

ERNEST J. MONIZ AT THE GREATER DES MOINES COMMITTEE ON FOREIGN  
RELATIONS

DES MOINES, IOWA

Wednesday, December 11, 2019

LIST OF PARTICIPANTS:

ERNEST J. MONIZ  
Former U.S. Secretary of Energy  
Co-Chair and CEO, Nuclear Threat Initiative

Ernest J. Moniz at the Greater Des Moines Committee on Foreign Relations

SPEAKER: Ernie, as the 13th Secretary of Energy, served in the Obama administration from 2013 to 2017. He strengthened the Department of Energy and he has been involved in many, many different projects. A couple things to note. He served on the faculty at MIT from '73 until becoming the Secretary of Energy in 2013. He's a physicist. He has worked for MIT and has been director of the Bates Linear Accelerator Center from 1983 to 1991. His physics research centered on developing a theoretical framework for understanding intermediate energy electrons and meson interactions with atomic nuclei. And so, we are extremely pleased and blessed to have Secretary Moniz.

(Applause)

MR. MONIZ: Well, thank you, Rob. And thanks to all of you for coming here. It's a pleasure to be here, back in Iowa. And I'll say right up front that one reason for really coming here at this time is that in Iowa, especially every 4 years, there is a tradition of Iowans really diving into issues of helping shape a debate that takes place as we lead up to our presidential election in a year. And frankly, coming here with the perspective of leading the Nuclear Threat Initiative, NTI, one area where the debate really needs some reshaping and some activation is along the many issues of nuclear security. And those stem from the fact that the United States and Russia together continue to have about 92 percent of the world's nuclear weapons. And having that gives us a responsibility to minimize risks of those weapons and other nuclear weapons, the other 8 percent in the world, from being employed.

So frankly, I'm here from the point of view of trying to have us enter a discussion of these issues and hope that this can be one channel for many of you helping to get these issues into the discussion. I want to make it very clear and make it explicit that of course we are a nonprofit, we are nonpartisan, we are not in any way promoting any candidate or any party, et cetera. This is about having a discussion that should be taking place to help shape what will be the program of our elected officials going forward.

I might add that at least we have one attendee from this morning's interactions at Iowa State University, not too far from here, where 3-1/2 years ago I had the honor of receiving an honorary doctorate and giving the commencement address. And just to note that at that time I focused on the issues of climate change and clean energy and innovation. And I would say in that time period, the climate change discussions and the solutions discussions were not getting sufficient discussion.

Also, I'm actually encouraged by the increase in that dialogue that's happening now. I'm not Pollyannaish about what comes out the other end necessarily at this stage, but I think we are reaching the stage of having much more serious and fulsome discussions about what we need to do in this country and what the world needs to do. But again, the nuclear security issues which are quite literally an existential issue simply aren't getting the attention that they need. And so, that's really the thesis of this visit. And I really appreciate the opportunity to do that here in the Council on Foreign Relations group here in Des Moines.

So let's try to put a little flesh on those bones. The reason for the great concern now is that during the Cold War these issues were very much part of the broader discussion of security with a lot of fear about a nuclear Pearl Harbor scenario. That scenario drove a lot of the structure of our nuclear security positions and we haven't changed. That scenario led to, for example, a set of policies that emphasized, you know, if there's, something huge incoming, we have to be prepared to launch in 2 minutes. There's no way to do this without giving all the authority to one person, the president of the United States, solely responsible, unquestioned for deciding on the use or non-use of nuclear weapons. We fast forward 30 years after the Cold War. Again, we still have now with Russia, as opposed to the Soviet Union, 92 percent of the weapons. We still have many, many weapons on what is called prompt launch--they can be sent off essentially almost instantaneously. We still have all the authority vested in one person. It's time to revisit the entire structure around our nuclear posture and to make it appropriate for our current situation.

Our current situation is that while Russia and the United States do have this very, very large arsenal, and we can come back, of course, and discuss the nuclear weapons issues with India-Pakistan, and North Korea, et cetera, but with the U.S.-Russia, this is the focus of the existential discussion we have. We don't really believe that the highest risk today comes from a premeditated major exchange between the two countries. But rather, we are now in a world of a dysfunctional U.S.-Russia relationship, in a world where our militaries, for example, operate closely in too many areas where there can be

accidents. We operate in a world where there's new technology development that was never present in the Cold War, but a key example, cybersecurity, cyber-attacks on the command and control structures of nuclear weapons; development of artificial intelligence that may look like a very attractive way of doing decision-making in a very short time.

Technology developments like hypersonic nuclear-bearing vehicles that can fly 10, 20 times the speed of sound and more importantly, do that while having evasive measures to eliminate any serious possibility of being intercepted. These are the realities that we need to address and do them in the context that the greatest risk certainly in our view is that there can be a blunder, a miscalculation, misinformation that leads to an escalatory process and the use of nuclear weapons, which would be truly catastrophic, particularly in an escalating spiral.

So, that's really the backdrop of this. I mentioned the U.S.-Russia relationship as being dysfunctional. Frankly, this has been building for some time. It really started already in the 1990s things, issues like NATO expansion, et cetera, created significant tension even as we continue to collaborate in some areas. But now, the last few years, Ukraine, the Crimea issues, and certainly the Russian meddling in our and in other Western elections--are very, very, very, very serious issues that we need to address and continue to address very seriously. But remember, U.S.-Soviet relations, at the height of the Cold War, weren't exactly based on comity. We had issues everywhere and proxy fights, let's face it, going on everywhere. It never prevented us in that time -- President Reagan, Secretary of State Shultz -- from keeping our eye on the ball that the nuclear weapons issue was an existential issue for which we had grave responsibilities to ourselves and to others to pursue. And we did so.

So, the architecture of arms control continued in that period. President Reagan negotiated arms control agreements. President Reagan and President Gorbachev issued statements. And sure, you can question, 'oh, it's only a statement,' but very consequential. They made a joint statement that nuclear war could not be won. You could only have two losers and therefore should not be fought.

So, a lot of things kept going on even as we had our major spats, conflicts, disagreements in so many areas. Today, our problem is that that level of engagement and focus on our continuing responsibility is not there. The level of dialogue going on, on these threats is at a very low point. And I don't mean here just discussion between the presidents. In the Cold War, for example, a huge amount of strategic stability came because we had, at the working level, military-to-military discussions, diplomat-to-

diplomat discussions. The idea was to head off crises and if one began to emerge, to have crisis management tools in place, have understandings in place, relationships in place that could hopefully resolve those crises. And we did dodge a lot of bullets, to be perfectly honest, in that time period. Those discussions are fundamentally not happening today.

Indeed, we reached the point where congressional legislation discourages military-to-military discussions quite literally. We've also reached a place where the Congress has, and it's somewhat understandable in the current context of U.S.-Russia relations and the election meddling, et cetera, but the fact is the lack of trust between the Congress and the administration is also affecting these relationships. For example, not often noticed is the Congress did pass some sanctions legislation on Russia a couple of years ago. What is not noticed so much is that when they did so, they took the uncharacteristic step and did it in response to progress. Let's say, suppose the sanctioned entity does in fact make progress and resolve some of the underlying issues. But if the president cannot remove those, if you're the sanctioned entity, you have to think you have an infinite stay in the penalty box. So, this is an erosion of all of the structures that we need. We need to change this.

So that's my kind of statement about what are the underlying challenges and why this is a time instead of the diminishing risk of nuclear weapons that we should be enjoying, we actually may be in a situation of increasing risk of use. So, we need to start addressing this in a significant way. And in the end, our elected officials, especially in the administration and in Congress, need to start addressing constructive ways of risk reduction. That's what at NTI, that's what we do ~~with it~~. And we do it with a global outlook, not just in the United States. But again, U.S. and Russia in our context today is the main focus of our discussion.

So where do we start? Well, for example, maybe we should stop digging the hole deeper in terms of basically eliminating the arms control architecture. I'm sure in this group most understand that that means right now after the ABM Treaty went in 2002 and after the INF Treaty went this year, we are now down to the New START treaty that expires in early 2021, 2 weeks after the new administration takes office in February of 2021, expires. If that expires, and it is by no means clear that it won't, if it expires, that will be the last bit of the arms control architecture.

It means not only that the limits on weapons go away with the risk of a renewed arms race. But actually more importantly in my view, it eliminates the transparency and verification measures that are part and parcel of that arms control architecture. So, it's

hard to understand why flying blind is better than having the ability to do selected inspections, for example. That should be part of the debate this year because you know what it takes to extend that for 5 more years? Nothing, but an agreement between the two presidents. No congressional requirements, no Duma requirements, just agree to a 5-year extension. That's an example of a critical, very crystal clear debate that we should be trying to understand what everyone involved in the March to the general election thinks about this.

I might add, again, that the United States has expressed great concern about the five new delivery systems of nuclear weapons that President Putin discussed back starting in 2018. Like the hypersonic glide missile for example. Well, it turns out that everyone agrees and we at NTI, we've [published a paper](#) on this, that two of those systems, including the hypersonic glide vehicle, would be included in the extended New START treaty, and the other systems would then be discussed. That's what the New START treaty does.

So again, it's difficult to understand what would prevent us from taking a major step of extending that treaty. That's one very important example. Another example, and maybe this would be a way to start bringing in other nuclear weapons states like China. Why not revisit the statement that Reagan and Gorbachev made about really being only losers in nuclear war? That would be very constructive, especially in the context that next year, 2020, is the 5-year review of the Non-Proliferation Treaty. The Non-Proliferation Treaty is in the end the cornerstone of the whole nuclear security realm.

These last reviews going back 5 years on 5 years, the gulf between the nuclear weapon states and the non-nuclear weapon states in terms of adhering to the NPT requirements has just been growing and growing. If we are now putting the arms control architecture in jeopardy, this only exacerbates the gulf and promises a very unpleasant review conference and potentially risk to the NPT regime.

Going back to what I was saying, that's where even a statement or restatement of the basic idea as expressed back in the '80s again would also be a contributor to a more constructive NPT.

Another example: we need to rebuild the cadre of elected officials who stay conversant on these issues. Again this is something that doesn't even require passing a law or signing a treaty. It's getting together leadership in the House, in the Senate, majority, minority, getting together, having a process of regular briefings.

Another example, in the 1980s, there was a joint congressional administration group on arms control and that had major benefits. If you were in that case, at that time, the Soviet Union and you were negotiating something with the administration, the fact that the administration and the Congress had this continuously operating working group would give them confidence that if they struck a deal, it could stick.

Remember my comment on the sanctions and being in the penalty box? Why would you want to negotiate? We've got to change that. These are examples of steps that can be taken now to go in the opposite direction of lowering the temperature, decreasing the risks, and then eventually being able to move to the next stage of arms control reduction, eventually engaging China, et cetera, et cetera.

I might just add, however, another thought for this discussion where we have made some progress, but we still have a lot to do. And that is that clearly the United States and Russia with the larger arsenals have this, deserve this special focus and responsibility. But obviously we are also, both of our countries, are very, very concerned about the possibility of any further proliferation.

The key is to obviously have security of nuclear weapons. We don't want nuclear weapons wandering around. But we must also focus on the nuclear weapons materials, the high-enriched uranium and plutonium that are the necessary ingredients of a nuclear explosive. Remembering that by far, and I mean by far, the biggest obstacle to producing a nuclear explosive device is getting the materials. If you're willing to settle for a relatively inefficient bomb, you have the materials, it's not a very big challenge to make an explosive. So, the materials are critical. And the good news side is that over the last 15 years, the number of countries, 40-plus, that have substantial quantities of high-enriched uranium has been cut roughly by a factor of two.

Now, the first factor, the first half is the easier half and now comes the harder half. So, we've got to keep at this. But once again, the reality is U.S.-Russia collaboration has been the essential ingredient in most of those reductions of HEU. And so, again, this is the kind of area where we're not doing anybody a favor. We need to collaborate for our own security, as does Russia with us, to get these things done.

I'm going to have one more thing -- and then you've got to cut me off. I did mention earlier as well the fact that one part of the Cold War posture legacy is this idea that the president has unique responsibilities and opportunities for the utilization of nuclear weapons.

There will be some circumstances, like, if there really is the massive attack that needs to be responded to instantaneously, there is no choice other than having essentially a single point of contact for key decision. But there are many, many other scenarios. At NTI, you can find on our website we [published a paper](#) that we commissioned by international security lawyers on the legal structures that govern authority to use nuclear weapons.

And then Sam Nunn and I put out a little [four-page document](#) that talked about what we can do now to use the deliberative process to give as much legitimacy as possible to a decision that a president might have to make in this context. And then to work to make the time available longer. It's a pretty logical set of steps and we go through those in somewhat more detail.

So, our only message is in the end, first of all to emphasize, we are not trying to project this in any way as being let's get back to ducking under the desk as the goal. It's not about fear, it's about recognizing we have risk and recognizing we have opportunities to lower those risks by taking a set of actions. If we have produced the political accountability that says we, the people, want to see these risks addressed and lowered. And that goes back to how I started this. People in Iowa always have had a special opportunity and dedication to shaping important debates. This is an important one. And anything that you can do and we can do to help each other get these issues discussed so that they can be addressed would be very, very much appreciated. Thank you.

(Applause)

SPEAKER: Secretary will entertain some questions. And so, I'm going to walk with the microphone.

SPEAKER: (Inaudible) threat from North Korea and Iran .

MR. MONIZ: Well, North Korea obviously has demonstrated that it has nuclear explosives. In fact, maybe it's worth saying that it's been 20 years since anyone other than North Korea tested a nuclear device. And they have tested several now in these last years. So, they have them, that's clear.

In terms of the risk, I personally do not think that the risk of a ballistic missile delivered nuclear weapon on the U.S. lower 48 is that high at the moment. But the risk



to our armed forces in Asia, the risk to our allies, South Korea and Japan in particular are enormous, although I do want to emphasize particularly with South Korea that the risk is not simply from nuclear weapons, but from the artillery position along the DMZ which could basically wipe out Seoul. So, obviously with the nuclear weapons in the background, this becomes quite an issue.

Now, we feel that opening up the dialogue with North Korea was a good idea. There was no point going on the way we were. The problem only was getting worse. However, opening up the dialogue is not easy, but it's easier than putting together the kind of structured negotiating position recognizing that it's going to be a long-term process, step by step before North Korea would ever actually denuclearize. And hopefully that process now starts coming together more effectively. It will not be easy. And I'll just add that in addition the verification requirements of a denuclearization agreement with North Korea will be enormously difficult, much harder than with Iran. They are a more closed society, they have nuclear weapons, and so that will be a major, major diplomatic challenge. And that's why, in my view and in our view I think at NTI, a North Korean negotiation has to be viewed as long term step by step with reciprocal actions along a well-defined roadmap to the end that we all hope for in terms of no nuclear weapons on the peninsula.

Secondly, I would add, we have begun to put forward some ideas that would be part of that roadmap negotiation. For example, as we said earlier, Former Senator Sam Nunn is a co-chair of NTI. And we [put out a paper](#) several months ago, maybe half a year ago, which was basically a Nunn-Lugar concept with North Korea. And the idea there is that, first of all, there was a lot of loose talk about like what we do to North Korea in a program of denuclearization as opposed to what we do with North Korea. I mean, fundamentally it was just like Nunn-Lugar and the Soviet Union and the former Soviet Republics with weapons.

The only ones who really are going to take apart those weapons are the ones who built them, like this idea we want to elect the cowboys, we put them on one of our planes, you know, it just not -- doesn't make any sense. That also we employ their nuclear scientists and engineers and hopefully keeps, at least the vast majority of them, home as opposed to going somewhere else and proliferating. So, those are the kinds of things that are going on. We should not be pollyannaish about this being an easy process, but neither should we be stopped from going step by step down this road.

In Iran it's a very different situation. Iran does not have nuclear weapons. They had a structured nuclear weapons program up until 2004. Everyone except the Iranians

agree to that. But there continues to be no evidence of a structured program and this includes the Israeli archive by the way, no evidence of a structured program since that time. The critical thing in the Iran agreement was that it did two things. It put severe restrictions on Iran's activities for 15 years, but more importantly, it put in place the world's most stringent and, I will have to , creative verification regime to make sure to raise the bar so high on evading a possible new covert program that the deterrence value would be enormous. That was the real point of it.

Now obviously the agreement is in a difficult moment. What I would point out is Iran, the steps it has taken so far to violate the constraints of the agreement have pretty much been easily reversible. In my view, what's very important is they have stuck with the inspection regime. That I think is the key issue. And now there are various suggestions that the inspection regime may also go by the wayside, which would probably end in any real sense the effectiveness of the agreement. So, I think our job is, look, I think you can't put Humpty Dumpty back together again in exactly the same way, but the goal is to keep in mind what the real objectives are. And the number one objective is to have a robust verification regime so that we and everyone else has confidence that they are not doing a weapons program. That's the objective. And I'll just circle back and say having been part of the negotiation of that very stringent verification regime, I go back to North Korea and say it's got to go up a step more.

SPEAKER: (Inaudible).

MR. MONIZ: So, I will focus on the technical support that you've alluded to. And I think in this room it's probably well-known. AI should remind people in this room that Ames was a big part of the Manhattan Project in terms of uranium purification needed for that effort. But I say that because the Department of Energy, first of all, is the repository of nuclear information in this country. The Department of Energy has 17 national laboratories, three of them labeled weapons laboratories, but in reality with a lot of the security knowledge spread out even much more broadly in the laboratory system.

When the Iran negotiation was going on -- I'm getting to your question but let me give it through an anecdote -- the Iran negotiation had been going on for many years. And I think many in the country did not recognize the central role of the Department of Energy and its laboratories until I was thrust in as a negotiator and then it became a public thing. But the reality is that core support from the Department of Energy was there the whole time. The only thing that changed was my negotiating profile.

My point then is going back to your question that is intact. All that core nuclear information and frankly the people who were directly involved -- these are the senior career people, they are there. They are there and working on it. I think that hopefully gives a little comfort. It certainly is different. We know that at the political level, in the diplomatic arena we certainly have lost a lot of strength in the government.

By the way, may I add though another issue on North Korea that we don't talk about a lot, but in this step by step long negotiation that I think will be needed to have any success there, there is also the question what is the depth that North Korea can bring to the table. It's a very isolated country. The Iranians, for example, they were part of the international discussions in science and everything else. So another reason why I think it will take a long time is we may need some patience while the North Koreans build up their capacity to get into these kinds of very, very in-depth negotiations. Interesting different take.

SPEAKER: Secretary, thank you very much. So, I had two parts to my question (inaudible).

MR. MONIZ: First of all about space and oceans, space is a very, very big concern in this context because obviously all the early warning systems, the command and control systems have very, very heavy dependence on this. Also that raises the issue of cyber, not to mention possible physical, attacks. We know that other countries have already demonstrated their anti-satellite capabilities. And so, militarization of space, it's largely unconstrained right now. And this is another important area of establishing norms and as with all of this in the nuclear realm, the U.S. and Russia have got to play the lead in that, even though other countries have any satellite capabilities. So, that's a major concern.

In the oceans, well, an enormous change in strategic stability will come about if the oceans become much more transparent than they are because obviously in particular for the United States, our submarine fleet is absolutely critical for our nuclear posture and deterrence, and that relies upon there being largely unidentifiable assets. It's clear without getting -- I can't get into any details but it's clear that that transparency is getting a bit more opaque or the other way around, I'm not sure which way to say it. It's becoming more transparent, I guess. And as technology keeps evolving, that will be a very critical issue. Right now, we still consider our submarines to be, you know, pretty safe assets and key to deterrence.

There are other things by the way I just will mention in passing that I mentioned earlier the five nuclear delivery systems that Putin announced in 2018. One of those was a super torpedo nuclear-powered and nuclear tipped that could travel very, very long distances in the ocean, that's an example of one of the systems. And by the way, we have an [NTI report](#) that I would suggest on our website written by Jill Hruby, former Sandia director, on six Russian new delivery systems and realities about them. So, speaking of oceans but there was that other idea. I'm sorry, what was the second -- your second question?

SPEAKER: (Inaudible).

MR. MONIZ: Oh yeah, terrorism, terrorism. So, second was on nuclear terrorism. And I'm not sure I would put it as a bigger or lesser threat; it's also a big threat. And there, that couples very, very strongly to the issue I raised towards the end of nuclear materials that it is true that obviously one has to keep the nuclear devices themselves under very, very strong security. And as you know, I mean -- and there are also a lot of, let's say, hopefully fail-safe mechanisms in terms of those weapons. But a terrorist group of any sophistication -- and I would add to that organized crime, it's not just necessarily terrorism, but sub-national groups with malign intentions, if they get a lot of nuclear -- especially HEU, a lot of HEU in particular, it's pretty straightforward in the end to do something, especially today with all kinds of possibly correct, possibly incorrect designs on the internet and the like.

SPEAKER: (Inaudible). The second question I had was, is the weapons race and the constant "upgrade" of our nuclear weapons arsenal at all a creature of special interest of corporations that rely on fear and members of the Congress who are quick to do a follow-on missile or weapon that may not make sense even to sometimes in people in the military or other experts? Years ago I worked on a B-1 bomber campaign and realized that the B-1 bomber was a creature of special interest, in many respects didn't make much sense. And the reason why I think this is important is people understand that corporations sometimes have special interests that drive behavior. And that explains for them, successfully sometimes, why certain policies are so powerful and that the "experts" might have some special interest in their part. So, I'm just curious about your observations about that.

MR. MONIZ: Well, I'll give you a muddy answer because there are many, many different aspects to this. First of all, I think the point you raised certainly is an important one, and it is seen most clearly in the many, many cases when the military

does not want a particular system and it is required to be built. So that's the clear example I think of what you're discussing. Now, in this case, the modernization of the nuclear enterprise, it is certainly one that the military is requesting. So on that issue, there's no question. But there's still questions to ask at the next level. For example, let's first separate, there is the enterprise that the Department of Energy runs to dismantle and rebuild the same nuclear weapons that we have had now for a long time and which are supported without testing. And then there's the military delivery systems, the triad, for example. On the former, I've to tell you as Secretary of Energy one of my biggest concerns was continuing to have our workforce at PenTex in Texas and at Y-12 at Oak Ridge, et cetera, working high-hazard operations, as you can imagine, dismantling nuclear weapons and explosives and all kinds of things in 50- and 60-year-old buildings.

It is public that in -- for example one of those places there's a new thing being built, and ceilings fell down internally. If we are going to have nuclear weapons--and that's a debate--but if we're going to have them and we're going to have them for another few decades, you can't have people doing those operations in what's going to be 100-year-old buildings. If we're going to have them, you got to pay for them. Plain and simple. On the delivery system side, the big debate -- and I'm not going to give an answer on this but the most controversial thing is should the land-based missile system be rebuilt. There's no question what we have is very old. So, the real question is what's our policy and do we want those. They're sitting in fixed silos, everybody knows where they are, you know. So, I think there are some real questions there. But going back to your original question, I reemphasize, there's no doubt that the military is saying they want to maintain the triad, they need it. We're going to have these weapons for decades more and we cannot live off of these very old systems. That's the argument. It's a tough one. It's a lot of money. It's \$1.2 trillion over decades. Yeah.

**SPEAKER:** I have a question fed to me by someone who knows a lot more than I do about it. The word integration is really popular in the military right now, integrating this, integrating that. And the current usage is something called conventional nuclear integration which has its simplest terms as you can use small nuclear weapons, sometimes called tactical nuclear weapons, on the battlefield and it won't necessarily trigger a wholesale exchange at the strategic level of those land-based missiles or those SLBM missiles being launched at target deep at each other's homelands. What are your thoughts on that? Can you have such a thing as a limited nuclear war?

**MR. MONIZ:** So, if I go back to the beginning of what you said, there are actually two separate questions in there. One is the integration of nuclear conventional and the second is this question of small nuclear weapons, particularly submarine-launched now

small nuclear weapons. I'm starting with the second one, then I'll go back to the first one. The second one, our view is that this is a very, very slippery slope we're going down, that reviving the idea of nuclear weapons as battlefield weapons is a very bad idea and that we should stick to our -- it sounds almost counterintuitive, but stick to our position. We have a deterrent and we will use the deterrent in response to nuclear use.

Secondly, I do emphasize that we do have, of course, small nuclear weapons already. The issue is putting them on submarines or not as opposed to the bomber fleet. And this then raises aspects of your first question, blurring the line between conventional and nuclear weapons. This is a case where I would stay with our more traditional posture -- draw a bright line between nuclear weapons and conventional weapons. But in looking at -- and we don't have the answers at this stage, but trying to think along these lines. Looking at the modern version of strategic stability, we're going to have to take into account the dual capable use of a number of weapon systems and the adversary just not knowing what you're doing.

So it's a harder problem than in the Cold War when you had a pretty bright line between the nuclear systems and the conventional systems. It's a very important question. But again, I will repeat on the first one. Don't start getting this thought of as a battlefield weapon, and I'm afraid it is. That's another really important question, by the way, to get into the public debate.

**SPEAKER:** Hello. Thank you very much for coming. Your comments and observations are greatly appreciated herein. I know speaking for the group -- I know if I can or not, but thank you so very much.

**MR. MONIZ:** In that case I will assume you speak for the group.

**SPEAKER:** No, there are much better people than I for that. Here's my question. I'm old enough to know that back in late '80s, early '90s, there was a notion called nuclear winter and there was a lot of emphasis on the problem even one nuclear explosion could actually decimate the earth and that as a result the notion of nuclear war was just absolutely off the table, that horrid, and almost a medical issue just like the black plague that needed to be fixed. What in the hell has happened over the last 30 years? What is the evolution of the public square now that now we're much more worried about abortion, which is a worrisome issue, I'm not saying that, or even gun control. It just seems like nuclear issues are no, we're worried now about small tactical nuclear weapons as if that's actually a pathway to make our world safer. What the hell has happened--

MR. MONIZ: Beats me.

SPEAKER: No, that's not the answer I want. I want some explanation for how cultures develop their issues in the public square and how some got taken off or not. How do you move it back on to the issues that come?

MR. MONIZ: Well, I wish I had a better answer but I think we need to go back to have a reinvigorated understanding and dialogue. People understand the consequences of this. It goes back to the Regan-Gorbachev statement. Nuclear war is not going to be won and therefore why would you fight it? And that's why it sounds simple and it sounds naïve, et cetera. But I think if we could get in our current world and even better not just U.S. and Russia but have Chinese president, et cetera, kind of come to that kind of a statement, I think it would have profound effects. I really do. So, that's not going to happen without our elected officials understanding that people are thinking that way and expect them to act in that direction. So, I think it's really important.

SPEAKER: One more question.

MR. MONIZ: Okay, one more.

SPEAKER: I work with a group called WiLL/WAND, WiLL, Women Legislators and WAND, which used to be an antinuclear group and now it's women for another direction or something like that. And we have submitted resolutions in 13 states and passed them in three states requesting that Congress set up a system that does not give the president, any president, full authority to launch a nuclear weapon without talking to some other leaders like the leader of the house, leader of the Senate, and we've been working on this for a few years now. When we go to Washington, we go talk to our senators and legislators about that. Have you heard of any appetite for that kind of reworking of our processes?

MR. MONIZ: Yes, yes. Well, certainly there are some bills banging around in Congress right now addressing that, but also as I said earlier and I would urge you to go to our website, that was the report we released yesterday. So, one report -- I don't know, 30-page [report](#) or something like that -- is laying out what are the legal structures around the use authority and nuclear weapons, and that includes going -- it includes constitutional issues, for example the notoriously unclear separation of war powers between the executive and the Congress, and what we call ad bellum issues and variety of issues. And then the [four-page addendum](#) that Sam Nunn and I did addresses exactly

what you are saying. So, recognizing that again, and calling for codifying these various issues.

So, again, there's no one questions that in self-defense of a nuclear attack, there just isn't going to be time within 5 minutes to go through a lot of stuff. But there's a lot of other scenarios where consultations first within the administration, secretary of defense, secretary of state, attorney general in terms of legalities because again in international law -- not constitutional but international law, there are the issues of required proportionality of responses. Humanitarian suffering comes in. Many, many of these things come in. So, the administration presumably, we hope, continues to go through the legal basis of a process, et cetera, but if it comes time to actually make a decision on something, then the circumstances are going to be very, very specific to that and how all of those issues come together. So, it spelled out what those issues are in the first report and then the second report we talk about the consultative mechanisms including with the Congress, the leadership. But the reality is the consultation of the president or the secretary of defense with the Congress is unlikely to be very meaningful unless the Congress has done the spadework to be up on the issues. And so, we recommend things like annual briefings to the leadership. And maybe since that was the last question, in concluding, however, I want to get back to your women--

SPEAKER: Women in legislative (inaudible).

MR. MONIZ: Yeah.

MR. MONIZ: And to say that actually NTI along with Ploughshares and others, we have been very active in forming a group including a group of ambassadors, et cetera, on women and national security to try to really increase the ranks. I will boast that at NTI - it's the truth, you can look it up -- of the 10 senior officers of NTI, eight are women. And I will say, several of them have been hired since I became CEO 2-1/2 years ago all because they were the best candidates. And it's really interesting how in a field where a lot of the feeder systems are not inherently favorable to this like the intelligence community, the military, et cetera, but we are seeing a tremendous number of young and mid-career women coming forward with extraordinary capabilities in the national security area, and so I think that keeping that up is also very important. Yeah, thank you.

SPEAKER: All right. Thank you.

MR. MONIZ: Thanks.



(Applause)

\* \* \* \* \*