

**NUCLEAR THREAT INITIATIVE**

**THE FUTURE OF GLOBAL NUCLEAR SECURITY POLICY SUMMIT**

**Wednesday, March 12, 2014**

**Newseum, Knight Broadcast Studio – Third floor  
555 Pennsylvania Avenue N.W  
Washington, D.C. 20001**

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## THE FUTURE OF GLOBAL NUCLEAR SECURITY POLICY SUMMIT

### WELCOME

MS. MacDONALD: Good morning. I am Poppy MacDonald, president and co-publisher of National Journal, and I want to welcome you all here this morning. Thank you for joining us. I also want to welcome our live stream viewers who are joining us at nationaljournal.com and at fora.tv.

Welcome today to the Future of Global Nuclear Security Policy Summit. I want to specially thank the organization that has made this event possible this morning, the Nuclear Threat Initiative.

I'd like to ask the audience if you just take a moment to please silence your cell phones we would be grateful. We want to encourage a lively discussion this morning and we definitely want to hear from you. We would welcome your comments, your questions, and your thoughts on this event via Twitter at #njnuclearsecurity. We will also be coming around with handheld microphones and we just ask that you please state your name and organization when posing a question. But we absolutely would love for you to participate in this morning's discussions.

We would also encourage your feedback on the event. On your chairs you will find just a brief survey. We would love to hear your thoughts. And you can hand them to an NJ staff member as you leave this morning.

Early in his first term in office President Obama identified nuclear terrorism as the most immediate and extreme threat to global security and hosted the first Nuclear Security Summit in Washington, D.C. The goal of the summit was to secure all vulnerable nuclear materials. Years later this remains an ongoing task. And to underscore the importance of this task focus now turns to the third nuclear security summit. This year it will be in The Hague later this month.

Since 2012 seven countries have removed all of the most dangerous materials that could be used to build a nuclear bomb from their territories bringing the number of countries now storing weapons-usable materials down to 25. Despite this progress, work still needs to be done as terrorist organizations continue to seek weapons of mass destruction. Materials are still stored at hundreds of sites with varying levels of security. And according to the International Atomic Energy Agency they continue to receive more than a hundred incidents of theft and other unauthorized activity involving nuclear and radiological material each year.

So what tangible result should we expect out of The Hague this month; what work remains that must be tackled by leaders over the next two years and on the road to 2016; is Congress a support or a hindrance. These are some of the questions that we'll discuss this morning and we are so glad that you all have joined us.

Let me give you a brief overview of the program. We will begin with keynote remarks and a keynote interview featuring Elizabeth Sherwood-Randall, White House Coordinator for Defense Policy, Countering Weapons of Mass Destruction, and Arms Control at

the National Security Council. And this will be moderated by James Kitfield, contributing editor for the *National Journal* and senior fellow for the Center for the Study of the Presidency and Congress. Our second experts panel discussion will be introduced later, but that will also be moderated by James.

We are able to gather this morning, as I mentioned, thanks to the leadership and support of the Nuclear Threat Initiative. I am honored to introduce the honorable Sam Nunn, former member of the U.S. Senate and co-chairman and chief executive officer of the Nuclear Threat Initiative. Senator Nunn?

(Applause)

#### OPENING REMARKS

MR. NUNN: Thank you very much, Poppy, and thanks to everyone coming this morning for getting up early and joining us on what we think at NTI as one of the most important security subjects facing both our country and indeed mankind. So Poppy, thank you for sponsoring this forum, the *National Journal* does a terrific job. We are very proud to be partners because you can call the shots as you see them totally objectively. But we think that the coverage you give these issues on a daily basis is enormously important, not just for leaders in this country but for the general public and also for leaders around the globe.

In early January 2001, the week that Ted Turner announced the launch of the Nuclear Threat Initiative, Howard Baker and Lloyd Cutler released a report they worked on for some time. And it was about loose weapons usable nuclear materials in the former Soviet Union. That was 2001. They declared it the greatest unmet threat to the United States. And Howard Baker later told the Senate Foreign Relations Committee, and I quote Howard, "It really boggles my mind that the world isn't in a near state of hysteria about the danger."

So from the very beginning of NTI, securing nuclear materials and preventing catastrophic terrorism, and the two go together, has been a major focus. In 2002 we worked closely with the state department and contributed to a US-Russia-Serbian effort to remove 100 pounds of highly enriched uranium from a poorly secured research facility near Belgrade. Lessons learned from that important effort led to the creation of the Global threat reduction initiative, GTRI.

As a result, the U.S. Department of Energy working closely with Russia and other countries has removed or verified the disposal of more than 200 nuclear bombs worth of highly enriched uranium and plutonium from dozens of countries. In addition, the United States and its partners have improved the security of enough material for hundreds of more bombs including a major effort in Kazakhstan. And there are a number of folks in this audience—I see some faces out there—that have had one heck of a big role in accomplishing these wonderful and beneficial developments over the last few years and indeed the last 20 years. I thank all of you.

It's important for us to emphasize that acquiring weapons and materials is the hardest step for the nuclear terrorist or would-be nuclear terrorist to take and the easiest step for us to stop. By contrast, every subsequent step in the process, building the bomb, transporting it and detonating it is easier for the terrorist to take and harder for us to stop. The bottom line, securing nuclear material at the source is the most effective and least expensive way to prevent

nuclear terrorism. But of course this is a very big challenge.

Consider this chilling observation by Mohamed ElBaradei, the former director of the international Atomic Energy Agency, and Poppy has already mentioned the number of incidents they have each and every year. This is a paraphrase of Director ElBaradei. "A large percentage of the nuclear materials reported as lost or stolen each year are never recovered, and perhaps worse, a large percentage of the materials that are recovered were never reported missing in the first place."

There is good news however. In recent years the world has focused more seriously on this threat. We have seen measurable progress through the nuclear security summits that began in Washington in 2010 under the leadership of President Obama, and continued in 2012 in South Korea. The third summit conference on nuclear material security will be held this month in The Hague, Netherlands.

In the past two years since the last summit seven countries have removed all or most of these dangerous nuclear materials from their territories. In addition, more than a dozen countries have taken steps to reduce their quantities and to better secure what they have. We also can measure real progress over the last twenty years. This has been the responsibility of several administrations, not just one.

In 1992 50 countries around the globe had weapons usable nuclear materials. Today that number is down to 25, from 50 to 25. Still a long way to go, but progress. These are just a few of the findings of NTI's 2014 Nuclear Material Security Index and those of you who are interested we'll have a copy of that index that has been published recently for you after the program is over.

NTI's index first launched in 2012, ahead of the summit in Seoul, is a unique in-depth assessment of nuclear material security conditions in 176 countries. It assesses the 25 states with weapons-usable nuclear materials and 151 countries without them. The report encourages governments to take stronger action to secure dangerous materials and to assure their neighbors they are doing so.

Let me focus this morning before we get to the panel on just one important finding from our report that I hope gets front burner attention in The Hague -- at The Hague summit in the next few days. Today we do not have an effective global security system based on common international standards to protect dangerous nuclear materials. Let me repeat it. Today we do not have an effective global security system based on common international standards to protect dangerous nuclear materials. This is in stark contrast to the strict standards in other risky global enterprises where public safety and security are clearly at stake.

One example, in aviation, countries set standards for airlines safety and security through the International Civil Aviation Organization which oversees state implementation of the standards and shares security concerns with the member states. If a nation's practices do not meet these standards, that nation's planes are not going to land in the other 199 member countries of the world. Obviously in a state and in the age of terrorism, the airline industry depends on the safety and security system for its economic viability and countries depend on it to protect their citizens.

The question for world leaders, shouldn't the security of the most dangerous materials on the planet have an equally effective global approach? My answer is an emphatic yes. I believe that our leaders must use The Hague summit to seriously discuss and reach agreement on key principles for an effective and sustainable system. There are many things on my list but let me just share four principles with you that I think are absolutely imperative.

Number one, nuclear materials security is both a sovereign responsibility and a shared obligation. Each nation's security as well as global security is only as strong as the weakest link in the chain and no single nation can prevent this threat alone. Number two, accountability and assurances are essential. It is not sufficient to just declare, trust me. Number three, standards and best practices must be implemented by all states and must cover all weapons-usable nuclear materials including non-civilian.

Number four, our leaders must get serious about sustaining this focus and this effort, even if the nuclear summit process ends after 2016, and it may. If the IAEA is given this responsibility, and some are talking about that, and that makes a lot of sense, but if that responsibility is given to the IAEA explicitly or implicitly, it must be given a clear mandate to go with it and the resources also must be available to carry it out.

I am hoping that progress will be made in all of these areas at The Hague summit. I look forward to hearing from our keynote speaker, Liz Sherwood and members of the panel, we have an outstanding panel. As I am sure most of you know Liz is the President's top advisor on weapons of mass destruction and weapons of mass destruction in terrorism, Liz we are delighted you could join us today.

I think you will be formally introduced perhaps by someone else, but thank you for all the work you've done on this for so many years. One of the most untold stories in the history -- the modern history of security, global security is the tremendous performance by Liz and Bill Perry and a team of folks in the early 1990s in getting four -- three countries of the four that had nuclear weapons after the breakup of the Soviet Union to give up all their nuclear weapons including Belarus, including Kazakhstan and interestingly enough including Ukraine, which of course is on the front burner today.

So thank you very much. And again Poppy and all the members of the team at *National Journal* we really appreciate your help. Thank you.

(Applause)

MS. MacDONALD: Thank you, Senator Nunn. And I wanted to just do that formal introduction of Elizabeth Sherwood-Randall, White House Coordinator for Defense Policy, Countering Weapons of Mass Destruction, and Arms Control at the National Security Council. Dr. Sherwood-Randall advises the President and coordinates United States government policies and initiatives that ensure the American military is fully prepared to confront current threats and future challenges. The President's -- she is the President's principal advisor on weapons of mass destruction, proliferation and on terrorism.

She will be giving some opening remarks followed by a discussion that will be moderated by James Kitfield. He is the contributing editor for *National Journal* and a senior fellow at the Center for the Study of the Presidency and Congress. He has written on defense,

national security, and foreign policy issues from Washington, D.C. for over two decades, publishing hundreds of magazine features and web stories and reporting from dozens of countries in Europe, the Middle East, Latin America, and Africa.

Just a reminder, we would welcome your participation in this conversation, please don't hesitate to use Twitter at #njnuclearsecurity. Dr. Sherwood Randall, welcome to the podium.

(Applause)

#### KEYNOTE AND Q&A

MS. SHERWOOD-RANDALL: Thank you so much, Poppy. Good morning to everybody here and to those who are watching, streaming, listening. Thank you so much to the *National Journal* for convening this policy event on the future of nuclear security, and to NTI for your co-sponsorship and your support along the way, of all the work that we are doing on this important agenda.

I just want to say how honored I am to be sharing this podium with Sam Nunn, one of the pioneers in this field, and you know that his cooperative threat reduction program with Senator Lugar resulted in the dismantlement of thousands of cold war legacy weapons of mass destruction, more than 7,500 nuclear warheads, more than 500 ICBMs. And indeed Sam has inspired so many, including me, to dedicate our lives to this important work. So thank you for your generous words, Sam, but it's really to you that I owe a huge debt of gratitude.

As you all know and as was earlier noted, the President's 2009 Prague speech and subsequent actions demonstrate that he places the highest priority on this nuclear security agenda. In Prague he announced he would launch a leaders summit process to drive progress in locking down nuclear materials, the highly enriched uranium and plutonium that are the essential elements of building a nuclear weapon in order to increase security, counter nuclear smuggling and, most important, prevent nuclear terrorism.

Since Prague, as has been noted, there have been two summits, one in Washington in 2010 and one in Seoul in 2012, and now in less than two weeks the President will join dozens of other world leaders in The Hague, the Netherlands to advance this vital work.

Of the national commitments that were originally made in Washington in 2010 amazingly over 90 percent had been completed by the Seoul Summit in 2012. And for those of you who track summit commitments in relation to achievements, that's an extraordinary record of implementation.

In total, over the past four years we've made great progress. Twelve countries and two dozen nuclear facilities around the world have rid themselves of highly enriched uranium and plutonium, dozens of nations have boosted the security of their nuclear storage sites, built their own counter-smuggling teams to work with partners around the world or created new centers to improve nuclear security and training.

The IAEA is stronger and more countries have ratified the treaties and international partnerships at the heart of our efforts. And we the United States have fulfilled our

commitments improving security at our facilities and we forged new partnerships through this process to support the work of other countries who are trying to do the right thing. We have removed nuclear materials and in some cases gotten rid of them entirely. As a result, more of the world's nuclear materials can never fall into the hands of terrorists who would use them against us. We have truly made the world a safer place.

In addition, and I would underscore this, we now have a vibrant web of nuclear security officials across 53 countries and multiple international organizations who are in touch with each other every day to work to advance this agenda. We communicate via e-mail, video teleconference and in live meetings to do our work together. And here I would note, I wake up in the morning and I have e-mails from China, from Pakistan, from India, from all over Europe, from Latin America, from Africa, working to advance this effort. That's an extraordinary new capacity that has been built, this network of individuals who are seized with the importance of this mission and who have had to organize their own inter-agencies in their own respective governments to support the effort.

Now, of course there is a lot more to be done to enhance nuclear security performance, to deter and apprehend nuclear traffickers, to eliminate excess nuclear weapons and materials, to avoid the production of materials that cannot be used and to make sure that our facilities can repel the full range of threats they face now and may face in the future. We need to share experiences and best practices and do so in ways that as has been noted or visible to friends, neighbors and rivals.

We also must reflect the commitment to continuous improvement because nuclear security work is never done. As long as these materials exist they require our utmost commitment to their protection. Therefore we see this 2014 summit that the Netherlands will host and subsequently the 2016 summit that the President has offered to host as critical drivers to make progress.

Indeed when my teenage son asked me last weekend, mom, why do you have to have summits to do your jobs? I explained to him that the pressure of leaders getting together is an action-forcing event for officials and for sluggish bureaucracies. It mobilizes them to bring forward commitments that give their bosses an opportunity to shine in front of their counterparts. In short, as I explained to this teenager, who understood this point, peer pressure matters.

At the 2014 summit there is much we will get done. Some of it I can tell you about here, and some of it unfortunately has to be held until the summit itself so that those leaders can shine in that moment. We'll step up our efforts to remove HEU and separated plutonium from countries where it is no longer being used. So watch this space for announcements at the summit of significant deliverables or as you may know in the summit lingo, house gifts.

We'll take further steps to strengthen the global nuclear security architecture we are building through these summits and in other ways as well. And this is something that Senator Nunn alluded to, the importance of strengthening this architecture and building what he described. We'll work to build momentum behind the concept of assurances, the voluntary steps that countries can take to demonstrate that they are maintaining the highest standards of nuclear security without disclosing sensitive information. And we will see examples of assurances in progress reports from some of the countries that are leading the way on this important concept, which I would note has been innovated by the work of NTI.

As was the case at the 2012 summit, in addition to the practice of house gifts there will also be gift baskets, which means the statement of collective intent by a number of countries to work together on a specific challenge. At The Hague we will see commitments aimed at improving security at civilian and nuclear military facilities -- excuse me, I'll state that correctly, it's civilian and military nuclear facilities, returning excess U.S.-origin HEU and separated plutonium from a number of countries to the United States, working with countries to convert their research reactors from the use of HEU to low-enriched uranium, which is non-bomb making material, strengthening the security of radiological sources, building up efforts to counter nuclear smuggling and improving nuclear detection at borders and ports.

One of the most interesting additional elements of this year's summit is an innovative effort by our Dutch hosts to conduct what amounts to a leader's exercise, what is being called a scenario-based policy discussion. A series of videos will be presented to leaders with a fictitious nuclear security incident that is designed to enhance leader awareness and explore international cooperation in the face of a nuclear security incident.

It will be chaired and moderated by our Dutch hosts and give leaders the opportunity to consider the urgent issues that would present themselves and the dilemmas they would face if confronted with such a crisis. This kind of exercise will be a more interactive experience for leaders than they have experienced at past summits and we salute the Dutch for their work in this regard.

Finally, I'd add that leaders will be discussing the future of the summit process and how we can sustain the momentum that we have established in the summits that have thus far been convened through a strengthened nuclear security architecture over the long term. It was never President Obama's goal to conduct summits in perpetuity, but there is enough work left to be done that we know we need a summit in 2016. And so we will begin preparing for that summit the day after The Hague summit is concluded in two weeks time. Thank you so much for being here this morning, and I look forward to interacting with you in the conversation we're about to have.

(Applause)

MR. KITFIELD: That was great, thank you. You know, as a journalist, I've been transfixed by what's going on in Ukraine. And I noted in the Nuclear Threat Initiative's recent index that one of the seven countries that since the last summit has given up all its -- or at least secured most if not all of its highly enriched uranium is Ukraine. And it makes me wonder what would we be thinking right now if that stuff was out and wandering around.

So it drives home two points, one of which is how important this is but also how difficult it is to keep you on the front burner when there are so many crises of the day that are out there. Could you talk for one second about the crisis of the day, which is Ukraine, because clearly the most important relationship in non-proliferation efforts is between United States and Russia now. And clearly that relationship is in a point of crisis. And I have noted some comments, bellicose probably, rhetoric for the most part of some Russian generals saying we may suspend verification under New START.

But talk for a second about your concerns about this critical relationship at this

time because obviously it's in a rocky patch.

MS. SHERWOOD-RANDALL: Thanks so much, James. So first of all I would note what important leaders in non-proliferation the Ukrainians have been. The Ukrainians agreed to give up all their nuclear weapons in 1994 and truly have been trailblazers in this field. And they have brought home the important material that needed to be locked down, taken out of Ukraine. Some of it has gone to Russia, some of it has come to the United States, and that's been a very, very important signal of their continuing commitment and indeed reflects their strong leadership in this domain. And we fully anticipate that Ukraine will remain a leader in this field.

As you know, the Russians were participants in the Budapest Memorandum that enabled the Ukrainians to fulfill their commitment and join the NPT. And we expect that the Russians will continue to abide by the arms control agreements that they have reached with us. These are in our mutual interest and we see no reason that the tensions that exist over Ukraine should in any way obstruct the path toward fulfilling the commitments that we have made with the Russians to reduce nuclear weapons on both sides.

We continue to work toward this summit as well in The Hague with our Russian counterparts very effectively. They are important contributors to this process as a country that has significant possession of both civilian and military nuclear material, and we expect this to be a very constructive summit in that domain as well.

MR. KITFIELD: It's going to be an interesting test to see if you can sort of keep that as a separate track, why the tracks are kind of wobbly, but good luck on that. You know, you mentioned President Obama's Prague speech and it was not lost on us in the journalistic world that he came out of the gates with this issue very much in the forefront of his mind. And I'm just curious if you can look back at that time. Give us a peek inside the President's brain. Why is he so committed and energized by this particular challenge? And since 2009, approximately, what do you think have been the milestones of what you've achieved in these various summits and along the way?

MS. SHERWOOD-RANDALL: I would say that the president is in part motivated by the experience he had in the Senate where he had the opportunity to learn from Senators Nunn and Lugar about this challenge, he traveled to Ukraine and to Russia. In 2008 he saw the importance of continuing this work and it has been an animating feature of his presidency to focus on nuclear security and reducing the role of nuclear weapons in our overall strategy. And he believes that this is one of the most important legacies of his administration for the future of the planet and therefore has driven this process forward and has committed his time to the series of summits where we work collaboratively with so many countries and international organizations to deliver these results.

He is very focused on tangible results, and so as has been noted we have multiple countries that have given up their HEU, that have given up their plutonium, that are working to secure the nuclear facilities, both civilian and military that they have retained. We have grown very strong bilateral partnerships with a number of countries that have nuclear materials as a result of this summit process and we do very important work in those bilateral channels to assist countries in improving their own nuclear security practices just as we continue to work to improve our own.

So I am confident this will remain a focus for the President throughout his term. And, of course, as I indicated, we will be looking at the future of the summit process when leaders come together in The Hague it will be necessary to ensure that the momentum is sustained and the focus is retained were the nations of the world to agree that summits are no longer necessary. That would have to rely on the growth of a set of institutions that is fully capable of sustaining this level of effort. And while there are many institutions involved and they do very important work, as yet that doesn't exist. And so we really need to ensure that that focus and momentum is maintained out long into the future.

MR. KITFIELD: Senator Nunn mentioned that there is no sort of global coherent nuclear security architecture system. It sounds like we might need one, why? And you talk about bilaterals. But is the world ready for something more coherent that sort of ties all these nuclear non-proliferations efforts together?

MS. SHERWOOD-RANDALL: The way we look at it is that there are a number of bricks that are the foundations of the architecture, the international institutions and the treaties in particular that govern this space. And so we have of course the IAEA which plays a very significant role. It hosted its first ever nuclear security summit last July in Vienna, very important step forward in its work in this field. We also have other entities that participate in working on these issues. And then we have the mortar in between the bricks, which is the behavior of states, the norms, the best practices, the ways in which we demonstrate assurances.

And so what we have to do is put the bricks in place, get the mortar in place and make sure it can stand on its own. Right now, without the engagement of individual leaders and pushing this process forward, this will not be as energetic as it needs to be. And one of the things that I've noted in the years of work I have done with international institutions is our international institutions are only as strong as we the nations make them be. We have to provide them with resources, we have to provide them with human capital, we have to help guide them. And so it's not enough to just hand off and say this is the job of an international institution. These international institutions are us. And even if the architecture is strong enough, we will continue to have to play a leading role in guiding their activities and ensuring they remain focused on this agenda.

MR. KITFIELD: Walk us through what actually happens at one of these summits because you talk about peer pressure and I got that along with your son, so thank him for sort of enlightening us, because I kind of get that, that you get under the spotlight of the media and you are all together and you want to make a good impression obviously. But talk about what actually happens at these summits that make them so important?

MS. SHERWOOD-RANDALL: So the leaders will come together a week from Monday and they will first be greeted by the Prime Minister of the Netherlands, Prime Minister Rutte, and then they will join in a series of plenary sessions where they all sit around a big table. And the Dutch have asked that leaders create a video message for one another and for the world which will be broadcast, streamed, put on the web, on big screens to give the opportunity for not only the leaders in the room but many beyond to hear about the goal of each country. To the extent that leaders have agreed to do that, that will limit the amount of time that leaders have to sit and listen to one another's long speeches. But there will still be some of that during the plenary sessions.

In addition to the individual national presentations, the leaders will have what I described, which is this extraordinary scenario-based policy discussion which will be lively and will invite the leaders to participate in real time in something that is unusual, that is to experience a crisis together and to anticipate how they might respond to it. And as you probably know, we do a lot of exercising in the United States government to deal with potential crisis, but not every country does. And so we're very hopeful that this will help leaders focus on the kinds of preparations that they need to make to anticipate and be prepared for a possible nuclear security crisis.

In addition, the leaders will have lunches and dinners together. The King of the Netherlands will host a dinner in honor of all the leaders in a beautiful palace. And at that session, at the dinner, although it is a social occasion, they also have an opportunity to continue their conversation. And on the second day of the summit the leaders will have a discussion just among leaders, so no staff present whatsoever, about the future of the summit process. And the idea is to think through this question of how much of the architecture, the bricks and mortar is in place and how much more needs to be done before we can say we can hand this off and we don't need to come together as leaders every two years to mobilize our governments to generate the kind of action that is necessary.

And I expect that no decision will come out of that because we know that we have a summit in 2016 and we will continue to work toward getting the job done and make a decision at 2016 about what the future of the summits will be.

MR. KITFIELD: But you talk about how important momentum is on this, I mean clearly the summits have helped build momentum. I would imagine that you would be loathed to give the summit process up unless you had a whole lot of confidence that that global security system is in place. Is that kind of a correct --

MS. SHERWOOD-RANDALL: I think that's true and I think that President Obama is so focused on the fact that there are still 85 percent of the materials in the world that are not being captured by the summit process that we know we have a lot more work to do.

MR. KITFIELD: The military, the --

MS. SHERWOOD-RANDALL: The military materials --

MR. KITFIELD: Right.

MS. SHERWOOD-RANDALL: Which is something that we believe we need to address in future summits. They are referenced in our summit communiqués but more work needs to be done in that domain. And as you can imagine countries that have nuclear materials are very proprietary about them. And there is a lot of concern about information security. But this is work that needs to be done again because as has been noted by Senator Nunn we have to -- trust is not enough, we have to be able to see and know that others are doing the work to make us secure. This is a shared space.

And if you don't keep your materials secure, it makes me vulnerable across the border. And this isn't about a direct threat as in pointing a nuclear weapon at me, it's about the possibility that your material could be stolen or could be accessed by someone who should not

have access to it and it could then be shared with someone who ought not to have it and turn it into a weapon to be used against us.

MR. KITFIELD: Only strong as the weakest link, I think Senator Nunn said and I take that point.

MS. SHERWOOD-RANDALL: Yes. Perfect image.

MR. KITFIELD: I'll make this my last question, I'm going to turn it over to some questions from the audience, but, you know, President Obama was very determined on the New START treaty, and clearly for those of us who have covered this, I mean, the -- watching the guys who have the most nuclear weapons reduce their stockpiles creates an atmosphere of a lot more cooperation on some of these others. But tell me how that informs this summit, for instance, the fact that there is an effort underway to go to New START levels and then go beyond New START levels where you reach agreement with the Russians. But is that an important part of the whole atmospherics of this kind of a summit?

MS. SHERWOOD-RANDALL: This summit really focuses specifically on nuclear materials and there are many international fora where disarmament is addressed. In order to invite countries that have nuclear programs to participate fully in this summit one of the things we have tried to do is not make this about disarmament because we know there are so many opportunities to work on that in other contexts. And so while we continue to work to reduce our reliance on nuclear weapons -- and the President's new nuclear employment guidance which was rolled out last June emphasizes that point -- we continue to implement the New START treaty and expect the Russians to continue to do the same.

We don't think this is the venue for that to be addressed. It certainly provides, as you said, a perspective that those who have the most are committed to reductions and to ensuring that their materials are secured, dismantled and destroyed. But we believe this space should really focus on security of nuclear materials no matter what your program, no matter whether you have only a civilian program or whether you have a civilian and a military program.

MR. KITFIELD: Okay, great. Do we have any questions from the audience? If you have one just please raise your hand, I see one over here. Microphone will come to you, if you will just state your name please and affiliation and give us your question.

MR. KING: I am Llewellyn King with *White House Chronicle* and *Hearst Newspapers*. I was --

MS. SHERWOOD-RANDALL: I am sorry, I couldn't hear you.

MR. KING: I am with *White House Chronicle* television and *Hearst Newspapers*, I am a columnist there. I was wondering what signal the leaders in The Hague will get from the President's budget which defunds the MOX facility in South Carolina, wasn't that an example of how we can go with nuclear materials and suddenly it's to be abandoned?

MR. KITFIELD: Could you hear that?

MS. SHERWOOD-RANDALL: I could hear that and I think it's very important to

understand what is actually in the President's budget for the National Nuclear Security Administration non-proliferation programs. As you may know, there have been reductions across the federal budget and each agency is having to endure cuts. In this domain what is underway is an evaluation of what would be the most effective means of disposing of the plutonium that we are committed to disposing of as a result of the agreement we reached with the Russians.

And so the budget reflects the fact that we are putting the facility that is currently being built in cold standby while we assess whether there is a more effective and cost-effective way to dispose of the plutonium. In addition, the budget for non-proliferation which has been adjusted downward in this cycle reflects the fact that much of our funding for non-proliferation initiatives was frontloaded to achieve the deliverables that we have achieved in the last four years. As I indicated, much of -- 90 percent of the commitments that were made at the 2010 summit have already been implemented.

And so to the extent that we didn't require funding for specific programs because they have already gotten their work done that money is no longer in the budget. But we assess, and Laura Holgate who works very closely with me and who is known to many of you here works on this issue with NNSA. We assess that there is sufficient funding in this budget to achieve all of our non-proliferation goals in this timeframe and to continue the very important work we do bilaterally with a number of countries to support their nuclear security missions.

MR. KITFIELD: Great. Other questions. Think I saw another one over here, this woman, please, in the middle.

MS. JAMES: Hi, my name is Alena James, I'm from George Mason and a writer for *Pandora Report*. My question is what kind of role can we see the NGOs might play in terms of helping to secure nuclear materials and will they be a part of the summit process at all?

MS. SHERWOOD-RANDALL: That's such an important question and I apologize for not touching upon that. There are crucial roles that NGOs play. So many of you are in the audience today who are critical partners for us, many sitting in the front row, many will be up on the panel momentarily. NGOs first of all provide incredibly important intellectual capital to our efforts. This is a collective effort to come up with new ideas, to solve some of the world's hardest problems. And we look to our NGO counterpart to help us think through how we can push forward on this agenda and how we can deliver the results that we seek.

As I noted before, NTI has been extremely helpful, Joan Rohlfing in particular, in generating the concept of assurances that we are now working with. There will be a summit that precedes the leader summit called the Nuclear Knowledge Summit at which a number of NGOs will be represented to present their ideas and their recommendations to the world, and this is a very important venue from which the media can learn about the work that is underway and the work that still needs to be done and where individuals can share ideas and best practices. So I can't underscore enough how important the role of NGOs is in this space now and going forward.

MR. KITFIELD: And just for my own part, I mean, NGOs are a critical resource for us journalists trying to get smart in this subject which is a complex subject. So the NGOs have been absolutely critical.

Question here on the end. Could you raise your hand again so they can see where

you are? There he is.

MR. SCHULTE: Thank you. I am Pete Schulte, retired from the State Department. And my question is Kiev and nuclear weapons, Ukraine and nuclear weapons. 1994 Russia promised to observe and protect the territorial integrity of Ukraine; in exchange Ukraine gave up its nuclear weapons. Now, Russia has blatantly violated that. Isn't the message from this it's not worth giving up your nukes for any country for a paper document? And what's the implication of this for other potential owners of nuclear weapons around the world?

MS. SHERWOOD-RANDALL: So I think that the, first of all the important message here is we are calling on Russia to abide by that commitment and the world is quite united in its expression of strong disapproval of the Russian current occupation of Crimea. And we have continued to point out to the Russians that they are a party to this agreement and have an obligation to respect it.

What is most important for Ukraine is the solidarity of the world with Ukraine at this moment in helping this new government and the government that will be elected in May by the Ukrainian people in getting on its feet. And this will be work that will be ongoing, Ukraine has tremendous economic challenges in addition to the political and military challenges that it faces. And so the evidence of the commitment the world made and that that other guarantors of the agreement, the United States and the United Kingdom to the Budapest Memorandum is that we will stand with Ukraine as it goes forward and seeks to build at last a country that is fully integrated into the world.

MR. KITFIELD: And just on that point, I mean I talked to some people who were very knowledgeable on this subject recently who make the point that Russia probably wasn't willing to let Ukraine keep its nuclear weapons back in those days, it might have run in and grabbed them anyway and caused a conflict more than a decade before because Russia probably, Moscow probably was not willing to let a circle of nuclear arms states spin out of its control back in those days. So the effort to get those weapons out of those countries may have prevented conflict (inaudible) between those countries, it's a thought anyway. Any more questions from the audience? We'll go back to you one more time, I see the same person, I think, right here and then we'll wrap it up.

SPEAKER: Thank you for entertaining my question. I was just wondering if any members from North Korea might be involved in this summit.

MS. SHERWOOD-RANDALL: We do not have any participation from North Korea in this summit. Our Republic of Korea friends are very active participants, of course they hosted the Seoul Summit in 2012 and are key partners in the work that we do.

MR. KITFIELD: Great, if you would give a hand to my guest, please. Thank you so much, that was very interesting --

(Applause)

## PANEL DISCUSSION

MS. MacDONALD: Thank you, Dr. Sherwood-Randall, for joining us. We are going to make a quick stage change here and bring up some additional chairs and I want to take that opportunity to introduce our distinguished panel. They will be joining James on stage for the discussion in just a moment. I want to start with Ambassador Kare Aas, Norwegian ambassador to the United States; Renee Jones-Bos, secretary general for the Ministry of Foreign Affairs of the Kingdom of the Netherlands; Matt Bunn, Professor of Practice, John F. Kennedy School of Government at the Harvard University; Representative Jeff Fortenberry, member of the U.S. House of Representatives; the Honorable Jane Harman, former member, U.S. House of Representatives and president of the Woodrow Wilson International Center for Scholars; the Honorable Sam Nunn; and William Tobey, Senior Fellow, the Belfer Center for Science and International Affairs at Harvard University. As soon as these folks join us on stage, I will turn it over to you, James.

MR. KITFIELD: And I see that Congresswoman Harman is here with us, so I'm going to wait till she has a seat because I think I'm going to start off with her if that's okay.

So, Congresswoman Harman, obviously the issue on everyone's mind is this crisis in Ukraine, and you having chaired the Intelligence Committee at one time understand how important the relationship with U.S. and Russia is on non-proliferation and how the ability for this crisis to affect that relationship. I am curious what your concerns are in that regard. Obviously we've already heard some bellicose rhetoric from -- some measure from Russia. I'm curious if you take those kind of threats seriously.

MS. HARMAN: Well, my apologies for arriving breathless and missing part of Liz Sherwood's comments, I do want to apologize to all of you, but I am delighted --

MR. NUNN: You missed mine too.

MS. HARMAN: I missed Sam. But I was just catching up on how Michelle Nunn is doing by the way, folks. I am non-partisan; however, very interested in how Michelle Nunn is doing.

At any rate I think Russia right at the moment is a wildcard, notwithstanding the amazing efforts of many in this room, especially my brother over here, to structure a regime or several successor regimes with Russia inside. This business with Ukraine certainly surprised the experts at the Wilson Center. I think what turned this into a major conflagration was the sniper attacks on 82 people in the Maidan. And had that not happened I think Ukraine would have held together, I am not exactly sure how the policies would have changed, but if that had happened we might not have had this crisis. This crisis could change a lot. Hopefully not, but it could change a lot.

Russia is talking about backtracking on START; Russia, it seems to me, could cause havoc not just by breaking off a part of Ukraine—which may happen as you heard Bob Gates, many of you, on the talk shows over the weekend predicting it would happen. But then also undermining efforts in Syria and in Iran and the peace process and perhaps elsewhere and this is bad news for folks who care about securing nuclear materials and certainly care about continuing with disarmament.

I may be too gloomy, I hope I am not gloomy, I was just reading the editorial in today's New York Times which says that this is the time to be tough with Russia, if we are not, we and Europe, tough with Russia will end up with a worse result than if we are tough, and that means some people who are lobbying fiercely against the imposition of sanctions may have to grin and bear it or grit their teeth and bare it for a longer-term goal, I don't know how that's going to come out. But today there is a crucial meeting at the White House with the interim government of Ukraine, we'll see what happens there.

But I am surprised that this has gone so far so fast and I don't have any ability to psychoanalyze Vladimir Putin. I do believe, I do agree with Henry Kissinger that demonizing him is not a strategy, and our endgame here has to be to find the way to help him back down hopefully to keep, to help keep Ukraine together, that is I think the overwhelming view of the Ukrainian people including many of those in East Ukraine. To provide economic aid as swiftly as possible because the economy has tanked, but then to help them structure, help them structure, a pluralist democracy that includes representatives of the eastern part of the country. And to continue as a country, they have been a country now for two decades, it is false to think they are not a country, and not that this -- any of this is easy, but you asked that, I guess, is ruminations of one brain cell depleted grandmother.

MR. KITFIELD: Well, harbor a few of those brain cells because I have a couple more questions for you. On the principle nothing is disconnected in the world of non-proliferation. You talked about the U.S.-Russia relationship and how critical that is. One place where the Russians have been pretty helpful actually is with Iran. We are at a critical phase now in this --

MS. SHERWOOD-RANDALL: Yeah.

MR. KITFIELD: -- negotiation of an interim deal with Iran.

I'm curious whether you think how that negotiated deal turns out has an impact over large non-proliferation efforts, will a failure of that critical deal sort of set back the sort of psychology of non-proliferation or do you think it's not even connected, give me your sense.

MS. HARMAN: I think it is connected and I think everything is connected to everything, I think compartmentalizing crises in this world is foolish, especially when the same players are moving around in the different negotiating rooms. John Kerry said fairly recently that diplomacy is a dance, I find that a very interesting metaphor. You dance with different people, the music changes, but it keeps on going. And Russia is an indispensable partner in this dance and Ukraine and Iran and Syria and the peace process in elsewhere.

So I think if the Iran deal fails it's a big deal. The question right now is will the sanctions regime hold together long enough to see if there is a deal or not and what Russia decides to do in the short term will matter here. Bluster is not a strategy, demonizing people isn't but bluster isn't either, what are their real intentions. I don't see how Russia wins in the long term if Iran has a bomb, I don't think that's good for Russia. So most people think that Iran wants this deal very much. And then the question is what's this deal, is it a good deal. I think it's in the interest of the whole world to have the deal and we will know pretty soon whether that's possible or not.

I just, one other comment, it's interesting, I don't know what Sam thinks of this, but the Israelis were in town last week for the APAC conference and Yuval Steinitz who is now the -- now the intelligence minister and a very old friend of mine, there used to be a, I don't know if there still is, but a congressional Israeli inter-parliamentary caucus on security and he chaired the Israeli part and Jon Kyl and I cheered the U.S. part, and so we got to know him a long time ago.

But anyway, he was defending the view of Benjamin Netanyahu that there should be zero enrichment in Iran, and I said, no, that's a non-starter with the Iranians. I mean, that's certainly what they say. And he said think about it, why do they need nuclear power anyway, they are entitled to it under NPT, but they don't have to have fuel rods and they don't have to have enrichment capability. The reason I mentioned that is, he then said, look, if they have to choose between a modern economy and a bomb, they're going to choose an economy, so why don't we negotiate harder.

I only put it out there because I have thought about it ever since he said that and I don't know if we can reach any deal with Iran, but at least it seems to me that we, we the U.S., and the P5+1 including Russia have a lot to gain if we reach the right deal with Iran and so does Iran.

MR. KITFIELD: And, you know, on that point, what I worry about is that if Iran thinks they can split Russia off somehow, if Iran thinks that we're distracted or if we -- Iran is going to use that to drive a harder bargain, we know exactly how they operate, so.

MS. HARMAN: But Russia is going to think about it too in Russia's own terms and let's not miss the fact that a number of European countries have been in Iran trying to figure out what deals they can get if the sanctions regime falls apart or after we reach some mutually acceptable agreement with Iran. So Iran is a partner many want to trade with.

I think this, to the Obama Administration's great credit, they have been enormously effective on structuring an international sanctions regime that has stuck, and most people think, including me, that we wouldn't be in this good a position, and I put quotes around it, if -- but for the sanctions.

And so credit does go to the Obama Administration and to Congress which on a bipartisan basis, let's speak up for the good people in Congress who really care about these issues and are responsible in both parties, and a lot of credit goes to Congress.

MR. KITFIELD: Okay, and I'm very anxious to get to the congressman, but first I'm going to look to a couple of our experts to sort of frame the issue for us, Will, I'm going to ask you this next question which is, I mean, you hear that the IAEA and the UN say that there are a 100 incidents of theft or material goes missing each year. We know from the past that Al-Qaeda has had, you know, a sort of philosophy that they -- you know, it's a jihad, a sort of commitment to a acquire weapons of mass destruction, yet there is a sense in this country that Al-Qaeda after the death of Bin Laden is a spent force. How serious is the terrorist threat and how serious are terrorists still have this as sort of a Holy Grail, probably a bad analogy, but to get something that could really, really cause damage to the West?

MR. TOBEY: You outlined the contours of the problem; I'm talking about material that's gone missing and terrorist ambitions. I would say that there are three reasons why the

threat of nuclear terrorism is greater today than it has been in the past, although offsetting that to an extent is all the good work that's been done that people have talked about in terms of securing material.

The three reasons are, first, we live in an age of unlimited terrorist objectives. There was a National Intelligence Estimate conducted in 1986, it was the first to my knowledge on nuclear terrorism. It's been largely declassified, and it concluded that while terrorists could, if they obtained either a weapon or fissile material, set off a nuclear detonation. They would likely not do so because it would defeat their political objectives. We see today in Al-Qaeda and other groups an objective of inflicting the most possible damage. And so that's a serious matter.

Now, you mentioned that Al-Qaeda has been weakened, Bin Laden is dead, certainly those are important developments. But I would point out that the key members of Al-Qaeda's nuclear effort remain at large, and one of them, the leader, has actually taken over leadership of the organization, Ayman al-Zawahiri.

So the first influence on the shape of the threat is terrorist objectives. The second is the spread of nuclear technology. Nuclear technology is now 70 years old, it's no longer at the cutting edge. And that's reflected in -- on a number of things. First of all, there are thousands of people today who have learned nuclear weapons design information in various countries. Inevitably that knowledge has spread. There's more computing power in my iPhone than was available on the mesa in Los Alamos in 1944. And so the spread of technology has made this a more available option.

And then third is the fact that fissile material, highly enriched uranium and plutonium remain vulnerable and we -- the best proof of that is that there have been 20 cases. And I would say that it's really 20 cases in which weapons-useable material has been found outside of authorized control. And many of those cases it's basically 20 cases over 20 years. Some of those are old but some of them are relatively recent. So in 2003, 2006, 2010 and 2011 small quantities of fissile material that could be used for a weapon were recovered outside of authorized control.

Now, in none of those cases was the material enough to make a nuclear weapon. But there are two reasons why it was still of grave concern. First, it was often advertised as part of a larger amount for sale, and, second, it's absolute proof of a security vulnerability. So in some we have essentially means, motive and opportunity for a very grave crime.

MR. KITFIELD: Do we have a sense of stolen to do what, were they going to sell it to terrorists, are they going to third parties, is it -- is there a big market for this?

MR. TOBEY: I actually think one of the vulnerabilities that continues is that we don't know enough in authoritative terms about what was happening. In only one of the cases do we know for sure what facility it came from, who was involved, who might have abetted the person, how they got it out of the facility and where it might have been headed. The belief is that this material was largely stolen for monetary gain.

MR. KITFIELD: But who knows?

MR. TOBEY: But a lot remains uncertain.

MR. KITFIELD: Okay. Matt, if you would weigh in. I mean we've heard today about how much progress is made with these summits and just at the last summit seven countries, you know, gave up all or most of their highly enriched Uranium, another dozen countries which have made significant progress, should we feel pretty good about where we are or give me your sense of what kind of trend line you think we're on?

MR. BUNN: So I think we've made enormous progress over the course of the last few years and the 20 years before that because the nuclear security effort didn't just start when President Obama gave his Prague speech in 2009. We just did a survey of nuclear security experts in most of the countries that have highly enriched uranium and plutonium. And they all said that over the past 15 years or so their country had made their nuclear security measures either much more stringent or somewhat more stringent. And overwhelmingly, they said that they were now requiring these materials to be protected against more potent groups of adversaries that might try to steal them. But there is a long, long way to go.

As we heard Senator Nunn say, we still have no global rule that says if you have a nuclear weapon, if you have some highly enriched uranium or plutonium here's how secure it at least has to be. We have no real agreed system for showing that you have put effective nuclear security measures in place. And we still have a number of vulnerabilities all around the world.

You know, I would argue every country, including the United States by the way, has more to do to make sure that its nuclear weapons, its highly enriched uranium and its plutonium are secure. I think the incident at Y-12 in 2012 when an 82-year-old nun and two other protestors made it through four layers of fences and all the way up to the wall of a building that housed thousands of bombs worth of highly enriched uranium before being accosted by a single guard is an example of failure of security culture even in a country that probably has as stringent rules as anyone, probably spends more than anyone on nuclear security.

You see also really troubling threats that remain in a variety of countries. In Pakistan you see these repeated attacks on heavily guarded military facilities. The Pakistani military headquarters, the naval base where multiple aircrafts were destroyed by armed attackers who appeared -- who had, you know, Pakistani army uniforms, they appeared to have insider knowledge of the layout of the facilities. They may have had insider help.

You see, in Russia, for example, the director and two of the deputy directors of one of the largest plutonium and the highly enriched uranium processing facilities was arrested -- were arrested for corruption to the tune of millions of dollars. Not nuclear corruption but, you know, they are the people in charge of that facility with tens of tons of highly enriched uranium and plutonium. This is the Siberian Chemical Combine in Seversk.

So I think there is an enormous amount to do still to make sure that nuclear security is where it needs to be. I should mention we at the Belfer Center have put together a massive website of material, nuclear security matters at [belfercenter.org](http://belfercenter.org), there's a little pamphlet about it out there, you can take when you get out. And we'll be putting up a report that summarizes the progress and the gaps still remaining. That will be coming out in the next couple of days.

MR. KITFIELD: Oh, yeah. You make a really important point which is the

underlying point of this whole discussion which is what can turn a chaotic situation or a run-of-the-mill crisis into an absolute catastrophe, as Senator Nunn has said, is if nuclear weapons and nuclear materials are involved. And you mentioned Pakistan, Pakistan is my greatest concern in the world not because it's worse off than Afghanistan but because it's pretty bad off and it's got a big nuclear arsenal. So if something happens there that looks Ukraine-like, we've got huge problems.

You talked about the culture of security. I mean, we had our own problem recently with the ICBM force, where we had our own commanders who were cheating at cards or probably drunkenness. Is there something about this challenge because nuclear weapons are almost theoretic in most people's minds and it is hard to do the everyday tough stuff to keep them secure, to keep the materials secure, is that a challenge you got to keep addressing or?

MR. BUNN: I think security culture is a big problem everywhere in the nuclear space. Reality is for the average guard at a nuclear facility every alarm he ever hears in his whole life will either be a false alarm or a test, he'll never actually, at most places, ever experience a real attack on his facility. So how do you keep that person alert and on guard and vigilant every day against something that will probably never happen during his entire career? It's a difficult problem. But it's a crucial problem to address.

I was talking few years ago with General Gene Habiger who had been commander of U.S. Strategic Forces and what securities are at the Department of Energy. And he said to me good security is 20 percent equipment and 80 percent culture. And we really need to work on that.

One thing that I've been recommending and that a few facilities are starting to do is that every operator that has highly enriched uranium or plutonium whether it's a facility or a transporter, needs to do a self-assessment of how good is their security culture and then put a program in place to try to improve it over time. It's a simple thing but countries ought to require that.

MR. KITFIELD: Okay, great.

Congressman, thank you so much for joining us, I want to get to you now. You know, the very presence of Senator Lugar -- I mean, Senator Nunn and his former compatriot, Senator Lugar, and how important they were in this effort. All the evidence a lot of us need that Congress is critical in this -- in keeping alive this idea that we have to get under control the materials we're talking about but also the whole non-proliferation architecture at large. Talk for a second on how you see Congress' role in this and how you see Congress being able to keep the momentum behind this when it's got a thousand -- its got an inbox that none of us would relish in terms of crisis, in terms of budget impasses, give us your sort of take on Congress' role?

MR. FORTENBERRY: Glad to. First of all let me thank *National Journal* for hosting this very important discussion and I think it's relevant to the answer to your question. But as you were talking, Professor Bunn, I was thinking how can you stop a determined nun, have you ever tried to do that? I agree with you completely in terms of heightening security culture but that's a huge, huge challenge.

The Congress is torn in a thousand directions. We have limited staff, limited

resources, limited time. Before I came here this morning I spoke to a group of Nebraskans, there were about a 100 Nebraskans there. Every week for the last 70 years any Nebraskan who's in town can come to the Nebraska breakfast, and the entire delegation is there. So it's a good time to interact with our constituents, to share stories, to poke fun at the rest of the delegation, it's a nice ongoing event.

This morning there were farmers there; there were representatives from the disabled community, business persons and groups of school children. And when you look out at them it causes you to reflect that my most important job is to keep them safe. And yet in Congress it just seems like on questions about the future of civilization, existential questions, we just don't have time. We hope that the spectrum of efforts, whether that's folks in the public sector, the administration, military, the intelligence sectors, NGOs, other countries' goodwill is doing enough to provide a safe and secure environment. But as we all know, there are tremendous holes here, and the intensity of the question should compel all of Congress to actually heighten not only awareness but to do the long-term critical thinking.

Congress has changed very dramatically since Senator Nunn was there, since -- even since Congresswoman Harman has been there because of the volatility and drama of politics, the money pouring into the system, the federalizing of so many issues, that it distracts from long-term thinking and planning in a bipartisan manner in a way that should transcend any political divide. That is a very huge challenge.

MR. KITFIELD: But talk about the Congressional Nuclear Security Working Group because it sounds to me like an effort to keep this issue alive in the minds of the congressmen and women but give me your sort of agenda for that group.

MR. FORTENBERRY: Glad to. This was my attempt to try to make a contribution to solving this problem along with Congressman Adam Schiff from California. We've been trying to work in a bipartisan way to think about the full spectrum, the multi-dimensional complex layers that go into nuclear security and actually have some venue that is formalized in Congress to bring experts in, to heighten awareness, to be positioned when budgetary discussions come around as to how we're going to set priorities. This is a fairly new movement. I need help, if any of you are interested in helping with this.

But I think the bigger question is we tend to look at this through an academic lens and a policy planning lens. The other thing that we need is a movement of people. I'll give you an example. I voted on a bill regarding electricity the other day and I was swiftly rebuked by a group of constituents back home who did not like the construct of that bill, who've organized themselves around the idea of a carbon tax in response to climate change. But there is no one who will respond by e-mail in thoughtful policy engagement with me or any other member of Congress about this. It's so hard for us to get our mind around that and it's not seemingly an immediate crisis although the burden of this weighs heavily on all of us.

MR. KITFIELD: I commend your efforts, certainly.

Mr. Ambassador Aas, could you talk for a second about -- I'd love to get a European perspective on this summit coming up. We tend to see everything through the lens of, you know, big Washington and Russia and sort of great power relations. Clearly our European partners have been absolutely critical in the non-proliferation front. Is there a sense in Europe

that we're on track that we're accomplishing the goals that we had set out some years ago?

MR. AAS: I think that, first of all, it's an honor to be around, I'm very pleased to be on this distinguished panel. Then I would say that I think that really that the question about nuclear security we are talking about a global threat and I think what is needed is of course a global response. And in that context I think that Europe is indeed very, very important.

Then I would more perhaps as a Norwegian -- and it was touched upon when Liz was discussing this subject with you -- really think that nuclear security as such is indeed very important. I also think that we have to add on the aspects of non-proliferation and nuclear disarmament. So it's broader than just the nuclear security issue. And that is also why I think that it's important, as I said, to continue to engage globally also on reducing nuclear weapons but also to strengthen the non-proliferation regime. So with that perspective Norway is committed and I also think Europe is committed to the summit in 10 days time.

MR. KITFIELD: Does Norway have a different perspective than other European partners? I mean we have nuclear weapon states in terms of United Kingdom and France, Germany has just gone through a whole rethink of its whole civilian nuclear dependence because of what happened in Japan. I'm just curious of what Norway's perspective on this is and how it differentiates because we all tend to think of Europe as sort of monolithic and of course it's everything but.

MR. AAS: From a Norwegian perspective I will say that we perhaps more than some European countries are very much interested also in engaging globally on this topic.

MR. KITFIELD: I ran into your peacekeepers around the world a few times.

MR. AAS: Yeah, yeah, but that's also why we, for example, have established a cooperation with NTI and other American think tanks in order also to create -- to build capacity in some developing countries. We are working hard with the IAEA so that the organization can do more for nuclear security. So from a Norwegian perspective it's broader and not just focusing on Norway's own interest. We have this global approach to --

MR. KITFIELD: And you've had quite a lot of interplay with Russia, have you not, on sort of your non-proliferations and helping them, encourage them to take steps. I think one of your aides talked about it, trying to get them to rid themselves of nuclear lighthouses which sounds like a perfectly good initiative. But talk for a second about how you -- and this issue of Russia now because obviously it's front and center of all of our concerns.

MR. AAS: As a neighbor to Russia and after the Soviet Union collapsed we commenced a practical cooperation with Russia in the northwestern part of Russia. And where we, as you said, we had these lighthouses, but we have also together with Russia, brought expertise and financial resources to dismantling, for example, five Russian submarines. And they are -- they were located at the border of Norway and were a huge threat both environmentally but also in this sort of context of international terrorism, so.

MR. KITFIELD: Militarily.

MR. AAS: And we will continue to do that, we will continue to work with the

Russians. And there have been a lot of references to Ukraine and Crimea and the crisis there. We are of course as concerned as all others. But at the same time I think it's also fair to say our bilateral relationship with Russia has been stable and peaceful for a thousand years.

MR. KITFIELD: And you found them a good partner in terms of some of these non-proliferation initiatives?

MR. AAS: Bilaterally, it has been a good cooperation on this topic.

MR. KITFIELD: Good.

Ambassador Jones-Bos if you would and -- place of honor because you're hosting this summit.

MS. JONES-BOS: Thank you.

MR. KITFIELD: Talk us through how the Dutch see this, the importance of this summit, why did you want it to be held in your country first off, and then what do you hope to gain from it, the goals are?

MS. JONES-BOS: Well, first of all, good to be back, and nice to see so many old friends here in the audience.

Well, why do we do this? I think a little bit the same as Norway, we're probably similar countries in many ways, we feel that we have an international responsibility, and we have a tradition to contribute to peace, security, and international legal issues around the world. So I think there's a global responsibility to help make the world a safer place.

But we also have a more direct interest. We are the gateway to Europe with the Port of Rotterdam, the biggest port in Europe, one of the biggest in the world. So a lot of stuff goes through the Port of Rotterdam, and that's not just good stuff but also dangerous stuff. So we have an obligation to keep a very clear eye out. And we have developed a lot of capacity on nuclear forensics. We have the national forensics institute in the Netherlands that is very good at that. So that's a responsibility we have towards Europe.

We have nuclear industry in the Netherlands as well. We make medical isotopes to treat cancer. And not many people maybe know this, but about 60 percent of European isotopes come from the Netherlands, 30 percent worldwide, so it's an important contribution to health. So there we feel a responsibility. And I think we have this tradition of the international legal order. You know, we have it enshrined in our constitution --

MR. KITFIELD: The Hague.

MS. JONES-BOS: The Hague, the legal capital of the world as the mayor of The Hague likes to call it. We have the world's court there.

MR. KITFIELD: Got a point.

MS. JONES-BOS: Yeah, International Court of Justice, criminal court, a lot of

tribunals. So I think The Hague in the Netherlands really sees itself as the international legal center.

MR. KITFIELD: And what will you see as a successful -- what goals do you hope to achieve, what do you hope to come out of it? Give us a sort of --

MS. JONES-BOS: Well, I think Liz said it very, kind of, convincingly. I think, first of all, reduce the amount of dangerous nuclear material that's around. I think that's crucial. And everybody here has also said you need those summits for administrations to keep working on that, to better-protect existing nuclear materials. And I think you said it, it's very easy to become slack. And I think what we hope to achieve with this is peer reviews, helping each other, keep each other sharp because maybe you can do it on a national basis but also internationally, and improve the international architecture through the IAEA, national implementation. We've got an initiative with Korea and the U.S. on improving implementation and national legislation.

MR. KITFIELD: Okay. This war game or I guess it's not a war game, this real-world scenario.

MS. JONES-BOS: It's a peace game.

MR. KITFIELD: It sounded very much like a war game to me, who has covered many, but it's a good idea because it's a good way to focus peoples' mind on how difficult these things can be, especially if they are being addressed in a crisis mode, et cetera. But what was the impetus behind it?

MS. JONES-BOS: Well, what Prime Minister Rutte really wanted, our prime minister is saying that so many of those summits are, I don't dare use the words, boring --

MR. KITFIELD: Dry?

MS. JONES-BOS: -- dry, very long speeches, and everybody kind of half falls asleep with the jet lag and all of that. So what he really wanted to say, let's have an interactive. So it's going to be a paperless summit. Delegations will get an app when they arrive for their iPhones, or iPads, or tablets, or whatever. The same for the press, the journalists, because as was said around here, it's very complex information and material. So we're going to do a lot of information. We have the knowledge summit, nuclear knowledge summit, we have the nuclear industry summit, all taking place at the same time. So we're really trying to help people understand what this is all about.

Then we have the scenario-based exercise so that leaders will really talk and think, and, you know, rather than read out. And we're going to have the video statements. And quite a few leaders have already made the video statements. And I think it's also easier for people in all of our countries to watch a video, with a leader explaining what he wants, he or she wants to achieve, than to read long dry texts. So, but obviously there will be a long dry text as well. Working very hard on the communique and --

MR. KITFIELD: I have no doubt. Do you want to tell us what the scenario is going to be, or is that a secret?

MS. JONES-BOS: No, I cannot say anything about that.

MR. KITFIELD: Senator Nunn, I'm going to finish with you, and then I'm going to go to some questions from the audience. You know, covering this subject for 20 years, if I had to put myself, my finger on a milestone in changing the dynamic, it was you and your compatriots, who we call the four horsemen of the anti-apocalypse, basically sketching a vision of a world without nukes, not because any of us, as you have said to me before, can see the top of that mountain, but because we were heading down the mountain the wrong direction, and there needed to be a psychological change that shifted the discussion, and you guys managed to do that, Mr. Kissinger, Mr. Shultz, Dr. Perry and yourself.

Looking at this 2016, whether or not we're even going to have summits beyond that is questionable. Give us your vision of the way ahead, knowing the challenge of keeping this kind of a subject on the front burners in peoples' minds in a very chaotic world where the, you know, the tyranny of the inbox tends to rule. Can you give us how you see a way forward to basically complete the vision or at least keep us on track of the vision that you espoused some years ago?

MR. NUNN: Well, I believe that the non-proliferation treaty is fundamental and that our presidents have supported that for a long time, every president, Republican and Democrat, countries around the world support it. But there's a huge loophole in it, and that is the same technology that can be used for peaceful purposes, which many countries claim the right to have under the non-proliferation treaty can also be used to make a weapon.

We also have the dimension now that you've got weapons of mass destruction, what formally thought of as being monopolies of the state, the more expensive they were the more likely it was that it would only be a state that could produce those weapons. And we've had that for centuries escalating.

We're in another whole era now. Weapons of mass disruption, including cyber, and weapons of mass destruction, not only nuclear, but bio, and to some extent chemical, those are available out there now, economically speaking, to small groups of people.

So we are in a totally different era and yet the world hasn't realized it. And I think we have to shift our way of thinking. Einstein supposedly said many years ago when the nuclear weapon was invented, which he certainly played a big role in, that we've changed this atomic energy, and this explosion has changed everything except man's way of thinking. I think we have to change our way of thinking. We're in a race between cooperation and catastrophe.

Ukraine is important for many reasons; we could talk about that for a long time. But one of the most fundamental that's already been alluded to is that Ukraine was given assurances when they gave up their nuclear weapons that their territory was going to be intact, and Russia was a part of that, U.S., and Great Britain. Senator Lugar and I had many discussions back then along that line. And yet now we see what's happening in Ukraine. You can talk a lot about it, but the implications are very serious.

And I think that this is a lose-lose-lose situation. I think in the long run Russia is a loser here. When all your neighbors are frightened, and most of them now want to get into NATO and when countries all over the globe take this as a declaration of separatism. And the Russians have their own separatism problem, and they have their own fundamentalist problem.

Russia is not going to be a winner here, maybe in the short run they look like it. In the long run, also Europe, the United States, we all lose. We are in a race between cooperation and catastrophe, and I'm glad that we're having this summit in the Netherlands, close by to the Ukraine situation because maybe it will have a sobering effect. I love the war game idea; I think that's a very, very good one. And I hope that out of this summit in two weeks people will begin to realize we are in another era.

President Regan said once, if aliens from out of space came in and invaded the world we would stop a lot of our quarrelling and we would see how silly it was when the whole globe was at stake. Well, indeed the globe is at stake when you consider all the weapons of mass destruction and disruption available to even small groups. So this summit is a big opportunity. And I thank our friends in the Netherlands for taking the obligation seriously and hosting the summit. You're doing a terrific job; we're very appreciative of it, those who watch this closely. We thank our friends in South Korea who put on a very important summit two years ago. And I hope we do, out of all of this, have more public understanding, because this effort can't be sustained without the public.

And so, James, to you, and Poppy, and all at the *National Journal* thank you for bringing the public in on this one and for the role that you play, the crucial role you play.

MR. KITFIELD: Great, thank you very much. So from the audience, we have about five minutes. Since we ran a little bit late starting this panel I'm going to go five minutes over. I see a hand right here.

MS. DANIELS: Hello, I'm Samira Daniels (phonetic), Ramsey Decisions (phonetic). My question is to Professor Bunn, nice to see you. I see one of the major challenges as a conflict or of a dichotomy between this cold war rhetoric which emanates from some circles in the United States, and then a somewhat more techno, diplomatic, and I would say a more mature rhetoric coming out of some others. And I'm wondering if maybe PON and Kennedy School can focus on nuclear diplomacy and to, you know, start thinking about it in a much more evidentiary and mature way. And I'm wondering if you see merit, because I think Sam Nunn, Senator Nunn, at the -- when I first became part of this discussion did emphasize that the conflicts have to be resolved to some degree for there to be some progress on the issue of nuclear security. And I was wondering if any of you could speak to that, and you particularly Professor Bunn.

MR. BUNN: So I think it's a good question, and I think it's very important at moments like this, when we have this crisis in U.S.-Russian relations to remember that while we need to protect our interests in that crisis, we also need to protect and work on the common interests that Russia and the United States have together. And certainly Russia and the United States have a common interest in preventing nuclear terrorism. They have a common interest in controlling nuclear weapons and ensuring security for nuclear material.

And the reality is that when it was the Soviet Union, and we were locked in a global struggle, we were able to cooperate together to build the non-proliferation regime that now exists, to put the structure of strategic nuclear arms control in play. So I have to think that we ought to be able to be able to cooperate with Putin's Russia as well even while we push back where we need to on things like the occupation of the Crimea.

And in particular, there's I think a feeling in both Moscow and Washington, that I think is wrong, that the work is done on nuclear security in Russia, and that there's nothing left to do there anymore. It's not. There's a huge problem of sustainability, there are problems of security culture, there are still weaknesses in insider protection, and we still need to be working together.

At the moment, most cooperation has been stalled for almost a year on nuclear security in Russia. And it was just on the point of sort of getting -- moving again with discussion back and forth when the Ukraine crisis broke out. I remain hopeful that we will be able to get that back on an even keel, and really put it on a -- if we manage to resolve the Ukraine crisis and get back to some reasonable level of tension in our relations, really put it on a new level of more equal partnership.

MS. HARMAN: Could I make a disruptive comment?

MR. KITFIELD: We love those.

MS. HARMAN: And that is that the *National Journal* gets it, this audience gets it, the mature people at the Kennedy School get it, Sam Nunn and NTI have gotten it for longer than all the rest of us. But there is not a mature or even informed conversation in most of the press, which is much more interested in whether Justin Bieber gets arrested for drunk driving at age 18 than a serious conversation about surveillance, let alone this subject. So -- I had some experience with that recently.

But I do think it's a challenge. I mean, Jeff Fortenberry talks about meeting his Nebraskans early in the morning, and they should know more about this. How to get this, and I've been in meetings with Sam and other at NTI to try to talk about how to jumpstart the right conversation with younger people about this existential threat, it's just not happening, and if it's not happening the drivers that are necessary to get people to make the right mature decisions aren't going to be there except in academia and occasional panels at the museum.

MR. KITFIELD: You know, and I see it even with younger reporters now, it's not front and center on their agenda anymore --

MS. JONES-BOS: That is why we've made a real effort to inform the press. We've done quite a few briefings in the run up to the summit at the Ministry of Foreign Affairs with the press to just talk them through what is this all about, give them examples, get our experts to explain and have sessions about it, do sessions with also the national forensics institute to make it a bit more tangible. And we're going to try to continue that during and after the summit in order to reach a broader audience.

MR. KITFIELD: It's a --

MS. HARMAN: Will there be young people at this summit?

MS. JONES-BOS: Not at the summit as such, but at a knowledge summit and the industry summit we'll try to include them.

MR. BUNN: And the NGOs will be having a press conference just before the --

MS. JONES-BOS: Definitely, yeah.

MR. KITFIELD: I saw a question back here.

MR. GRANT: Hugh Grant, staff. It was reported that Rosatom, the Russian atomic energy agency has agreed to build two new nuclear reactors, 1,000-megawatt reactors in Bushehr. Do you see that as violating any kind of trust we would have in Russia?

MR. BUNN: So I think there's a lot of issues with respect to Iran and Russia. If I were making recommendations to the Russian government I would definitely tell them that's not a good idea. However, the power reactor is really not the issue in Iran. The key issues are the enrichment plant, the research reactor, as Iran describes it, that is ideally designed for plutonium production, and the past activities that appear to have related to nuclear weapon design.

So I would be -- so far Russia has played a pretty responsible role in working with the P5+1 on the sanctions regime and on the negotiations with Russia -- I mean, with Iran. So I'm hopeful that that will continue, but I worry because of the really toxic state of U.S.-Russian relations, and European-Russian relations, or at least some European-Russian relations at the moment.

I think we really need to focus on finding some negotiated resolution of the situation in Ukraine because I think it otherwise will have a very poisonous affect on all of these other important kinds of cooperation that we're working on.

MR. KITFIELD: I can tell you the Israelis think it's a redline for sure. I mean, they -- any deal that does not include the plutonium production at the reactor is going to be a non-starter with the Israelis. So we have a problem.

MR. BUNN: But that's the Arak reactor, not these large safeguarded light water reactors that the questioner is asking.

MR. KITFIELD: Any more questions from the audience? I see one here. We just got another couple of minutes.

MR. CHACHITA: Yeva Chachita (phonetic) from George Mason University. I'm wondering about Japan, because Japan has like 96 tons of the plutonium which could be used for a weapon. What are your thoughts on that, what's the strategy?

MR. KITFIELD: Japan's stockpile of highly enriched uranium.

MR. BUNN: If nobody else wants to jump in I'll take it again. So Japan is the only non-nuclear weapons state that reprocesses plutonium from spent fuel. And they have built up about 9 tons of plutonium that's on their soil, they have another 30-plus tons that is sitting in Europe, in either Britain or France because of contracts where they send spent fuel there to be reprocessed. And they are now in the midst of a decision about what to do about their Rokkasho reprocessing plant, which has been a gigantic expensive white elephant.

I would argue that in Japan's own interest, it would make sense to move more toward dry cask storage of the spent fuel and away from the reprocessing that separates out plutonium from the radioactive fission products and spent fuel and makes it more available for nuclear weapons.

But I do want to say, Japan, it has already leaked out that they will be making a very important announcement at the Nuclear Security Summit. They have one particular facility, the fast critical assembly that has hundreds of kilograms of weapon-grade plutonium and they're going to be eliminating all of that material. And I -- for some reason China has taken the opportunity to criticize Japan for doing the right thing in that case, and I think that's most unwise. I want to celebrate Japan for doing the right thing in that case. I think it's a very decisive and important move that they'll be making.

MR. KITFIELD: I'm shocked.

MR. NUNN: Japan has some big challenges, but they made progress since our first index. And Fukushima, of course, was an intervening event, and that had a big affect in Japan. I think you're going to see the Japanese make more progress.

MR. KITFIELD: Yeah, great. I'm going to leave it at that. Our time has run out, I apologize for those who have remaining questions. Please give a hand to my panel which has been excellent.

(Applause)

MS. HARMAN: Thank you, James.

MR. KITFIELD: Thank you very much, it was nice meeting you.

MS. MacDONALD: Thank you to our panel. And I especially want to thank our cosponsor, the Nuclear Threat Initiative and Senator Sam Nunn; this would not be possible without them. Have a great day. And if you have time please fill out the survey on your chair, we would love to hear your thoughts on the event. Thank you.

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