

HEARING TO RECEIVE TESTIMONY ON PROLIFERATION PREVENTION PROGRAMS AT THE DEPARTMENT OF ENERGY AND AT THE DEPARTMENT OF DEFENSE IN REVIEW OF THE DEFENSE AUTHORIZATION REQUEST FOR FISCAL YEAR 2014 AND THE FUTURE YEARS DEFENSE PROGRAM

TUESDAY, APRIL 23, 2013

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

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

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

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

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

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

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

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

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

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

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

Ken Myers is the Director of the Defense Threat Reduction Agency at the Department of Defense, which is focused on reducing the threats from weapons of mass destruction. The agency is responsible for executing the Cooperative Threat Reduction program. He is also the Director of the U.S. Strategic Command Center for Combating Weapons of Mass Destruction, located at the agency.

Anne Harrington is the Deputy Administrator for Defense Nuclear Nonproliferation at the National Nuclear Security Administration of the Department of Energy.

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

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

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

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

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

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

Senator Fischer.

STATEMENT OF SENATOR DEB FISCHER

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

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

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

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

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

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

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

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

Ms. CREEDON. Thank you, Senator Hagan, Ranking Member Fischer. It’s a pleasure to be here, also to be here today with colleagues of longstanding duration from both the Defense Threat Reduction Agency and from the National Nuclear Security Administration.

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

One of the most worrisome scenarios we face is the prospect of a dangerous WMD crisis involving the theft or loss of control of weapons or materials of concern that end up in the hands of hostile actors. As the situation in Syria illustrates, instability in states pursuing or possessing WMD could lead to just such a crisis. To meet these challenges, the Department of Defense has focused on three areas: preventing WMD acquisition, containing and rolling back the threats, and responding to a WMD crisis.

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

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

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

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

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

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

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

If our efforts to contain and roll back WMD threats fail, we must be prepared to respond. The recently activated Standing Joint Force Headquarters-Elimination has this responsibility. In addition

to the unique support it provides to the combatant commands, this year the Standing Headquarters participated in major exercises with South Korea, France, and the United Kingdom. We're committed to meeting the Nation's countering WMD requirements while taking into account shrinking Department of Defense budgets.

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

Thank you.

[The prepared statement of Ms. Creedon follows:]

Senator HAGAN. Thank you, Secretary Creedon.

Director Myers.

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

Mr. MYERS. Madam Chairwoman, Ranking Member Fischer, members of the subcommittee: It's an honor to be here today. I'm pleased to share with you the work being done to counter the threats of weapons of mass destruction by the Defense Threat Reduction Agency and the STRATCOM Center for Combating WMD.

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

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

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

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

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

[The prepared statement of Mr. Myers follows:]

Senator HAGAN. Thank you.
Now Ms. Harrington.

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

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

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

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

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

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

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

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

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

[The prepared statement of Ms. Harrington follows:]

Senator HAGAN. Thank you.

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

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

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

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

How we actually will do that going forward in the future is still not resolved, as the umbrella negotiations are going on pretty much even as we speak today in Geneva. But it's maintaining that ability to work together. We're going to change, obviously, how we work. Many of the programs at DOD were on a natural glide path for completion over the course of the next several years. We want to make sure that as we transition out of these programs that Russia is going to be able to sustain them, that they have the budget-making and funding capability to sustain these programs. But we want to also figure out ways that as we look for changes in this relationship that we can work together on certain things. So maybe there are opportunities in the future where we can take our combined knowledge and share it with other countries. It's that sort of a strategic relationship that we hope in the future we'll be able to sustain.

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

Senator HAGAN. Thank you.

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

Ms. CREEDON. Well, as is very obvious, this is a region of significant turmoil, not the least of which is in the last 18 months or so with Syria. So one of the main things that we've done with this new authority is to work with the Jordanians in developing a sub-

stantial border program, as I mentioned in my statement, that will provide border security capability to the Jordanians for over 250 kilometers of the shared border with Syria, to help prevent the leakage or the proliferation, primarily of chemical weapons, but also of technology. One of the fears is that something along the line may be stolen or tried to—someone may try to get it out of the country.

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

Senator HAGAN. Thank you.

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

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

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

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

Senator FISCHER. Thank you, Madam Chair.

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

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

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

The other one of these big examples is also the chemical weapons destruction work. When we started off, the U.S. and Russia had

the largest chemical weapons stockpiles. In the work, primarily at Shucha, the Russians have built one facility and the U.S. built another facility. This facility is working through the bulk of the Russian stockpile. There are several other facilities, but again this is one where they are about, I want to say, they are about 70 percent complete of the stockpile that's out there. So this is another example of significant success and significant progress.

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

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

Senator FISCHER. Well, both.

Ms. CREEDON. Both.

Senator FISCHER. Let's look at both.

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

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

Senator FISCHER. Thank you.

Mr. MYERS. Senator, let me add a couple of points. First, one of the other specific areas that we cooperate with the Russians on is on nuclear warhead security, helping them transport nuclear warheads for dismantlement and ensuring that their storage facilities are safe and secure. One of the ways that that was measured was in the Bratislava agreement which set up the cooperation. We were basically able to establish metrics and we were able to really judge how far along in that process we are.

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

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

I would also just echo what Secretary Creedon mentioned. As we move forward with these efforts in new countries, we are focused primarily on the threat, but we're also coordinating very, very closely with the combatant commands and working closely with them in terms of opportunities in terms of building relationships

and the like. Obviously, the combatant commands also have an opportunity to make recommendations or make requests, and we'll work with them as we expand the program to new areas and new regions.

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

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

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

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

Senator FISCHER. Thank you.

Senator HAGAN. Senator Graham.

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

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

We've been dealing with this issue for over a decade now, well over a decade, and the Obama administration comes along and they actually begin to build the MOx facility. And I'm sure you're aware of it because of Duke Power, but in case people are not, there's a technology that's been tested and it works, where you can take weapons-grade plutonium, blend it down, and make commercial-grade fuel out of it. So you're taking a sword and making it a plowshare. The MOx facility at Savannah River site is somewhere toward halfway being completed.

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

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

I can assure you, I would not have done that if I had known this year in the President's budget they would be suspending the MOx

program for a study. We have studied this thing to death. It is now time to get on and getting it built.

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

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

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

Ms. HARRINGTON. That is correct.

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

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

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

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

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

Now, at Savannah River site the pit disassembly facility was going to be a third separate building. This is where you take the pit out of the warhead and that's what's blended down into MOx fuel. It's the plutonium bullet. We were able to avoid building that facility and save \$2 billion right there.

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

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

Have a good day.

Ms. HARRINGTON. Thank you, sir.

Senator HAGAN. All right.

Mr. Myers, can you please give us an unclassified summary now of the role of the STRATCOM Center for Combating Weapons of Mass Destruction to support planning for any contingencies with the chemical weapons in Syria?

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

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

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

Senator HAGAN. Great.

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

Ms. CREEDON. Thank you, Senator. The new CTR strategic guidance has just been issued, and I should also mention we're also working on a broader guidance document that would be more largely for WMD. The combination of these two should help the Department focus on the threats as they emerge to prevent the acquisition, to prevent the transition of technologies, and if all that fails to be able to interdict. It's some of what I mentioned in my opening statement.

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

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

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

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

Mr. MYERS. Yes.

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

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

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

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

Senator HAGAN. Well, why don't we give you a copy of it.

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

Senator HAGAN. Since you've got the chart too, right? [Pause.]

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

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

Mr. MYERS. Yes, Senator.

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

Mr. MYERS. Yes, Senator, I did.

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

Mr. MYERS. Yes, Senator.

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

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

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

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

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

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

Senator HAGAN. Thank you.

Senator FISCHER.

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

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

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

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

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

Senator FISCHER. Thank you.

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

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

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

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

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

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

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

So I would suggest to you that as we do the planning, as we provide the subject matter expertise to the combatant commands and share with them where we believe the threats are, why we believe we should move in one direction or another, it really does become a team effort, that we then move forward and obviously bring to Congress for authorization and appropriation.

Senator FISCHER. Ms. Harrington?

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

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

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

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

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

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

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

Senator FISCHER. Where does the expertise come from?

Mr. MYERS. Well, a little bit from all of us, quite honest with you: obviously, Secretary Creedon's colleagues in OSD-Policy, our colleagues at NNSA, as well as from the State Department, their

country desks, their regional bureaus, and obviously the technical support comes from all three of us as well, and sometimes from outside our three organizations and the State Department.

Senator FISCHER. Thank you very much.

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

Ms. HARRINGTON. We also have staffs at a limited number of embassies overseas in critical countries. So both DOE and the Department of Defense—

Ms. CREEDON. Work with State.

Ms. HARRINGTON.—work with State and work through the embassies to also engage that network in our work.

Senator FISCHER. Thank you.

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

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

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

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

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

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

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

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

Senator HAGAN. Thank you.

Other questions?

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

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

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