in some elements of the Congress.

Secretary Gates went through a very thorough review and analysis of missile defense needs, including detailed studies done by the Missile Defense Agency that went right through review with the combatant commanders and the joint staff and the chairman and the vice chairman. And the leadership agreed unanimously that 30 ground base interceptors, 26 based in Fort Greely and four in Vandenberg Air Force Base, was sufficient for the next period to deal with projected North Korean threats based upon our best intelligence of the evolving North Korean threat. And it is actually not just against the North Korean threat, but against some other potential threats too.

So, at the moment, the Defense Department is not seeking additional funds beyond what we have requested there.

On the money for the North Koreans, I think Administrator D'Agostino has answered fully. I would just say, of course North Korea is going through some sort of succession process currently. We don't know if it is going to take three months or three years. By all accounts, the leader is very ill. The son who he has anointed is of uncertain stature, 26 years old. And it may well be that a number of activities of the North in escalating, kind of, aggressive behavior in recent months, is as much for domestic consumption as it is for international activities.

They are an opaque society, as you know. The quality of our information about them is not zero, but it is limited. And we are actually developing scenarios—we have developed scenarios for future North Korean situations in which these funds could be used more effectively should those scenarios materialize.

The CHAIRMAN. Thank the gentleman.

Mr. Langevin.

Mr. LANGEVIN. Thank you, Mr. Chairman.

Gentlemen, I want to thank you for your testimony here today and for the work that you do to keep our nation safe.

Particularly, Mr. D'Agostino, I want to thank you for your time yesterday. I enjoyed our conversation when we met yesterday. And I want to thank you again, of course, for your testimony today.

Let me begin with the new loose nuke threat, nuke material threat. Obviously, the threat of a loose nuke falling into the hands of terrorists is a threat not just to the U.S. but, clearly, to every nation.

What I would like to ask is, how much more does the NNSA need to secure—and this is from a program perspective—need to secure and reduce all known nuclear weapons, as well as unsecured weapons-grade nuclear material, around the world? And what are the remaining costs of this effort? And what is also being done to expand cooperation with partner nations to address this shared risk?

You know, in the context of your answer, if you can talk about the successes that we have had, but most especially what is left undone. I am particularly concerned if you can give some insight into what you are doing to protect us from the insider threat.

Secretary D'AGOSTINO. Certainly, sir. The insider threat piece may be best dealt with in closed session. And if we don't have time, I could come up to your office, sir, and talk to you about it there, as well.

Mr. LANGEVIN. That is fine.

Secretary D'AGOSTINO. There is a lot more work to be done, actually, on the materials and weapons side. We have, obviously, this Global Threat Reduction Initiative program you have heard about and you have analyzed, which is to convert or shut down 200 reactors around the world that use highly enriched uranium, remove essentially 4,600 kilograms of material by 2016, and protect close to 4,000 buildings.

We are down the track on each one of those lines of work, but we are not completed and we are not finished down the track. We are only 32 percent of the way there on our reactor conversion work. We are looking at accelerating up as much as possible what we think are the most vulnerable ones. We are about 50 percent of the way there on removing and getting into secure sites the

highly enriched uranium and plutonium that exists around the world to get to that 4,600 total. And we are only about 15 percent of the way down on securing the number of buildings that we have around the world.

Now, let me be fair here and clear. Not all of these sites have fissile material, particularly in the buildings area. Most of the buildings have radiologic material, sources and things like that that could be used for a radioactive dirty device—still not good, but not as bad of a problem, obviously, with fissile material.

In our Material Protection, Control, and Accountability Program, we have slightly better numbers with respect to completion of the work that we have to do. About 60 percent of our sites that we think are in the work scope are done; 87 percent of the buildings. And only about 40 percent of the Megaports work that we have to detect material is done.

So it is pretty significant. We think it is going to take a concerted effort—we know it will take a concerted effort, obviously, to complete all of the work. But what we are working on right now is the costing plan and the program plan, to pull all of this together.

I think your other question dealt with partner nations, what are other nations doing, kind of, with respect to these programs. And it really depends on the particular program. We have agreements in place, ready to execute, for example, additional work in Mexico, in the Ukraine, in Kazakhstan. Many of those states have agreed to pay up front for a significant portion of that work. And, obviously, our approach in all of these cases for Megaports, for example, is to have the nation-states operate and maintain those facilities. We check on them, but we have them do that.

Mr. LANGEVIN. How many other countries are actually cooperating with us in this effort and actually contributing dollars to the effort?

Secretary D'AGOSTINO. I will have to get you specifics as a—I would like to take the specifics as a lookup.

But if I can offer you some perspective and offer the committee some perspective, we operate with over 100 countries around the world. In most cases, to do the significant work that we have to do, we sign memorandums of agreement with those nations where we define the type of a cost-share agreement.

Overall, we look along the process—the general principle is we come up and kick-start, get the work started, and provide the equipment and technology and know-how. We have them pick up the work from there and carry it forward. And then we check and offer assistance.

So I will get you the details off the record, sir.

Mr. LANGEVIN. Thank you. I see my time has expired, but I would like to talk about the insider threat issue when we get into closed session.

Secretary D'AGOSTINO. Certainly. I would be glad to.

The CHAIRMAN. Who is next? Mr. Franks, please.

Mr. FRANKS. Well, thank you, Mr. Chairman.

And thank you, gentlemen, for being here.

You know, I guess I first want to commend the points of Dr. Bartlett and Mr. Marshall even though they are no longer here. I

do think that their points are salient. And I am looking forward to hearing more of your response in a different venue, as you say.

Let me just say that I believe EMP potentially to be the most effective asymmetric weapon in the hands of almost anyone that could have them. I also agree that the departments that you represent are wise in focusing on the source to try to do those things to prevent the material from ever becoming available to anyone. And I was especially appreciative of Dr. Nacht's comments related to Iran being such a priority in that regard.

Let me just say something that is very obvious to both of you. I say it primarily for the record, and sometimes restating the obvious is important. I believe missile defense, an effective missile defense, especially in the area related to Iran, even the European site, to be something that is capable of devaluing the entire nuclear program in Iran's plan. And I believe that—you know, it is going to be hard to deter them in any circumstance, but if we have whatever efforts we are making that are coupled with at least the notion that any leverage they might gain is ameliorated by our missile defense capabilities, I think that is vitally important. And I hope it is something that we don't overlook. It is not just about stopping a missile; it is about stopping the proliferation. Missile defense is probably one of our most important components in preventing proliferation.

With that said, let me shift gears here and ask you, Mr. D'Agostino, in your testimony, page 2, you say that North Korea's continued defiance of the international community through its WMD-related missile and nuclear activities makes clear the urgency of today's global nuclear threats.

So I guess I am hoping you can explain to the committee how you surmise that North Korea's defiance—and, incidentally, I agree with you—but explain it to us how North Korea's defiance drives a global nuclear threat.

Secretary D'AGOSTINO. I look at this as an example, real-time, that is dynamic. And I think this is the piece that we just have a very clear example of—when the President's budget for 2010 was coming to its final days of closure and we were doing the negotiation in writing and making sure the numbers were right and the words were right and, more importantly, the strategy is right, we were in a different situation, and it changes quite quickly.

So my sense is this is a dynamic problem. It is a problem that is a lot faster than the budget process that we have on the executive branch. Obviously, it outpaces everything. So, to me, that drives a sense of urgency to get on top of the problem as quickly as possible, to put the resources on the problems as quickly as possible. It is very significant, but it is something that we can't shy away from. And, obviously, we are not. With the committee's support, excellent support, we have been in a position to do that.

The one thing I might add is that, with the committee's support as well, it has made it possible for us to receive resources from other countries. Other countries see it the same way as we do. Canada and United Kingdom, South Korea, Japan, other nations have actually contributed their resources toward our problems in the Global Threat Reduction Initiative. I think that is an excellent tes-

timony to the programs that you support, as well as to this urgency piece that comes forth.

Mr. FRANKS. Thank you.

Given the parameters, the sensitivities that you have to deal with here, I do think that, as Mr. Langevin mentioned, again, the greatest challenge that we face, at least short term, is some type of nuke device in the hands of terrorists. Because it is not so much that they are so much better at delivering it, but I am convinced that their mindset of actually using it is really unquestionable. And I think that is what makes it so dangerous.

It is likely that if they do gain some type of nuclear yield weapon, it probably won't be a large weapon. It will probably be a smaller weapon which may not be as effective for EMP, and they may just want to try to bring it into the United States.

So my question to you, Dr. D'Agostino, and certainly, Dr. Nacht, if you are inclined to respond as well, is: Help the committee understand, within the parameters that you can in this venue, what mechanisms do we have, either at the ports—and you mentioned in your Second Line of Defense a lot about the ports—within the ports and the border crossings, what do we have here, whose responsibility is it to be making sure that we screen for nuclear devices coming into this country.

Secretary D'AGOSTINO. Department of Homeland Security has primary responsibility. We provide technical support and backup with our radiation detectors, as well as we have—we also take care, with the Department of Homeland Security, we have our Megaports program to make sure that we have detectors up and operating in 100 of the largest seaports around the world, which send the materials, send goods here in the United States.

So that is a short answer. I am not sure how much time I can keep talking. But from that standpoint, our job is to make sure to finish the work on Megaports initiative, which is significant, as well as to support the Department of Homeland Security in its Secure Freight Initiative, which has a responsibility for looking at all the material that comes in here domestically.

Dr. NACHT. And the Department of Defense's role is to work with NORTHCOM also in consultation with DHS so that, as horrible as it sounds, if a weapon is detonated, that a second weapon is not detonated, so that one weapon would be horrific, but more than one would be much worse. So not to have some sort of ad hoc approach to dealing with the perpetrators but having as comprehensive a plan as possible to stop them from doing any more damage than they have done.

Mr. FRANKS. Thank you gentlemen. Thank you, Mr. Chairman.

The CHAIRMAN. Let me say that we are supposed to have votes shortly which will take about 45 minutes. Let's get as many questioners as we possibly can and observe the 5-minute rule. After the votes on the floor, we will adjourn here to 2327 for the classified hearings, and those that have not had the opportunity to ask questions in the order they would have asked here will be recognized at that moment in 2337 to continue on the classified basis. With that understanding, Mr. Kissell, we will squeeze in as many as we can before the votes come.

Mr. KISSELL. Thank you, Mr. Chairman.

A couple of quick questions, thank you, gentlemen, for coming today. We had a hearing—I think it might have been January the 22nd, earlier this year, when former Senator Graham and his Commission on Weapons of Mass Destruction testified before us. And one of the conclusions they drew and presented to us was that they predicted there would be a weapons of mass destruction attack upon the United States I think in the next three, four, years. And the opportunity to stop it was there, but actually, we were losing ground in terms of being able to stop it. In other words, we weren't making up that deficit towards being able to keep this from happening.

In your opinions, what is that opportunity now, is that a growing situation or a lessening situation that we would have that attack?

Secretary D'AGOSTINO. I will start and turn it over to my colleague. I typically am not a big fan of putting time frames, because I don't want to promote anybody from trying to beat the odds or not. What I think my focus frankly is—I think we are getting better, but only because what we are seeing is an increased sense of urgency. I think the increased sense of urgency is properly placed by the administration.

I think it is well understood in my organization, which is more of a technical organization than necessarily establishing the policy, if you will, but the key is that we recognize, we understand the devastating impacts of material getting out. I am speaking mostly on the nuclear side, which is my expertise, and what we are trying to focus on is, do more. And I am looking internally at the program to see, am I properly prioritized?

But I am also communicating externally with my colleagues at the National Security Council to make sure they recognize that. I think what we have got from the administration which I represent is this renewed sense of urgency, this idea of securing material within a certain period of time; the idea of working internationally and establishing the right type of international frameworks; the idea of making sure that the International Atomic Energy Agency (IAEA) is properly supported and we have the next generation of scientists and technicians ready to work. Because as energy increases, as the nuclear power becomes more ubiquitous, we want to make sure we design in the safeguards into those systems so that we don't cause ourselves problems out in the out years 5 or 10 years from now. So, from a technology standpoint, I think the urgency is there, and the light is on the problem; it is up to us to go out and go execute, frankly.

Dr. NACHT. Congressman, I note that the language of the Commission was that a weapon of mass destruction will be used in a terrorist attack somewhere in the world by the end of 2013. So that is what, three and a half years now. I don't know, I am a little—point predictions are sometimes a little hard to justify. Clearly, we have a major problem here. I think the combination of the activities Administrator D'Agostino and myself talk about and the President's commitment suggests that we are looking at this problem globally, nuclear, as well as biological. We have renewed resources in the intelligence community to track, as best we can, terrorist activities. And I would say we are trying to get that curve to turn

around, plateau and then drop off, but we are in a full court press now in this administration on this problem.

Mr. KISSELL. Thank you, gentlemen.

Thank you, Mr. Chairman.

The CHAIRMAN. Mr. Coffman, let's see if we can squeeze two questioners in between now and the time we have to go vote. There will be five votes, and it will take approximately 45 minutes. We will reconvene and the questioners will be in the same order as if you were here in 2337. So let's get there as soon as the five votes are over.

Mr. COFFMAN. Thank you, Mr. Chairman.

It was mentioned, concern about Iran and their development of nuclear weapons, and it was also mentioned about sanctions, effectiveness of sanctions against Iran by the United States in the international community. I believe there was legislation in the House and Senate that has been introduced that would in fact impose further sanctions on Iran. I wonder if one of you could speak or both of you could speak to the effectiveness of that legislation or sanctions that you would envision specifically that would be effective in terms of getting Iran to back off of its development of nuclear weapons.

Dr. NACHT. There is little I can say about that at this time. We could provide you with more detailed information and perhaps in another setting with additional colleagues who work this problem more specifically.

Mr. COFFMAN. Well, thank you very much.

I would really appreciate any information you could provide on that issue. If, in fact, sanctions would help in deterring Iran from attaining nuclear weapons, then we need to do everything we can to promote those sanctions at the earliest possible time in order, again, to deter them from moving forward. Now, I wonder if you at all would speak to—if you were to say what is the number one threat facing the United States, is it bioterrorism, is it a dirty bomb or is it an ICBM, a nuclear weapon launched from a rogue nation?

Dr. NACHT. Again, the President answered that question by saying it would be a terrorist attack with nuclear weapons. I think the core difference between the terrorist or even the suicide bomber, obviously, and the nation state is that they are very difficult, if not impossible, to deter. You can't dissuade them. You can try to prevent them, but they don't have anything to lose because they know they are on an exalted mission, and they are going to a better reward after the detonation. So whether it is biological attack or a nuclear attack by terrorists, I think it is now an absolutely top priority for us to try to deal with.

We have varying degrees of judgment about our ability to deter other states, but I think many of us believe that even Iran and North Korea are deterrable from using these weapons because they have a tremendous amount to lose once they use them. In fact, their entire societies are at risk, whereas the terrorist does not have that incentive.

Mr. COFFMAN. Mr. Chairman, I yield back the balance of my time.

The CHAIRMAN. Ms. Tsongas, please.

Ms. TSONGAS. Thank you, gentlemen, for your testimony.

I would like to ask a question about Pakistan and reference the same report that Congressman Kissell referred to on the Commission on the Prevention of Weapons of Mass Destruction Proliferation. That report—their report describes Pakistan as the focus point of WMD and terrorism. I just wondered if you could reflect on that your own thoughts and how we as a country, particularly given the destabilized situation in Pakistan today, how we can exercise influence over Pakistan to secure their weapons and deal with the threat among—in their midst.

Secretary D'AGOSTINO. I would be glad to start off on the answer. We absolutely agree; working with Pakistan, probably working with Pakistan makes a lot of sense. In fact, Pakistan has—we do work with Pakistan, with the Department of Homeland Security on Secure Freight Initiative in putting radiation detectors in their ports. One port is done, Karachi is the second port. We are negotiating that type of work. We have export controls experts who are in the process of working with Pakistan on training them on what to look for with respect to what comes into the country and goes out of the country.

Pakistan has legislation in place as a nation to establish this type of capability and maintain it. They have developed their own list of materials and advanced their list of materials on things that they are looking for. We also, from the standpoint of their programs, we know that Pakistan, obviously, some of the details I would rather go into in a closed session. But what I can say about the military is they are a very highly professional group. They are well trained. They understand the problem and the work they have cut out before them and in fact the work the rest of the world has cut out for them, and they take these issues very seriously.

We do work closely in many areas, as I said, with their port security, export control work, and we have actually seen things taking place in country which signifies they have taken that seriously. Other details I will address later in closed session.

Dr. NACHT. I would just add that collaboration of the Pakistani government with the United States is a sensitive matter in Pakistan. So what we do with them is best discussed elsewhere.

Ms. TSONGAS. I yield back, given the time constraints.

Thank you.

The CHAIRMAN. We will adjourn to 2337. Mr. Spratt will be the next questioner. We will see you in half an hour, 45 minutes.

[Whereupon, at 12:08 p.m., the committee was adjourned to reconvene in closed session.]

A P P E N D I X

JULY 15, 2009

PREPARED STATEMENTS SUBMITTED FOR THE RECORD

JULY 15, 2009

Statement of Thomas P. D'Agostino

Under Secretary for Nuclear Security and Administrator

National Nuclear Security Administration

U.S. Department of Energy

On

"Addressing a New Generation of WMD Threats"

Before the

House Armed Services Committee

July 15, 2009

Thank you very much for the opportunity to testify today on NNSA's nuclear security programs to reduce the global threat of nuclear proliferation. This hearing is particularly timely, as it touches upon many issues at the forefront of today's national security—and international security—agenda, including: brokering a new strategic relationship with key allies such as Russia on mutual nonproliferation and nuclear security objectives; addressing continued challenges such as North Korea and Iran; and stepping up U.S. and multilateral efforts to prevent terrorist acquisition of nuclear weapons and related materials. I am proud of the NNSA's contributions to addressing the global threat of nuclear proliferation, and am honored to share with the Committee today our work to mitigate global risks.

This nonproliferation and arms control suite of activities complements the Department's recognized capabilities in counterterrorism, emergency operations, and WMD intelligence and analysis. In addition, consistent with the President's call for progress towards a world without nuclear weapons, NNSA provides technical support for negotiations of the START follow-on agreement, Comprehensive Nuclear Test-Ban Treaty (as well as supporting the President's CTBT objectives by ensuring a safe, secure and reliable nuclear weapons stockpile in the absence of testing and supporting the elements necessary to verify the treaty), and a verifiable Fissile Material Cutoff Treaty. However, I will focus my remarks on the nonproliferation capabilities that the Committee has expressed an interest in hearing about today.

My remarks today will focus on three areas:

- Today's global nuclear proliferation threat and NNSA's nuclear nonproliferation strategy and response;
- NNSA's role in the President's nonproliferation strategy; and
- Our planned future activities to achieve these crucial national security objectives.

I have often had the opportunity to speak to some Members of the Committee on the important work NNSA's Nuclear Security Enterprise carries out to ensure that the United States nuclear stockpile remains safe, secure and effective to deter any adversary, and provide a defense umbrella to our allies. While today I am speaking on a separate component of NNSA's national security mission, the nonproliferation component of NNSA's national security mission relies upon similar scientific and technical expertise. It is that scientific and technical nuclear expertise, combined with our proven track record of international program implementation, which has allowed the NNSA to become the most effective nonproliferation organization in the world.

As the Committee is aware, today's proliferation challenge is dramatically different from that faced by the United States forty years ago, or even twenty years ago. We remain concerned about the spread of nuclear weapons to new countries, but are increasingly concerned about the spread of nuclear weapons capabilities, and the necessary nuclear materials, equipment, and technologies themselves, as well. North Korea's continued defiance of the international community through its WMD-related missile and nuclear activities makes clear the urgency of today's global nuclear threat. Revelations regarding the intricacies of the A.Q. Khan illicit procurement network and the International Atomic Energy Agency's investigations into Iranian and Syrian activities, as well as concerns about the potential acquisition of nuclear weapons by non-state actors, demonstrate the unprecedented scope and complexity of the task facing us today .

However, while the global proliferation threat has evolved over the years, the primary proliferation choke-point has not. The most difficult task for a would-be proliferator—whether an individual country or a non-state actor—remains acquiring the necessary fissile material. For this reason, NNSA's highest nuclear security priority remains keeping these dangerous materials out of the hands of the world's most dangerous actors. Preventing access to nuclear weapons and fissile material has many dimensions. The most direct way to prevent acquisition of nuclear weapons is by denying access to fissile material.

NNSA's Material Protection Control and Accounting (MPC&A) program utilizes NNSA's nuclear security expertise and experience to secure nuclear materials in place, by working cooperatively with partner countries in Russia and the former Soviet Union to implement sustainable material protection, control and accounting programs at nuclear facilities. The MPC&A Program helps its partners develop a robust, multi-layered, and domestically sustained MPC&A infrastructure using a structured and graded approach. To date, the MPC&A Program has completed nuclear security upgrades at 73 Russian nuclear warhead sites, 39 Russian Navy sites, 25 Russian Strategic Rocket Forces (SRF) sites, and 9 sites of the 12th Main Directorate of the Russian Ministry of Defense. Additionally, the MPC&A program has improved nuclear security at 37 Russian nuclear material sites. Within these sites, a total of 214 buildings containing nuclear material have been identified for security upgrades, and 87% of these buildings have been upgraded. Beyond Russia, the MPC&A program has also completed upgrades at 15 buildings containing nuclear material at 13 sites in the Former Soviet Union (FSU), and

completed a series of security workshops and joint projects with China. The MPC&A Program supports the long-term sustainability of these improvements through many related activities such as regulatory development and improvements in training, security culture, protective force capabilities and secure transportation assets.

NNSA's Global Threat Reduction Initiative (GTRI) also builds the first layer of defense, through 3 different categories of activities at civilian nuclear and radiological sites. First, GTRI strengthens security through physical protection upgrades at civilian nuclear and radiological sites in 57 countries across the globe. Second, using NNSA's nuclear reactor and fuel fabrication expertise, GTRI works to convert research reactors that use highly enriched uranium (HEU) to less-proliferation sensitive low enriched uranium (LEU) fuel and, where needed, develops high-density replacement LEU fuels to support other conversions. Third, GTRI helps repatriate HEU fuel to its country of origin, reducing and consolidating stocks of HEU that would be attractive to proliferators or terrorists. To date, GTRI has converted 57 HEU-fueled research reactors in 32 countries to the use of LEU fuel, and shutdown another 7. GTRI has returned 910 kilograms of Russian-origin HEU for secure storage and/or downblending in Russia, over 1,200 kilograms of U.S.-origin HEU, and more than 176 kilograms of other HEU and plutonium that could not be repatriated under the U.S.-origin and Russian-origin programs (otherwise known as gap material). Together, these NNSA efforts have helped secure enough HEU for more than 90 nuclear weapons.

Nuclear safeguards are also an important part of securing nuclear material. NNSA's Nonproliferation and International Security program employs NNSA's nuclear accounting expertise to enhance nuclear material verification and nuclear safeguards overseas, another key element of the first line of defense. Through the HEU Transparency program, NNSA and our Russian counterparts are verifying the downblending of 500 metric tons of Russian weapons-origin HEU, which then provides fuel for commercial U.S. reactors and provides 10% of all U.S. electricity. To date, this effort has verifiably downblended 367 metric tons of HEU—enough for 14,700 nuclear weapons.

Within this office, the Nuclear Noncompliance Verification (NNV) program develops technologies, equipment, and analytical methodologies to verify declared nuclear activities, detect undeclared nuclear materials and activities, and implement dismantlement and verification of nuclear programs in countries of proliferation concern. The program also provides technical and operational support for USG nonproliferation policies and activities, and oversees DOE participation in the U.S. Support Program to IAEA safeguards, which develops equipment and technology and provides inspector training and consultant support to the IAEA Department of Safeguards. The International Nuclear Safeguards and Engagement Program works bilaterally with 18 countries, Taiwan, the European Atomic Energy Community (EURATOM), and the Brazilian-Argentine Agency for Accounting and Control of Nuclear Material (ABACC) to enhance nuclear safeguards approaches and techniques, to the benefit of both sides. In 2008, NNSA launched the Next Generation Safeguards Initiative (NGSI) to develop the technology, concepts, and expertise necessary to strengthen the International Atomic

Energy Agency (IAEA) and the international safeguards system to confront the challenges posed by nuclear proliferation and the anticipated global nuclear energy expansion. Although this is a new initiative, we have already achieved several early successes, including the development of new types of portable inspection equipment and supporting more than 50 safeguards internships and safeguards courses across several National Laboratories.

The *second line of defense* against nuclear proliferation consists of developing an infrastructure to deter, detect, and respond to illicit trafficking of nuclear materials and related equipment. As the A.Q. Khan network demonstrated, gaps in the nonproliferation regime can be exploited to give proliferators (or terrorists) an opportunity. As the second pillar of our nonproliferation strategy, several NNSA programs work to strengthen international capabilities to detect, deter, and interdict illicit nuclear materials and nuclear-related smuggling. NNSA's Second Line of Defense program provides radiation detection equipment, training, and sustainability support to bolster nuclear materials detection and interdiction capabilities at key airports, border crossings, and seaports (through the Megaports program).

The Second Line of Defense Core Program has equipped a total of 161 sites in Russia with radiation detection systems and is partnering with the Russian Federal Customs Service to jointly equip all of Russia's border crossings (approximately 370 sites) with radiation detection equipment by the end of 2011. The Core Program has also equipped a total of 69 sites outside of Russia with radiation detection equipment systems. The Core Program is also working with foreign law enforcement entities to deploy mobile (e.g., van-mounted) radiation detection systems to enhance their efforts to deter, detect, and interdict along unofficial "green" borders and at points internal to the country.

The Second Line of Defense Megaports Initiative has completed installations at 23 ports in various countries to date, and will complete work at 5 additional ports this year, bringing the total to 28. The Megaports Initiative also cooperates with the U.S. Department of Homeland Security's Bureau of Customs and Border Protection (CBP) by making technical resources available to complement the Container Security Initiative (CSI) and the Secure Freight Initiative (SFI) at international ports. Equipment installed under the Megaports Initiative serves as an additional screening tool to enhance CSI officer's ability to effectively target high-risk U.S.-bound containers at international seaports before they are loaded onto vessels destined for the United States. Under SFI, all U.S.-bound containers are being scanned by an integrated system consisting of a Radiation Portal Monitor, a DHS/CBP installed imaging system, and optical character recognition technology, at three ports in Pakistan, Honduras, and the United Kingdom. Megaports and DHS/CBP are also working at ports in South Korea, Oman, and Hong Kong to demonstrate integrated scanning of U.S.-bound containers at larger container terminals at high-volume ports.

Within the Nonproliferation and International Security program, NNSA's International Nonproliferation Export Control Program (and similar domestic efforts) strengthens national export control systems to help stem the flow of WMD-related equipment,

materials, and technologies to end-users of concern. Building on NNSA's technical export control know-how, INECP also developed and conducts Commodity Identification Training (CIT), a gold standard commodity recognition program to sensitize frontline customs and enforcement officials both in the U.S. and overseas to the risks and red-flags of illicit WMD trade. CIT works by highlighting the visually distinctive aspects of strategic commodities, including equipment, raw materials, and technologies. The CIT training provides hands-on training and technical resources to help customs and enforcement officials in 52 countries, Hong Kong, and Taiwan recognize nuclear items and "dual-use" commodities that have legitimate commercial uses as well as proliferation-related applications. Together, these international efforts help reduce the risk and increase awareness of nuclear-related smuggling via commercial global trade, by providing the equipment, training, and expertise to identify suspect shipments.

While these NNSA nonproliferation programs—International Material Protection and Cooperation; the Global Threat Reduction Initiative; and Nonproliferation and International Security—provide the bulk of NNSA's response to today's global nuclear security threat, three other NNSA programs complement these activities. NNSA is working with Russia to shut down Russia's last three plutonium producing reactors and thus end the production of weapons-grade plutonium in Russia; is working to disposition excess weapons-grade U.S. and Russian plutonium as well as U.S. HEU; and conducting advanced R&D to support NNSA and U.S. national and nuclear security missions. The Elimination of Weapons Grade Plutonium Production program has already shutdown two reactors in Seversk, Russia, and is working to shut down Russia's sole remaining plutonium production reactor by 2010. The Fissile Materials Disposition program is working to dispose of inventories of surplus weapons-usable fissile materials. NNSA's R&D program develops tools to help detect, locate and analyze global proliferation activities, focusing on nuclear weapons technology and the diversion of special nuclear material-support materials detection and deterrence.

Today's complex global nuclear threat requires a multifaceted response strategy. Together, all of these programs implement NNSA's primary defense nuclear nonproliferation mission to detect, secure, and dispose of dangerous nuclear material worldwide and comprise the *defense in depth* that NNSA's nonproliferation strategy is built upon.

In support of U.S. nonproliferation and national security objectives, NNSA and its predecessors have been implementing nonproliferation efforts since the passage of the Atomic Energy Act, and have become a recognized global threat reduction leader. In response to the evolving nature of the nuclear proliferation and terrorism threats, NNSA's nonproliferation mission has grown and evolved. We have parlayed our technical and international implementation expertise into cooperative partnerships with over 130 country partners across the globe, through 19 specialized nuclear security activities. In support of this global mission, seven international partners have provided nearly $60 million USD to date in contributions to NNSA's international nonproliferation programs, recognizing and facilitating NNSA's tangible international nuclear security progress.

The President's April 5, 2009 speech in Prague outlined an ambitious new American strategy for responding to the threat of international nuclear terrorism and nuclear proliferation. He proposed measures to reduce and eventually eliminate existing nuclear arsenals, halt proliferation of nuclear weapons to additional states, and prevent terrorists from acquiring nuclear weapons or arsenals. His plan to lead an international effort to secure all vulnerable nuclear materials around the world within four years and disrupt nuclear smuggling networks is a cornerstone of this strategy. The NNSA nuclear security programs will serve as an important means to achieve some of these Administration objectives.

To support these Administration goals, we have identified the scope of work we need to accomplish to support the President's call to secure all vulnerable nuclear material worldwide within four years. This identified workscope includes priority-based assessment of the activities required to address security concerns at specific sites. We have also worked to identify any high-level diplomatic efforts that might be needed to conclude new nuclear security cooperation agreements with additional partner countries or to address potentially vulnerable sites in that have not yet been open to cooperation under NNSA programs. Our workscope assessment outlines the specific actions NNSA will undertake within the next four years to:

- Expand nuclear security cooperation with Russia and other key partners;
- Secure nuclear material at the most vulnerable sites worldwide;
- Remove and eliminate weapons-usable nuclear materials where possible;
- Strengthen international nuclear security standards, practices, and international safeguards; and
- Improve international capabilities to detect and intercept smuggling of nuclear materials, and to prevent terrorists and proliferant states from poaching on the international market in dual-use and nuclear weapons-related equipment and technologies.

To meet the four year timeline to secure vulnerable nuclear material, some existing NNSA activities in these areas will be accelerated, while other aspects of the President's agenda will require new or expanded efforts. NNSA is now developing detailed implementation plans with associated schedules and costs. Once we better understand the available resources—both funding and personnel—available in the outyears for this effort, we will finalize NNSA implementation plans.

This NNSA plan of work alone will not accomplish all of the President's nuclear security objectives. The Departments of State, Defense, Homeland Security and others also will play a role in achieving these goals, and NNSA will continue to work with our interagency partners. No one entity, or even country, can alone ensure international security. A global challenge such as today's threat of nuclear proliferation requires a global response. As the President noted, America will work with our international partners to fulfill his international security vision. The Global Summit on Nuclear Security that will be held next year underscores the U.S. commitment to renewed partnerships. NNSA stands ready to convert these international commitments into

concrete actions and progress. By continued and accelerated implementation of these key NNSA nuclear nonproliferation programs, NNSA can and will significantly contribute to the President's nuclear security vision.

The April Prague speech provides a priority list of areas in which NNSA will focus its future nuclear security activities. Chief among them is the President's call to "secure all vulnerable nuclear materials around the world within four years, expand our cooperation with Russia, pursue new partnerships to lock down these sensitive materials."

NNSA's future plans rely upon expanding key partnerships. One such key partnership is our long-standing bilateral relationship with our Russian counterparts. Historically, nonproliferation has been a bright spot in U.S.-Russian relations, and NNSA-Russian cooperation has enjoyed this same success. I have shared with some Members of this Committee before some of the work conducted under the 2005 U.S.-Russian Bratislava Nuclear Security Initiative. I am proud to report that NNSA successfully completed, by the agreed-upon December 2008 deadline, all DOE/NNSA nuclear security upgrades included within the scope of this Initiative. This success was the result of a multi-year joint effort between NNSA's MPC&A Program, the Russian Ministry of Defense, and Russian Rosatom as I described in earlier testimony. Through the Bratislava Initiative, we were able to accelerate security work by more than two years at Russian nuclear sites, Rosatom Weapons Complex sites, civilian non-Rosatom sites, Rosatom civilian sites, and Russian Navy reactor fuel sites.

Also within the Bratislava Initiative scope, the NNSA Global Threat Reduction Initiative, with its Russian and other international counterparts, successfully completed 22 Russian-origin nuclear fuel return shipments back to Russia, together totaling enough HEU for more than 32 nuclear weapons. Through this bilateral cooperation, all HEU has been removed from Latvia, Bulgaria, and Romania.

We hope to build upon these remarkably successful joint efforts. In Moscow just last week, Presidents Obama and Medvedev, noting their special responsibility for nuclear weapons security, agreed to "broaden and deepen" long-term bilateral cooperation to increase further the security of nuclear facilities around the world. This expanded cooperation includes minimizing the civil use of HEU, including through research reactor conversions and additional fuel repatriations, and the consolidation and conversion of nuclear materials. An important aspect of our effort is seeking to develop guidelines on the Management and Minimization of HEU, an effort that we have discussed in some detail to date with France, and will eventually expand to other countries. The July 6, 2009 Moscow Joint Statement on Nuclear Cooperation lays the groundwork also for expanded cooperation on physical protection and nuclear material accounting, nuclear security best practices, international safeguards, and expanding capabilities to combat the illicit trafficking of nuclear and radiological materials. The Joint Statement also noted both countries' commitment to executing the Plutonium Management and Disposition Agreement (PMDA), under which framework both countries will dispose of no less than 34 metric tons of weapons-grade plutonium. In short, this Joint Statement outlines the very priorities that NNSA and our Russian counterparts will take on.

However, as I have often said, we recognize that there is nuclear material of concern across the globe. In addition to expanding our cooperative relationship with Russia, we are going to have to pursue new and intensified nuclear security partnerships with many other countries to achieve the President's objective of securing all vulnerable nuclear material worldwide within four years. Increasingly, our focus will include civilian sites with vulnerable nuclear material. These activities will be as agreed upon by the USG interagency process and prioritized in keeping with NNSA's methodology. I am optimistic that the Global Summit on Nuclear Security that will be held next year can serve as a forum to build the consensus and partnerships needed to meet the President's requirements.

A complete nuclear security strategy must deal not only with existing or vulnerable materials worldwide, but also address the future production of nuclear materials and necessary supporting security norms. In Prague, the President also called for setting "new standards" on nuclear security. As mentioned, part of NNSA's future strategy includes strengthening nuclear security practices and international safeguards. This includes continuing to provide financial, in-kind, and expert support to the IAEA's Office of Nuclear Security and its increasing mission. It also includes providing continued technical and policy support to such efforts as revising the international physical protection standards enshrined in IAEA Information Circular 225/Rev.4 *on the Physical Protection of Nuclear Materials and Facilities.* This IAEA document serves as the recognized international standard for adequate physical protection, and is a key component of international efforts to ensure that States maintain robust and adequate physical protection measures. NNSA will also intensify efforts to ensure the security of U.S.-obligated nuclear material, conduct bilateral physical protection training and assessments, consistent with the Nuclear Nonproliferation Act of 1978.

The President also noted in his Prague speech the need for "stronger international inspections around the world" while "improving the effectiveness of current resources and authorities." The Next Generation Safeguards Initiative will contribute to strengthening the international safeguards system, bolstering the U.S. safeguards technical and human capital bases, revitalizing the international safeguards system, and building an international capacity to help prevent the theft, diversion of spread of nuclear materials. In some circles, the anticipated renaissance in nuclear energy as a means to assure the clean energy needed to meet future demand only adds to the urgency of the international safeguards mission. We must ensure an adequately robust international safeguards system to support the peaceful uses of nuclear technology while reducing the risk that proliferators could pursue nuclear weapons under the guise of civil nuclear energy programs. The Next Generation Safeguards Initiative will develop advanced safeguards approaches and technologies to ensure that the IAEA can effectively address the increasing number, size, and complexity of civilian nuclear facilities. We look forward to the second Next Generation Safeguards Initiative international conference, to be held in Fall 2009, as a mechanism to launch new safeguards partnerships through NGSI to address tomorrow's nuclear safeguards needs.

The President's Prague strategy also included intensified "efforts to break up black markets, detect and intercept materials in transit..." NNSA strengthens the ability of foreign government partners to deter, detect, and interdict illicit shipments of nuclear equipment, material, and technology. In support of the President's call, NNSA will accelerate our Second Line of Defense/Megaports and export control cooperation activities. Beginning in Fiscal Year 2010, we will increase work to provide a mobile radiation detection capability to overseas law enforcement agencies in order to facilitate the detection of nuclear trafficking at unofficial, "green," border crossings. We have also begun a pilot collaboration with partner country law enforcement agencies to enhance their capabilities to investigate and act against smugglers. We will ramp-up work to complete installations at 15 Megaports in FY2010, thus increasing the total number of Megaports to 43, out of the 100 ports identified for cooperation under this Initiative. Our International Nonproliferation Export Control Program will likewise accelerate its activities and international engagement, launching new Commodity Identification Training in 16 countries. We will also continue to support the Proliferation Security Initiative, including through the development of training exercise scenarios and informational resources, such as the WMD Commodity Guide developed for and provided to PSI partners.

As Presidents Obama and Medvedev recently noted in their Joint Statement on Nuclear Cooperation, we are also working to "dispose of existing stockpiles of weapon-grade materials that are surplus to defense needs consistent with our obligations under Article VI of the NPT." As I shared with some Members of the Committee recently, the United States and Russia have agreed on the basic principles underlying a revised Russian program to dispose of 34 metric tons of surplus Russian weapons plutonium. This revised program is consistent with Russia's national energy strategy and relies on the use of Russian fast reactors to dispose of the plutonium with certain nonproliferation add-ons. The program includes a U.S. commitment to provide $400 million, subject to the availability of appropriated funds, and a Russian commitment to pay for the balance of the disposition program costs. These changes will be codified in a Protocol that amends the 2000 U.S.-Russian Plutonium Management and Disposition Agreement which we expect to sign in the near future.

In parallel, NNSA is making significant progress on the U.S. plutonium disposition facilities at the Savannah River Site, consistent with our obligations under the 2000 Agreement. Construction of both the MOX Fuel Fabrication Facility and the related Waste Solidification Building are proceeding according to their respective validated cost and schedule baselines.

While some believe that the U.S. plutonium disposition program is no longer a nonproliferation program, I maintain that the U.S. program demonstrates leadership in living up to our nonproliferation commitments by drawing down our nuclear arsenals and materials in a transparent and irreversible manner. The commitment made by Presidents Obama and Medvedev last week in Moscow, as part of the Joint Statement on Nuclear Cooperation, to executing both countries' commitments under the Plutonium Management and Disposition Agreement demonstrates that this is a vital nonproliferation

program. As a result of the U.S. program and reciprocal Russian effort, the United States and Russia will ultimately dispose of enough weapons plutonium for at least 17,000 nuclear weapons.

In conclusion, I am proud of the nonproliferation accomplishments that NNSA has reached to date. NNSA stands ready to continue and build upon this foundation of achievements to help realize the international security dividends enshrined in the President's global nuclear security vision. I have the utmost confidence in the enormous contribution that, together with our interagency and international partners, through *concerted* action, we can make towards this shared goal. I thank the Chairman and the Committee for your time.

Statement for the Record

The Honorable Dr. Michael L. Nacht
Assistant Secretary of Defense for Global Strategic Affairs

House Committee on Armed Services

July 15, 2009

Mr. Chairman and members of the committee, I am pleased to appear before you today to discuss the threats posed by weapons of mass destruction (WMD) and explain how the Department of Defense Cooperative Threat Reduction (CTR) Program is an important element of the broader U.S. strategy to counter WMD.

Countering WMD

Weapons of mass destruction pose a tremendous threat to our nation, our interests and indeed, our way of life. In the Department of Defense we are seized with this challenge and are determined to ensure that we develop and maintain the plans, strategies, capabilities and programs necessary to prevent WMD proliferation wherever possible and respond to WMD threats wherever and whenever necessary. The Under Secretary of Defense for Policy has identified four strategic priorities, which, while not comprehensive, do provide the Department with a mechanism for examining WMD challenges and integrating what has worked well in the past with new thinking in the area. These four strategic priorities are:

1) increasing barriers to WMD proliferation and use,

2) identifying and mitigating emergent WMD threats,

3) developing an integrated, layered WMD defense, and

4) managing WMD threats emanating from failing or fragile states and ungoverned spaces.

These strategic priorities provide a valuable framework to support the President's ambitious nuclear security agenda as laid out in his April 5th speech in Prague. In addition, within the Department of Defense, these strategic priorities are shaping our efforts to address WMD-related issues within the context of the Quadrennial Defense Review (QDR), which is currently underway. The QDR provides an opportunity to look closely at the challenges involved in countering WMD and highlights those programs and initiatives that can help reduce the threat to this country. In addition, the QDR provides an unparalleled opportunity to communicate the importance of these issues to the broader defense community and to establish a common understanding of the threats that we face and steps necessary to overcome them.

Of course establishing a common vision and sense of purpose across the Department of Defense is not enough; we must also build common understanding and approaches across the U.S. government and among our international partners. I am pleased to be joined today by the Department of Energy - an essential interagency partner in our efforts to counter the threat posed by weapons of mass destruction -- to discuss the Cooperative Threat Reduction Program. This program plays an essential role in supporting each of the countering WMD priorities, particularly in terms of developing an integrated, layered WMD defense while increasing barriers to WMD proliferation and use. In addition, CTR will play an important role in supporting the President's goal of securing all vulnerable nuclear materials around the world in four years. This "lockdown" of nuclear material highlights the importance of developing strong interagency and international partnerships—a goal that can only be reached through cooperative efforts. Few programs better exemplify the value of interagency cooperation and international collaboration than the CTR program.

I would like to offer the committee a report on current CTR activities and provide our vision for the future of the program as it evolves to meet the WMD challenges of the coming decade. Before I begin, however, I would like to thank the committee for its continued strong support for the Cooperative Threat Reduction program in the House version of the National Defense Authorization Act for FY 2010. I take this as a vote of confidence in the Department's efforts thus far to implement the CTR Program. Such cooperation on countering WMD is an essential element of our national defense, and CTR is a leading example of DoD's successful efforts in this area.

Cooperative Threat Reduction (CTR)

Mr. Chairman, the committee is well acquainted with the history and activities of the CTR Program. Over the years, the Program has led efforts to facilitate secure transportation, storage, safeguarding and destruction of WMD and the means of their delivery and assisted in the prevention of weapons proliferation as authorized by the original legislation.

I would like to bring the committee up to date on the status of current CTR projects, some recent achievements, and then address new initiatives.

CTR Today

CTR today is in a period of transition from a nuclear-centric effort focused on the former Soviet Union to a more expansive effort to counter WMD threats throughout the world. As new security risks emerge, such as genetically engineered pathogens or established actors looking to acquire new weapons types, CTR must maintain its flexibility and agility to ensure continued success. By securing those sites that are most at risk, while maintaining commitments to legacy efforts, CTR will continue to offer viable solutions to pressing problems.

- In FY09 the Department continues to oversee the destruction of strategic weapons delivery systems and associated infrastructure in accordance with all relevant START provisions and agreements.

- Security systems at 24 nuclear weapons storage sites in Russia have been upgraded in partnership with DOE, with the final upgrades completed in late 2008. DoD and DOE are now coordinating closely with the Russian Ministry of Defense (MOD), the Russian Navy and the Strategic Rocket Forces to structure a system that gives the Russian military the means to sustain operational readiness of these security systems far into the future.

- Under the Nuclear Weapons Transportation Security Program, DoD continues to work with the Russian MOD to ship nuclear warheads to dismantlement locations or secure storage sites pending dismantlement. In FY09, DoD plans to transport approximately 48 trainloads of nuclear warheads (1000 to 1500) from deployed locations to enhanced security storage sites or dismantlement facilities. In addition, the program is providing maintenance and certification for MOD railcars, procuring 17 additional cargo railcars, and providing communications equipment or security upgrades to 9 railcars.

- On March 5, 2009 the first chemical munitions were destroyed in the Shchuch'ye Chemical Weapons Destruction Facility (CWDF). The U.S. has committed close to $1.04 billion to the creation of the CWDF, which is designed to destroy entire stockpile at the nearby Planovy military base of chemical agent-filled small and medium-sized rocket and tube artillery, and large rocket and missile warheads by the end of 2012. The Shchuch'ye CWDF project directly supports the Russian Federation's treaty commitments under the Chemical Weapons Convention.

- CTR has continued to improve the capabilities of Azerbaijan's Coast Guard to interdict WMD smuggling in the Caspian Sea. We are in the final stage of installing a comprehensive surveillance system that will cover the major shipping lanes in the Caspian.

- WMD-Proliferation Prevention projects in Ukraine continue on track. Working with the DOE, we are installing a surveillance and command, control and communications system to complement DOE's radiation portal monitor installations. We are additionally providing enhanced WMD detection and interdiction capabilities to Azeri maritime Border Guard forces on the Black Sea.

- The Biological Threat Reduction Program (BTRP) continues its work in Azerbaijan, Georgia, Kazakhstan, Ukraine and Uzbekistan to consolidate pathogen collections, provide security for extremely dangerous pathogens, develop a capability for disease detection, diagnostics, and reporting and enhance strategic research partnerships. The Department has negotiated an implementing agreement with Armenia, which is pending signature. Construction is progressing on 12 facilities for biological threat agent detection and response in Azerbaijan, Georgia, Kazakhstan, Russia, Ukraine and Uzbekistan. Construction of the Central Reference Laboratory (CRL) in Tbilisi, Georgia, which began in 2007, is on track to be completed this year. At the request of the Georgian government, CTR is working to make the CRL a joint U.S.-Georgia disease surveillance and research center.

The Future of CTR

Mr. Chairman, I have outlined above some of the many achievements of the CTR Program over the past 17 years. We have developed important partnerships with leaders in each country, which remain strong and effective. We worked – and continue to work – on the sustainment of our operations, with the goal that each country will be able to take full ownership of the threat-reduction capabilities we have worked with them to build.

The world today is very different from the world of 1992. The WMD proliferation threat has evolved rapidly, and the CTR Program has been successful in keeping pace with those changes. CTR activities must remain directed solely at countering the WMD threat –no other purpose. However, as we look ahead, we need to think "globally" rather than just nationally, about these efforts. Today's challenges today range from unprotected nuclear weapons and materials in established nuclear states, to the capacity for extremist groups in unstable or failing states to develop lethal chemical or biological agents, to the capabilities of organized networks to transfer WMD building blocks across unsecure regions. We are now in an important state of transition, and while CTR must continue to build upon its past successes, it must also remain flexible and adaptable to address complicated WMD threats of the future. The result will be a CTR Program that looks very different from the CTR Program of the past.

First, we must continue to have a strong CTR presence in Russia. CTR has been instrumental in helping Russia meet its START requirements. CTR has also been a stable force through both the calm and turbulent years in U.S. – Russia relations. As the President attempts to reset our relationship with Russia and reduce the number of strategic missiles and nuclear warheads under a START follow-on treaty, the CTR Program should be a central part of the process. Russia takes international agreements seriously, as do we. The history of CTR efforts on strategic nuclear arms reduction has demonstrated this commitment to Russia.

As I mentioned earlier, the CTR Program is participating in an interagency forum tasked with developing strategies to meet the President's goal of securing all vulnerable nuclear material in the world within four years. This interagency group is currently assessing known locations of nuclear material in order to determine the best way to work with international partners to reduce or eliminate vulnerabilities associated with this material. This initiative is a high priority for the President and CTR looks forward to assisting in this effort.

In addition, the CTR Program is bracing for a wide range of emerging WMD threats beyond the FSU. A recent National Academy of Sciences report on the future of the CTR Program notes that "[i]gnoring globalization is not an option, whether in economics, public health, combating terrorism, or reducing the threat of WMD," and that "engagement" is "one of the most important tools in the national security arsenal" for dealing with the more elusive WMD threats. The report recommends that the CTR Program expand and evolve in form and function to confront these threats and be used as an active tool of foreign policy.

Also noted in the report, the CTR Program of the future will need to be more agile, versatile, and responsive to WMD threats across a wider geographical landscape. CTR will continue to focus on the development of strong and lasting partnerships with our foreign

counterparts, however, future requests for assistance will likely be more varied in scope and require DoD to respond more quickly. As recommended by the National Academy of Sciences, CTR has worked hard to integrate into the broader threat reduction and proliferation prevention community, including government, academe, industry, non-governmental organizations, and individuals.

While there have been no requests outside the FSU for CTR assistance with nuclear nonproliferation projects to date, CTR is prepared to assist if asked. However, with regard to chemical weapons elimination, in April 2009, the Government of Iraq sent a request to the Department of State for assistance with meeting Iraq's commitments under the Chemical Weapons Convention. CTR is retaining the capability to partner with the Iraqis and provide assistance with destruction of chemical agents if our help is required.

Within the past year, both Pakistan and Afghanistan have requested assistance with biological threat reduction efforts. CTR, as a member of the National Security Council Interagency Policy Committee on International Bio-Engagement, had previously identified Pakistan and Afghanistan, as well as Kenya and Uganda, to be potential partners for bio-engagement efforts. CTR looks forward to partnering with these strategically important countries on biological threat reduction efforts.

Today, the Biological Threat Reduction Program (BTRP) accounts for more than half of the CTR budget. The National Research Council recently issued a report on BTRP, noting that countries which lack the public health infrastructure necessary to detect, diagnose, and report naturally occurring disease outbreaks are at a greater risk of succumbing to a bio-terror attack. The report further states that the infrastructure required to conduct a bioterrorism attack is relatively small. CTR has concluded that the best way to assist our partners prepare for a biological attack is to help them build sustainable infrastructure.

The ease with which dual use technologies, materials, and expertise flow across international borders is particularly relevant with respect to bioterrorism. Dangerous pathogens exist in nature and can be weaponized with readily available materials and few technical skills. Although the recent H1N1 outbreak was not the result of a deliberate or malicious act, it clearly demonstrates the potential impact such a biological event could have. Dangerous pathogens know no borders. A biological attack of greater magnitude than the H1N1 virus could be unleashed against a human or animal population with relative ease. In a region where the infrastructure for detecting, diagnosing, and reporting on dangerous outbreaks is underdeveloped, the consequences could be severe -- for the country, the region and potentially the world.

The H1N1 flu outbreak demonstrates that countries which have the infrastructure and capability to report and track the spread of a virus would be able to save more lives in the event of a more virulent outbreak. The threat of animal-to-human transfer of pathogens, such as H1N1 and H5N1 (avian influenza) underscores the importance of reporting on animal disease outbreaks as well as human. A biological attack against an animal population could have a devastating impact on a nation's economy and/or food security. To meet this threat, BTRP-built facilities

such as the joint U.S.–Georgia disease surveillance and research center will have the unique capability of conducting research on both human and animal especially danger pathogens.

DoD looks forward to continuing its work with the interagency, its partner agencies in the US government, its collaborators, and international partners to address the biological WMD threat. Future Program efforts will focus on assisting in the identification of dangerous pathogens, and with the establishment of infrastructure to detect, diagnose, and report on disease outbreaks in accordance with the World Health Organization's International Health Regulations, and the World Organization for Animal Health's reporting guidelines.

Finally, I would like to endorse the new legal authorities, recommended by the National Academy of Sciences study, that this committee has included in the markup language for the National Defense Authorization Act, granting limited "notwithstanding" authority and creating a CTR Partnership Account that will permit DoD to accept funds from any person, foreign government, or international organization. "Notwithstanding" authority is an instrument that will enable the CTR Program to become more flexible and respond to a broader range of threats beyond the former Soviet Union. The CTR Partnership Account, together with exemption from the Miscellaneous Receipts Act, will allow DoD to receive contributions from other countries and organizations for existing and planned projects.

I wish to emphasize to the committee that DoD understands the sensitivities associated with the use of these authorities, particularly "notwithstanding" authority. As outlined in the legislation, we will only utilize these authorities with the concurrence of both the Secretary of Defense and the Secretary of State. Furthermore, DoD looks forward to openly engaging interested members of Congress when developing plans to exercise these authorities.

Conclusion

Mr. Chairman, CTR is one piece of an overarching national strategy to counter WMD. We have made significant progress over the history of the program. We have more to do across the spectrum of WMD threats. The Department of Defense looks forward to continued close coordination with Congress as we address the threats posed by weapons of mass destruction.

Thank you.

QUESTIONS SUBMITTED BY MEMBERS POST HEARING

JULY 15, 2009

QUESTION SUBMITTED BY MR. MASSA

Mr. MASSA. Based on the success of the dismantling of the Libyan nuclear weapons program of the 1990s, are there any lessons learned from that effort that can be applied in respect to Iran and North Korea?

Dr. NACHT. The important lesson learned was that the USG was able to move quickly in response to the Libyan decision to dismantle their WMD program. The proposed "not-withstanding authority" legislation, Section 1305 of the House 2010 National Defense Authorization Bill, will permit additional flexibility should Iran or North Korea agree to dismantle their WMD programs.