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MISSILE DEFENSE: COOPERATION OR CONTENTION?

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P R O C E E D I N G S

MS. O'DONNELL: Good morning, everyone. My name is Clara O'Donnell. I'm a Non-Resident Fellow at the Center on the U.S. and Europe at Brookings and a Fellow at the Center for European Reform, in London. And on behalf of the Center on the U.S. and Europe, and the Arms Control Initiative at Brookings, it is my pleasure to welcome you to today's event, marking the release of a new paper of the Brookings Arms Control series, by Steven Pifer, entitled "Missile Defense in Europe: Cooperation or Contention?" And I hope that you all picked up copies when you walked in.

On behalf of Brookings I would also like to thank the Ploughshares Fund for supporting this report and the broader work of the Arms Control Initiative.

With a few days until the NATO summit in Chicago, Steve's report provides a very timely contribution to the ongoing debate on how to address the stalemate between NATO and Russia regarding missile defense cooperation. American plans to deploy missile defense systems in Europe have posed major issues for U.S.-Russian and NATO-Russian relations over the past five years.

There had been hope that a cooperation agreement would be reached at the Chicago summit. This has proved impossible. But as the report stresses, U.S. policy-makers must continue to seek ways to engage with Moscow on this issue, as, indeed, NATO stands to gain from turning missile defense into a cooperative asset instead of a liability on the NATO-Russian agenda.

Today's event will give us the opportunity to discuss the current challenges facing the U.S. and Russia in relation to missile defense in Europe, and to explore the various ideas within the report on how both countries could work together.

We are very fortunate to have with us three prominent experts on this issue. Greg Thielmann, Senior Fellow at the Arms Control Association, David Hoffman,

contributing editor *Foreign Policy* magazine and *The Washington Post*, and Steve Pifer, author of the report and Director of the Arms Control Initiative at Brookings.

In order to maximize the time for debate, as you have copies of the speakers bios, I will not provide their full introductions. I would, though, very much like to thank them for being here this morning.

In terms of how we will proceed, I will quickly lay out the current state of play regarding missile defense in order to provide some background to the discussion. Then, over the course of seven to eight minutes, Greg will provide his assessment of the threats posed by ballistic missiles to NATO, and the merit of the U.S. response. David will discuss the Russian reaction to U.S. efforts to develop missile defenses in Europe. And Steve will lay out potential forms of cooperation between NATO and Russia. And we will then open up the debate for comments and questions.

So what is the current state of play? As many of you will be aware, in September 2009, the Obama administration announced new plans for missile defense, known as the European Phased Adaptive Approach. The principal concern driving the Administration's program is the perceived threat from Iranian ballistic missiles.

The plan is to deploy the missile defense system over four phases. Phase 1, which is currently being implemented, is designed to protect Turkey and southeastern Europe from the existing threat of Iranian short- and medium-range ballistic missiles. It is made up of intercepting missiles known as the standard SM-3 Block IA, and the SPY-1 radar which are on board U.S. Aegis-class warships in the Mediterranean, and supporting radar in Turkey.

Phase 2, which will begin in 2015, foresees SM-3 Block IB interceptor missiles, which will be deployed at sea and on Romanian soil. These missiles will have an improved C-curve on their kinetic kill vehicle.

Phase 3, to begin in 2018, aims to give a capability against intermediate-range ballistic missiles. It will be made up of SM-3 Block IIA interceptors, which will have higher velocity and longer range than their predecessors. These will be deployed at sea, and on shore in Poland, and will allow to give coverage for NATO allies in northern Europe.

Finally, Phase 4, to begin in 2020, foresees SM-3 Block IIB interceptors with a velocity and range which would allow them to engage rudimentary intercontinental ballistic missiles, therefore allowing some protection for the U.S. homeland.

Now, in 2010, NATO and Russia agreed to explore how to cooperate on missile defense and, as Steve's report documents, there is some convergence between NATO and Russia regarding ideas of how this cooperation could take place in practice. But, recently, Moscow has been demanding a legal guarantee that U.S. missile defense will not be directed against Russian missiles. And this is something Washington is not prepared to give and, as a result, progress on NATO-Russian missile defense cooperation has stalled.

As mentioned earlier, contrary to initial hopes, the Chicago summit will not see the introduction of a NATO-Russian cooperation agreement. Instead, NATO will announce that its missile defense system has achieved an interim operational capability.

So, anyway, with this background in mind, Greg, we turn to you for your thoughts on the extent of the threat to NATO posed by ballistic missiles from Iran and elsewhere, and the merit of the U.S. response.

Thank you.

MR. THIELMANN: Thank you, Clara.

Now that NATO has achieved the first tangible step toward the missile defense goals it established at Lisbon, I want to take a close look at the threat that inspired it.

The threat to NATO Europe and to the U.S. mainland from ballistic missile attack by hostile countries is hardly new. It existed throughout most of the Cold War. The U.S. twice adopted programs to provide for defense of its own population from missile attack, and twice abandoned this objective. Cost-benefit analysis showed that such defenses could be defeated by relatively inexpensive countermeasures and proliferation of warheads. The Nixon administration also realized that limited U.S. and Soviet defenses by treaty would head off a potential threat to the credibility of the U.S. nuclear deterrent. For three decades, the 1972 ABM Treaty limited the number and location of strategic ballistic missile defenses, and prohibited deployments designed to defend the national territory.

There was, of course, a new ballistic missile threat that arose in the late 1990s from newly emerging states of proliferation concern. At the top of our list were North Korea, Iran, and Iraq, later dubbed the "Axis of Evil" by the George W. Bush administration. The 1998 Rumsfeld Commission on the foreign ballistic missile threat had identified each country as being capable of building an ICBM within five years of a decision to do so. A 1999 National Intelligence estimate projected that North Korea would test an ICBM by the end of that year, and that within the next 15 years, North Korea, probably Iran, and possible Iraq would pose an ICBM threat.

Amplified by a North Korean satellite launch attempt in 1998, these grim assessments created a political tidal wave that profoundly affected the course of U.S. strategic and arms control policies for years to come. In the Missile Defense Act of 1999, the U.S. Congress committed the nation to -- quote -- "deploying an effective national

missile defense system against a limited missile attack as soon as technologically possible, unquote.

In the wake of 9/11, President Bush secured strategic missile defense procurements and the accelerated deployment. He also announced U.S. withdrawal from the ABM Treaty, and voiced a commitment to activate strategic defenses by 2004.

In providing more than $8 billion per year over the last decade, the Congress has not challenged the dubious technological premis of the strategic missile defense program, which have been exposed in numerous studies. For many members of the U.S. Congress, missile defenses in Europe are "all about us," and based on an ahistorical understanding of the offense-defense relationship, and a superficial analysis of actual threats. In spite of the ubiquitous rhetoric about the "growing ballistic missile threat," the threat posed by Moscow has actually decreased dramatically from its Cold War peak, and the large ballistic missile inventories of the Warsaw Pact allies are gone. Also gone are the fears of Iraqi nuclear-tipped ICBMs' appearing by the end of this decade.

As for North Korea, it has just suffered the fourth consecutive long-range missile launch failure over a 14-year period. It will be years before North Korea poses a direct threat to the U.S. continent or to Europe.

And let us not forget the end of the missile threat from Libya, the only country which ever launched a ballistic missile attack on a member state.

The only country that could pose a new potential missile threat to Europe in the foreseeable future is Iran. Although it has demonstrated satellite-launch capabilities, it hasn't yet conducted any long-range missile flight tests, and is not likely to have an operational ICBM before 2020. Iran is currently concentrating on medium- and

short-range missiles. Their presumed targets would be Israel, Saudi Arabia, and Gulf States, or U.S. forces in the Middle East.

Without nuclear warheads or improved guidance systems, Iranian missiles pose a very limited threat to military bases, oil facilities, and cities in the region, and virtually no threat to specific point targets like the Israeli nuclear reactor at Dimona.

Against short- and medium-range missiles with conventional warheads, missile defenses can limit damage and casualties -- and even if technically deficient, can provide a psychological boost to threatened populations.

Now, there is an important distinction between strategic and nonstrategic missile defense. For strategic, successful intercepts are much harder, the consequences of failure much more catastrophic, and the impact on strategic arms control often fatal.

Once upon a time, Washington and Moscow took great pains to differentiate these categories. U.S. and Russian delegations even negotiated language in an ABM Treaty protocol in 1997 demarking the boundary between the two. For proponents of strategic missile defenses there was a reason to blur this distinction. Conflating strategic with theater prejudiced the ABM Treaty, obscuring the fact that most of the things we wanted to do to defend against actual rogue-state missile threats were already permitted by the treaty.

This ancient history is relevant to our discussion this morning because the tactical and theater missile defenses NATO is deploying benefit Europe without damaging arms control. Patriots, THAADs and SM-3 Block I interceptors correspond to the threat NATO faces, and the potential threat on the horizon. While some of the locations may be politically unpalatable to Moscow, they are not militarily threatening.

The mobile and network anti-ICBM capabilities intended for EPAA Phase 4 are another matter. And when U.S. officials reaffirm our commitment to timely

deployment of all four phases, it raises questions about whether the schedule would really be adapted to any diminution of the threat. I'm concerned about NATO heading into a cul-de-sac with plans for "achieving full coverage and protection for all NATO European populations, territories, and forces" -- the language of the Lisbon Declaration. This language takes me back to my high school days. In 1967 Secretary of Defense McNamara announced plans for building the Sentinel ABM system to protect the U.S. population from the emerging nuclear threat of a "rogue and unpredictable China." Sentinel lasted 18 months before being replaced by the Nixon administration's Safeguard ABM system, oriented toward the protection of U.S. ICBM sites from counter-force attack. Safeguard used the same interceptors and the same radars as Sentinel, but the new U.S. administration had changed the ABM mission virtually overnight from population protection to ICBM protection, and the target set from a small number of unsophisticated future Chinese missiles, to the enormous ICBM, SLBM arsenal of the superpower Soviet Union.

Now fast forward. The Republic candidate in our current presidential race who opposed the new START Treaty, and still regards it as a mistake, has just asserted that Russia is, quote, "without question our number one geopolitical foe," unquote. Senator Kyl, the GOP's leading spokesman on strategic issues, said this week that "The Obama administration should make no pledge that would preempt a U.S.-led shield capable of thwarting any missile that might be launched at us, not just an accidental launch or one from a nation like Iran or North Korea."

So we have another potential change in administrations coming. How should Moscow evaluate U.S. assurances on missile defenses in Europe?

With that rhetorical question hanging, I'll yield the mic to David.

MS. O'DONNELL: Thank you very much.

David?

MR. HOFFMAN: Great. Thank you, Greg. I'm glad to know that you, in high school, were doing the same thing I was doing, taking little model rockets out and checking out the interceptors. I read recently that the interceptor for the Safeguard system had to move through the atmosphere at such a terrific speed that, actually, the nosecone of the thing would be glowing. And the author said that if you had applied a blowtorch to that nosecone, it would have cooled it.

So, with that -- Russia is a big, difficult issue and question -- multiple players, different ideas, ever-changing sort of moveable feast. So I'd like to start by saying I'm not here as a spokesman for Russia. And I'm certainly not here to defend Russia. But I am here in the spirit to try and shed some light on their views, their perceptions, and perhaps to offer some analysis.

But in preparing for today, I was reminded again of how difficult it is, sometimes, to put your arms around the idea of what Russia wants or things. So, certainly, in the question period, I would welcome further input if you think I haven't quite mastered it. I've spent a lot of time there, including recently, but I would say the following couple of things.

First of all, today Russia is nostalgic -- nostalgic for the ABM Treaty, nostalgic for a period when they did not have to compete in the realm of missile defense. And, you know, ABM took defenses off the table. They liked that. And at a recent conference in Moscow this month on missile defense, I saw what was a fascinating moment, when the Ministry of Defense general put up a slide listing the nine times in the 1990s in which the United States and Russia came to some kind of agreement to reaffirm taking missile defenses off the table.

So I mention this because by putting it back on the table, we must not ignore the fact that we are making the Russians uncomfortable. They are not prepared technologically to compete with us in missile defense and, frankly, this has been a problem that they have known about and that we have known about for decades. It was certainly the case when President Reagan was advancing the Strategic Defense Initiative, and it's the case today. So by putting them into a competitive situation in an area where they can't compete, they feel very much overshadowed.

And, again, without being too sort of anthropomorphic about it, I would like to add that this is not the first time, lately, that we have made Russia feel inferior. And I think that the leadership in Russia is fraught with some feelings that are accumulated over the last 20 years -- NATO expansion, something they haven't completely gotten over yet. Certainly, the NATO efforts to romance Ukraine and Georgia is something they haven't gotten over yet. The Kosovo war is something they haven't gotten over completely.

So, thinking about the perception in Russia, I think that it would behoove us to be sensitive to their mindset, even if we find it a little bit irrational -- sometimes a little bit paranoid, sometimes deeply lacking in self-confidence. And there's a few other parts of this I'd like to mention which have played into this mis-perception and mistrust for many, many years.

And one of them is that even today people, policy-makers, people at high levels in Russia on this subject have deep insecurities and suspicions about American technology. Now, I will tell you briefly a little historical story, which is that in the research for my last book, *The Dead Hand,* I found a series of papers describing their internal deliberations about President Reagan's Strategic Defense Initiative. Now, this was fascinating contemporaneous, genuine, original material about how their debates were

going on. And the interesting thing in their debates was that they had already reached some relatively firm conclusions about the technology. They didn't think that Reagan would be able to achieve a workable Strategic Defense Initiative in 20 years.

But the thing that puzzled them was the way, in their words, the stated goals and the actual actions of the Reagan administration didn't coincide. They said, "What is it for?" One of the analysts said, "What is the big iceberg that we're not seeing?" And they puzzled over this for years -- 1983 to '87. Even in 1987, they had a conference; they could not answer this question. And they came up with the answer themselves, and the answer was: Well, you know, if it won't work, what is Reagan spending so much money on it? It must be simply a hidden subsidy for the defense contractors.

And this kind of sort of conspiratorial and insecure thinking is being stimulated today by our continued pursuit, especially of the Phase 4 Block IIA missile, in which Russians are trying to fill in the blanks themselves. And they won't always successfully do that.

And therefore, I fear the creating of further mistrust and misperception if we are not clear about our goals, and how we intend to get there. It is time to be clear. We're not in the Cold War confrontation anymore, where opacity and deception are tools of the trade. We actually ought to realize that behaving differently will help us get to "yes."

And I believe that the Russians look at this, this entire process, as a period of negotiation and leverage. So, although, yes, we are at an impasse, I don't think that you could take any snapshot of this impasse and say, oh, throw up your hands, like Medvedev did not long ago, saying "failure," or whatever. The Russians look at this as a long-term period of leveraging and negotiation, of threats and shadow-boxing. And I think we have to realize that that's what they're about.

Ultimately, their worst nightmare would be to essentially fail to influence the United States at all, and NATO, to be outside the entire process. They don't want that. That's a kind of want-in, but they bring very little to the table, in terms of what they can bring to it. So they're negotiating for the best deal they get, in a field in which they're not strong.

And I think that we should realize that that is what's going on here. We're in a long game of cards, and we're only in the middle of it. It could run for years.

So, technically, I'd like to point out a few things -- which was hinted at in what Greg said -- and that is that the real Russian concern is Phase 4. As everybody here knows, that's coming at the end of the decade.

And if you look carefully at the forest of objections that Russia has raised about this subject, you find there are two or three concrete ones around which there seems to be a consensus. So I won't go into all the things that they've objected to, but I will try and identify the two or three that I hear from multiple sources.

And the first one is the Block IIB interceptors' velocity, burnout velocity, the final speed that it can attain. This is a critical element in their judgment about whether or not it's a threat to their strategic deterrent. And the critical number is 5 kilometers per second. Anything in excess of that Russians tend to think of as threatening their ICBMs. Generally, under 5 kilometers per second will not be fast enough to catch, to chase a Russian ICBM, and they will be able to clear those zones without too much worry.

But the question is about the IIB, as far I understand, that we don't really know yet what the velocity, burnout velocity of this interceptor missile will be. But what concerns the Russians is that if you look at them, the earlier Blocks have a narrower diameter in the upper stage, but the IIB is 21 inches top-to-bottom, which adds maybe 40

to 60 percent more fuel and velocity. I'm not sure exactly about how much, but if you consider the earlier interceptor having a 3-1/2 kilometer per second ability, then maybe the last iteration, the fourth interceptor, actually could go that fast.

But, you notice, there's a great deal of uncertainty about this. And I think in the Russian mind, also, some clarity about the nature of what this missile interceptor will be could go a long way.

The second thing about them, which there seems to be a consensus in the Russian view, is the location of the deployments. And it's interesting that after their strenuous objections on the third site, in the previous administration, and then the pause as they began to sort of assimilate and study the Phased Adaptive Approach, that they are now beginning to voice objections to the idea of sea-based missiles -- in certain places. And from three Russian officials who I interviewed, they all mentioned concern about the northern seas, and about putting interceptors in close to Russia's borders, especially in Poland and Romania.

So, you know, again, I think that the idea of mobile, sea-based Aegis interceptors in other places doesn't seem to really ring their bell. But I was told by one of these officials that if NATO and the United States could remove the proximity issue, then all the rest of it would essentially fall into place. And I'm not suggesting how we resolve that, but it is clearly the hot spot which is -- you know, the idea of an Aegis interceptor exceeding 5 kilometers per second in the northern seas, they believe would pose a real threat to their strategic deterrent.

What does Russia want? You know, again, if it's a long-term negotiation, it's hard to say. The language that's been used in the last year or two has been "legal guarantees," although I would note that Russia recently -- President Putin excuse me, I

guess President Putin's new executive order refers to "firm guarantees." And I think that we ought to simply keep our eye on the negotiation. It may change.

There is a realization in the Russian elite, as far as I can tell, of the need to get to "yes," and to get to get to some kind of cooperation. I'm not sure how that will unfold, but people there have been making intelligent lists of what they could bring to that cooperation. The long-lost idea of a joint data center or two, or coordinating centers have been put back on the table. Their radars have been put back on the table.

But that's about it. Russia does not bring interceptors to this discussion. And I think the idea of a sectoral defense, which they floated maybe more than a year ago, has sort of quietly begun to fade.

So I would say: Stay tuned. It's going to be a crap-shoot a little bit. It's going to be a long negotiation. But keep in mind that, as Dmitri Trenin in his terrific recent book, *Post-Imperium*, that Russia has a lot of post-imperial blues. And these things, even today, as President Putin looks out from the Kremlin and sees people marching in the streets against him -- as he thinks about ways to suggest to his people that Russia is a great power, and that it has, you know, power-projection abilities, it's not going to be easy. And it was never easy for Russia to extend a hand to the United States.

MS. O'DONNELL: Great. Thank you very much.

Steve?

MR. PIFER: Thank you, Clara.

Let me talk about two things. First of all, what are some of the models of cooperation? What might a cooperation NATO-Russia missile defense arrangement look like?

And then, second, I'll talk a bit about things that I think the United States and NATO can do, or should be doing, to make it as easy as possible for Russia to say yes to cooperation.

But first just to comment on why is cooperation -- you know, why bringing Russia into this arrangement in the U.S. and NATO interest? And I'd give three reasons.

First of all, if you involve the Russians it could mean a better missile defense. U.S. officials, for example, are interested in the radar data that would come from the Russian radar in Armavir, in southern Russia, and the Russian-operated radar in Gabala, Azerbaijan. Both of these have very good views of Iran and, in fact, could provide earlier warning of a launch coming out of Iran than could the American radar in Turkey.

Second, cooperation could defuse missile defense as a problem issue on the U.S.-Russia and the NATO-Russia agendas. And you'd like to see this issue as an asset, rather than a problem that undermines those broader relationships. And one view is that if you have a cooperative arrangement where you're including NATO and Russian military officers working together 24 hours a day, seven days a week, that's going to give the Russians a lot of transparency about NATO thinking, NATO plans, NATO capabilities, and hopefully help address some of their concerns about missile defense.

And then the third reason to do this -- and it actually comes from a couple of retired Russian generals. And they say, you know, if NATO and Russia are cooperating together in this kind of a defensive arrangement that actually is going to mean, on missile defense, we're allies. And they say that can be very useful in knocking down some of the Cold War stereotypes that still linger in Moscow.

I think David's done a very good job of talking about Russian motives. I guess I would add one additional one, and that is, I think right now the Russians are

probably in a holding pattern on missile defense. And I'm not sure you're going to see the bottom Russian line, the bottom-line position, emerge until 2013, because they want to see who's going to be in the White House then. Their calculation likely is that a President Romney is going to bring a very different approach to missile defense than a President Obama. And they're reluctant at this point, I think, to commit.

Now, in terms of models of cooperation, there's actually quite a bit that's been done over the last two years. In the first part of 2011, there were technical discussions between the Pentagon and the Russian ministry of defense and, reportedly, they found a lot of convergence in terms of what a practical missile defense arrangement between NATO and Russia would look like. For example, the focus would e on Europe, and looking at threats coming out of the Middle East. There would be transparency about capabilities on both sides, joint exercises -- and I might note, there's a history of U.S.-Russian and NATO-Russian missile defense exercises going back to the mid-1990s.

And then, as David mentioned, there's talk of joint centers. And in the discussions between the Pentagon and the ministry of defense, they've talked about two joint centers. One would be a data-fusion center, which would take data from Russian sensors and NATO sensors -- we're talking about satellites and radars -- bring that to a jointly-manned NATO-Russia center, and combine the data to produce a common operational picture. That picture would then be sent back to the separate NATO and Russian military commands, because the presumption is that each side, and, in fact, both sides of this publically would retain an independent decision about whether or not to launch an interceptor. But both of those command centers would have the benefit of the combined data, the common operational picture developed in the joint data-fusion center.

The second center is called a "planning and operation center." And, again, this would be jointly manned. But this could be a venue to implement the

transparency measures on missile defense. It could be a venue for NATO and Russian officers to talk about what are the possible attack scenarios that they should be looking about and thinking about. And, finally, it would be a venue for discussing what might be the rules of engagement for launch, so that the sides would understand, you know, how the other would act if it saw an incoming ballistic missile threat.

Now, that's where the discussions between the two governments were as of about the middle of last year. There have also been at least three or four track-two dialogues, which have come up with very similar ideas. Former Secretary of State Madeleine Albright and former Russian Foreign Minister Ivanov have run one dialogue. The Pearce Center and the Ploughshares Fund have done another one that talked about missile defense cooperation. And then the Carnegie Foundation has supported the Euro-Atlantic Security Initiative, which involves former National Security Advisor Steve Hadley as a co-chair of a missile defense group, and they've put out what is probably the most comprehensive picture, including an actual architecture for what a cooperative arrangement might look like

But these track-two dialogues all seem to have several common elements. One is you focus on missiles of intermediate range and less. So you don't get into the question of talking about capabilities that might be used against U.S. and Russian strategic missiles. A number of these ideas talk about jointly-manned centers, there's value in having NATO and Russian military personnel working together on a permanent basis on these questions.

The ideas seem to turn on not having a single system, but two complementary systems, because there's an acknowledgment that, at the end of the day, at this point, both NATO and Russia would retain a separate decision, an independent decision, about actually launching an interceptor.

Some talk about how you might divide responsibilities. A couple of the dialogues have talked about NATO having responsibility to defend NATO space, Russia having the responsibility to defend Russian space. But you might have a proviso worked out in advance that said, or NATO might say to the Russians, "If there's a missile overflying your airspace coming to NATO, by all means please take a shot at it."

And then one other discussion came up, which was looking at joint computer protocol, the idea that you might develop rules of engagement -- NATO personnel and Russian personnel might work out a common computer protocol that would then be provided to the two launch centers. And the thinking here is that the decision time to actually decide whether or not to intercept is going to be very short. A computer is likely to tell someone, "We've seen this launch at burnout; we've now calculated the trajectory and the impact." And you now have maybe two to six minutes to press the button saying execute this launch decision, or not. Well, if that computer program was developed jointly, you'd actually have the separate decisions by a NATO command and a Russian command working in sync.

Now, the point here is that there's actually a very rich menu of ideas out there as to what missile defense cooperation could entail in practical terms, if the sides could move past the current obstacle, which is this Russian desire for a legal guarantee.

Now, I think that the United States and NATO should do a number of things, some of the things which they've done before, but maybe a package, in order to make it as easy as possible for the Russians to say yes to cooperation.

And I'd start out by saying, you know, we should not dismiss the Russian concern about missile defense. The Russians do have a legitimate point that if missile defenses increase, at some point they have the potential to undermine the strategic offensive balance between the United States and Russia. As I understand the European

Phased Adaptive Approach, out over the next 10 years, I don't think that that plan, in 10 years, is actually going to pose a serious threat to the Russians. But one of the goals that NATO and the United States should pursue is how do you assure the Russians on this question? And how do you test their readiness to cooperate?

So let me outline several points of what might be a U.S. and NATO offer.

First of all, although a legal guarantee is not possible, because it would require Senate ratification, which would not happen, the United States and NATO could offer to make a political commitment, a political assurance to the Russians that U.S. and NATO missile defenses would not be directed against Russian strategic forces.

Second, transparency should be a big part of the solution. And I would suggest that the United States could offer to Russia a declaration that would take each of the key components of missile defense -- the number of ground-based interceptors in Alaska and California, the number of standard SM-3 interceptors -- and you could break them down by individual Block -- the number of land-based launchers for interceptors, the number of launchers at sea, the number of associated radars -- and you could create a matrix. And you could tell the Russians, we're going to tell you, and we'll give you this notification once a year, how many of each of these elements we have now. And were going to tell you, looking out over 10 years, for each year, how many we expect to have.

And you could combine that with a political commitment and say, if any of those numbers will change, we're going to give you a certain amount of notice. And that would vary from system to system. It would be measured in months, for example, were you to decide to increase the number of SM-3 interceptors. If you're talking about an increase in the number of ships, you're talking about notification on the order of years.

And the idea here is to convey to the Russians that you will have a fairly complete and regularly updated picture of American missile defense capabilities -- which would allow the Russians to make a judgment, is that a threat or not?

I would also add, I think it would be useful for the United States to reiterate the suggestion made by the head of the Missile Defense Agency last year that he would welcome the Russians' coming to observe standard SM-3 missile interceptor tests. In fact, the Russians can do this in any case, because these tests are conducted in the Pacific Ocean over international waters.

NATO might consider offering that this cooperative missile defense arrangement would be time-limited, say, for four years. Medvedev, when he spoke in November of last year, said the threat doesn't emerge for six to eight years. But tell the Russians this is time-limited -- "We understand you have concerns, and you have four years to test and see if this arrangement, in fact, will ameliorate your concerns."

And then, finally, I think there are probably two points where I would suggest theat the United States and NATO change current aspects of the position that they've articulated.

Many NATO and American officials say that if there's a cooperative arrangement between NATO and Russia it will in no way change aspects of NATO's planned missile defense in Europe. And I would suggest that NATO ought to be ready to accommodate reasonable Russian concerns, but the criterion ought to be "those ideas that would not compromise NATO's ability to defend NATO space." If that criterion can be met, I think it would be appropriate for NATO to be more flexible, in terms of listening to, and perhaps taking into account Russian suggestions for a cooperative arrangement.

The second point would be to go back to the "adaptive" part of the Phased Adaptive Approach. And I think it would be useful for the United States, given

the Russian concern about Phase 4, when the standard SM-3 Block IIB is supposed to have a capability against ICBMs-it would be useful for the United States to say that if, in five or six years, it appears that Iran is not getting close to an ICBM capability -- and, I think, the first time, in 1997 -- Greg, you'd know -- in '98, the Missile Defense Commission there said that Iran could have an ICBM within five years. So that was 14 years ago. And I think at this point they've flown nothing farther than about 2,000 kilometers.

But if in five or six years Iran does not have something an ICBM capability, that the United States would be prepared to slow the development and deployment of the standard SM-3 Block IIB. And, again, the point being here, if the Iranian threat does not emerge, why would you want to go ahead and deploy an unneeded capability.

But, again, the goal here is to try to create a way to bring the Russians into a cooperative arrangement, because that's in the U.S. and NATO interest, in terms of defusing the problem issue, but also providing for a better defense of Europe.

MS. O'DONNELL: Great. Well, thank you very much, Steve.

Before turning to the floor, I'd like, if I may, to pick up on two points which have been raised.

And first, I'd like to ask a question to Greg and David, and that is: What are your views on the various forms of cooperation which Steve has laid out? Which do you think could be the most helpful? And also, to what extent do you believe there will be appetite from the United States, and Russia, to actually explore some of these days in the aftermath of a U.S. election? And that would be, of course, under a next Obama administration or a Romney administration.

And then the second point I wanted to ask was just to Steve -- and Greg mentioned Senator Kyl. And I was just wondering, what are your views on the argument

that Senator Kyl has made, that not only should the U.S. not be providing any legal guarantees to Russia on missile defense, but it should not even be providing political assurances, because this would be trading away America's right to self defense?

So, maybe -- Greg, if you would like to start?

MR. THIELMANN: Well, there's actually very little that Steve said that I have strenuous disagreement with. I think he laid out very well the various potential avenues of cooperation. And I really think that it's very hard to say that missile cooperation is not in the U.S. interest. There are those in Washington who say that, and I'm amused at the efforts made on the Hill to make sure that we never give Russia any secrets in the capability of our systems, which are not intended to threaten them in any way.

We can do a lot without bending U.S. interest in pursuing missile defense. I agree with Steve that one of the bet ways for Russia to relieve some of its anxieties is to get up close and personal, and see what we're doing, and to help us do it. I mean, they would gain a lot of information. Most of their greatest anxieties are worst-case analysis that is not really justified. Of course, we should be sympathetic to that, because we do worst-case analysis as well, which is often not justified.

One of the things I'm obviously most attracted to is Steve's proposal to in some way give meaning to the adaptability aspect of the Phased Adaptable Approach. I've been reading the words of Ellen Tauscher from Moscow, and others, very carefully, and I seem to hear more emphasis on the inevitability of a timely deployment of all four phases, than I do a stressing that, of course, this will only happen if the threat that we're worried about begins to materialize.

I think there are ways to make that much more specific. And I think Steve alluded to some of those ways, about using criteria -- have they flight-tested?

What is the range of the systems that they are deploying, and so forth -- that can link up with what we're doing to counteract those systems.

I don't think it's particularly helpful, when we use an SM-3 Block IA interceptor to shoot at an IRBM target, which we've already done. That's the very kind of thing that helps convince the Russians that we are bound and determined to develop all four phases of the system and aim at IRBM and ICBM targets, independent of whether we're way ahead of the threat or not.

MR. HOFFMAN: You know, essentially what Steve is suggesting and what Greg is suggesting is that we show Russia that if there's not a threat that we won't go there. And that the Phase 4, the Block IIB that you're afraid of might not happen. How do we persuade them of that? It's a long game.

But there's another, parallel, game the Russians are playing. They've laid out a series of threats of things they might do if there's not an agreement. And I would just like to mention a few of them, because then maybe we can weigh them up and see.

For example, they have announced, a year ago, plans to build a new liquid-fueled massive ICBM, 15-warhead, MIRV, and they say they've put this on the drawing boards. I have some doubts about whether they would ever do it, but it's very typical to start something like this 10 or 15 years out.

So, suppose we get nowhere for five or eight years, and we haven't persuaded them that we're not going to deploy the IIB fast interceptor, and they're eight years into building that missile? You know, it's happened before that plans like that have materialized for no reason. In fact, it happened in the Cold War, when Brezhnev once decided to build three missiles because there was a competition and he couldn't choose the winner.

Secondly, you know, Russians inherited from the Soviet time a whole series of countermeasures and technology from what was called the "asymmetric response" to Reagan's Strategic Defense Initiative. And that is hardware that's already in existence, and technology that they've already -- say that they've mastered, including decoys and other things.

And, you know, what the status of it is, is sometimes, often, rather opaque: Have they modernized it? Have they actually made it work? Will their new land-based missiles actually have some of these characteristics? I don't know. But, again, do we want them to go for years planning to do that, or not?

In the recent Moscow conference, the military floated a list of eight or nine further actions that they might take. I don't want to suggest that they're all for real, but this kind of bluster and threats is going to create a different kind of an atmosphere if there is years of uncertainty about our intentions. And one of the things they listed would be maybe to upgrade the existing Moscow anti-ballistic missile system, which has had its problems, and which is not a hit-to-kill system. It was originally designed for nuclear warheads to go off in the skies above Moscow, and rein radioactivity down on their own people. It's got its own problems. But do we want them to spend years more trying to think about how to upgrade that?

They again raise the question of countermeasures -- and also of attacking the sensors and the satellites and radars and command-and-control centers of a missile defense system.

So all of these things strike me as the kind of direction that would be counterproductive for Russia, expensive for Russia. And if they weigh those things against the kinds of things that Steve is discussing, my guess is that, in the end, they would rather go the route of cooperation if they could find a way politically to do it.

Because the countermeasures and hostile responses are definitely a heavier burden, in an area where the technology is not as well developed.

And I would just add that the general who put up the slide at the Moscow conference, but in bold-face down there at the bottom, "All these measures will be implemented only as retaliatory steps, provided a threat to the Russian strategic nuclear force from the U.S.- and NATO-deployed missile defense assets appears to be on the rise. Russian responses will be adequate, economically well-balanced, and effective.'

So, again, I think we should see this whole -- what they're thinking and where they're threatening to go, as well as our needs.

MS. O'DONNELL: Thank you.

Steve?

MR. PIFER: Yes, I think Senator Kyl had an op-ed that ran in *The Wall Street Journal* on Tuesday. And he's right in that there is no prospect of a legal guarantee that American missile defenses would not be directed against Russian strategic forces, because that would have to be approved by the Senate. And in current circumstances, I don't think there's any chance that anything that looks even remotely like a limit on missile defense would be ratified by the Senate.

But I guess I don't understand the logic of not offering a political assurance, where the President basically says we are not going to direct our missile defenses against Russian strategic forces. And it's interesting -- in his op-ed, in fact, Senator Kyl says that American missile defense are not targeted against Russia. So why would you not want to say that to the Russians? Particularly if it could get Russian cooperation that would be beneficial.

And I think, here, perhaps, this is where the Senator and I might disagree, is, you know, how important that is. I think it is very much in the U.S. interest to

minimize the chance that missile defense becomes a difficult issue on a U.S.-Russia relationship which is already pretty complicated. Because Russian help is important to us in a number of ways -- for example, in Afghanistan. Up until now, and I guess it may be starting, but the last six months, you know, American and NATO forces in Afghanistan have gotten zero supplies through Pakistan. It's all come through Russia and post-Soviet states through the Northern Distribution Network. You know, that help is awfully important to us.

Likewise, while the Russians haven't been as helpful as we'd like on Iran, two years ago the Russians supported a U.N. Security Council resolution which imposed an arms embargo on Iran. And then two months later they terminated the sale they had negotiated years ago to sell Iran a sophisticated air defense system. So I think there is value in finding ways not to antagonize the U.S.-Russia relationship.

The other point I think we might disagree on is, again, having Russia in this cooperative arrangement makes for a better missile defense.

And there does seem to be some skepticism in Congress -- Greg made the point about Congress, for example, limiting the ability of the United States to share classified or sensitive data with the Russians. Well, I think early warning tracking data from American radars would be counted as sensitive data. It's hard for me to see the Russians' being prepared to give us their sensitive early warning tracking data if we're not prepared to share.

So some of these limitations seem to be designed to frustrate cooperation without, in my mind, a good basis.

MS. O'DONNELL: Brilliant. Thank you.

Now, turning to the floor. I would be grateful if you could introduce yourselves and wait for the microphones.

Yes -- a question here in the third row.

MS. OSWALD: Hi, Rachel Oswald, Global Security News Wire. This question is for David.

Could you provide a little bit of the historical context for why Russia has such a different view than the United States about the evolving Iranian ballistic threat, even if they don't believe that Russian territory could ever come under a missile attack? Why can they not perceive that the United States has this fear -- genuine fear?

MR. HOFFMAN: I guess the question really is do they share our technical assessment of the progress that the Iranians have made?

And as far as I can see, their technical assessment of the progress that the Iranians have made suggests that there's a longer horizon, a longer timeline on the question of the long-range missiles. And the best evidence of this was the cable that was leaked through the -- I won't say who leaked those cables -- but the 2009 cable described these conflicting assessments from one of those joint meetings where this was discussed.

And I'll just quote from it. It said, "Russia said its bottom-line is that Iran lacks appropriate structural materials for long-range systems, such as high-quality aluminum. Iran can build prototypes, but in order to be a threat to the U.S. or Russia, Iran needs to produce missiles in mass quantities, and it lacks materials sufficient for the type of mass production needed to be a security threat. Russia further noted that the technology for longer-range missiles is sophisticated and difficult to master -- which they certainly understand from the Cold War.

And I would just add, I'm not an expert on all of this, but we know from 20 years of checking it out that Russia sent some of their best rocket-motor people, people that work on guidance systems and so on, to Iran. And those people came back. They

made repeated trips, dozens of trips. So Russia may actually have a valid insight into the timelines.

And I think the best net assessment I've seen outside of governments was Mike Elleman's piece about a year ago, IISS. And his timeline was similar to the Russian one, which is that the long-range missiles are not a threat in the next decade, from Iran.

So I think that's what it comes down to, not some kind of judgment about Iran's political system, not some kind of judgment about our fears or feelings about Iran's political system. It's really about can they do it -- materials, testing, expertise?

MR. THIELMANN: If I could just one thing to that, I think the Russian's may have underestimated Iranian capabilities to develop a solid-fueled missile systems, but if one looks at the record of projections of the U.S. intelligence community over time, it's pretty hard to avoid the conclusion that the Russians have projected things more accurately than we have in the future. And I think there may be some potential for a meeting of the minds, especially if we share information and cooperate more closely.

But there's no doubt that we have greatly exaggerated Iran's capability and intention of developing intercontinental ballistic missiles.

MS. O'DONNELL: Steve? Would you like to add something?

MR. PIFER: Nothing.

MS. O'DONNELL: Yes, gentleman in the back.

MR. MORLAND: Howard Morland.

I have always regarded missile defense as sort of IQ test. If you believe in it, you're not very smart. And if you pretend to believe in it, you're probably currying the favor of Republican voters who are not very smart -- the reason being that it's easily defeated by countermeasures, airplanes, cruise missiles, and clandestine surface

delivery. So Reagan's idea that this would make nuclear weapons impotent and obsolete is just a pure fantasy.

It's always seemed to me that the purpose of this fantasy is to provide a distraction from the true thing, which is the only thing that would protect us, which is nuclear disarmament. In other words, you build a new type of weapons system instead of disarming, which is the only thing that really will make a difference.

Where am I wrong about this?

MS. O'DONNELL: Any comments?

MR. HOFFMAN: Well, Howard, I would just say I certainly have written at some length about Reagan's fantasy, its sources and its implementation, and its legacy that we are still struggling with.

But I would also point out to you that we live in the real world, as it is, and it's not a disarmed world. I, speaking for myself, think that if you are going to evaluate threats, you have to evaluate them in a cold-eyed way.

I would agree with you, what you said about missile defense, and I've written even recently about countermeasures. And we could get into that discussion.

But it does not simply -- you know, like the whole issue of getting to zero. You don't get there quickly, in one leap. That's the world we live in.

MR. PIFER: Yes, I think a reasonable argument can be made by smart people for a limited missile defense capability -- and, you know, particularly when you're looking at shorter-range, and on the battlefield.

And, in fact, I do think, when you look at the standard SM-3 missile, when you look at the Pat-3, the THAAD, there are some capabilities now to defend against the shorter-range scale -- as long as you're not talking about decoys and

countermeasures. And the Pentagon, I'll give them credit on this -- I mean the Pentagon does admit they have not yet solved the problem of how you solve decoys.

And the way the standard SM-3 seeker works is it's cued to a certain point in space by radar. It then opens up its infrared seeker, and it then, hopefully, picks out a hot warhead against the coldness of space. Well, if there's a hot warhead, and seven or eight hot decoys, it's going to say "I see eight objects," and it will not know which one to go after. You know, if you can't solve that problem -- which I think is technically very, very difficult, missile defense, I think, really has some limited prospects.

And this is one of these where I think that the Russian concerns about missile defense, at this point, are overblown.

One of the things that the Russians did, or then-the Soviets quite aggressively in the 1980s, given their concern about SDI, was to develop countermeasures. And I think the assumption is that Russian intercontinental ballistic missiles, and submarine-launched ballistic missiles, have fairly sophisticated decoys, chaff, countermeasures that would simply overwhelm the ability of American missile defenses now, or for the next decade.

MS. O'DONNELL: Thank you.

Yes -- sir, in the second row.

MR. PIERRE: Andrew Pierre.

In a few days we'll have the NATO summit meeting in Chicago. And I think it's already been scripted that NATO is a nuclear alliance. We've now known that for some time -- and that there's a NATO-wide agreement on next steps in missile defense. So that's one side of a quandary.

The other, as you travel around Europe, and go to ministries of defense and foreign affairs, and the better journalists, and so on, there's a great deal of

uncertainty, skepticism, about missile defense in the long term, its necessity. It's not just its technical feasibility, but the money that it would cost, and so on.

So it's not clear, to me at least, where Europe really stands on missile defense. I won't even get into questions of the Asia dimension of this.

I'd be interested in the views of anybody on the panel as to whether, in fact, we have a coherent approach -- within the Western World, let's say -- or whether we simply are pushing off into the future the many disparate elements which could lead to uncertainty and, eventually -- I won't say a "collapse" of missile defense. In this area things never collapse, but they just go on to a new phase, where there's new level of uncertainty.

Thank you.

MR. PIFER: Well, let me take a first crack.

I don't think, in a lot of NATO European capitals, people spend a lot of time awake at night worrying about an Iranian ballistic missile attack. But I do think that there is support of missile defense, as currently described, for other reasons.

In Central Europe, particular in Romania and Poland, there is support for missile defense because if Phases 2 and 3 go forward, it will mean the presence of a small American detachment, and a small number of American SM-3 missiles on their territory, which those countries value as an additional sign of American commitment to their security, and additional safeguard.

I think, for a number of other countries -- and, I think perhaps Germany would fit into this group -- when they look at the balance of NATO conventional and nuclear missile defense forces, there is a hope that missile defense can assume a bit more of the deterrence and defense burden, and then thereby perhaps reduce the need for the nuclear requirement, consistent with -- I think a number of those countries would

like to see NATO's nuclear posture be reduced, and even perhaps including the removal of American nuclear weapons from Europe.

And then I think there are a third set of countries that see this as an issue that's important to Washington. They see this as a program which will be largely funded by Washington, and they're prepared to say, you know, go ahead.

So, there is, I think, a number of different reasons for it. But I don't see this as an issue that, in the near term, is going to become hugely controversial within NATO. It's not like, for example, in the early 1980s, as Greg and I went through, when we were both at the State Department, with the question of deployment of ground-launched cruise missiles and the Pershing IIs. I just don't see this rising to sort of that level of anxiety.

MR. THIELMANN: And I would just say that I agree with Steve that there are a lot of reasons for the NATO alliance making a declaration at Lisbon on missile defense, and for presumably reaffirming it shortly in Chicago.

The one thing that I hope is true is that they don't mean what they say. (Laughter) I can't believe that the Europeans, who objected so strenuously to the U.S. leaving the ABM Treaty, who were so upset with Ronald Reagan's Star Wars program, believe that Europe can have a territorial population missile defense that will magically protect them from any kind of nuclear-tipped IRBM or ICBM threat.

That's what the words say. I mean, I'm really surprised they didn't say that this will render ICBMs and IRBMs impotent and obsolete. I mean, this is pure Star Wars fantasy, the language that they have chosen in that Lisbon Declaration. But I'm confident they don't mean it.

MS. O'DONNELL: Any other -- yes, sir, in the second row.

MR. MACDONALD: Hi. I'm Bruce MacDonald, and I'm a lecturer at the U.S. Institute of Peace.

One of the -- it's always struck me that one of the, one issue, or aspect that informs the U.S. position on missile defense is the tacit assumption that we'll have it and nobody else will. And in that context, you can -- well, why should we make a concession to someone else? And it's been true for a long time. Russia's missile defense system has been just about phased out. Not quite.

My question is Putin has said something about maybe reviving, not ruling out reviving missile defense. India has openly talked about developing a missile defense. China conducted a successful missile defense a little over two years ago. Now, it may have been a cover for an ASAT test, but nonetheless --

My question is, do you see any prospect of Russia, or anyone else, suddenly upsetting the assumption that we make tacitly that we'll have it and nobody else will -- keeping in mind, you know, that back 40 years ago, one of the things that impelled us to the ABM Treaty was not because we loved the idea of abandoning defenses, per se, but we were worried about the possibility of the Soviet Union blunting our nuclear deterrent.

Do you see any prospect, either -- and I'm thinking, in particular, Mr. Hoffman, your comment -- any prospect at all that we might see, in the future, a changed, a missile defense environment where maybe that assumption isn't quite as steadfast as we tacitly make it now?

MR. HOFFMAN: I think it's highly unlikely that Russia would try to build a competitive missile defense system, given their current difficulties with military modernization, with force modernization, with, you know, economic difficulties that they have. It seems to me to be out on the edges of what their priorities might be.

I can't speak, necessarily, for China and India. I'm not as familiar with that. But I would point out that China, you know, has already a minimum-deterrence approach. What would they need missile defense for, given what their real aims are?

And as for other countries, who knows? You know, it's hard to predict.

But I would just leave you with one other historical point. While these two guys were at the State Department in the '80s, I was the White House correspondent for *The Washington Post*, covering President Reagan. And I remember Reagan -- frequently in his speeches and certainly at Geneva and Reykjavik -- saying to Gorbachev, you know, well, this is not a weapon. It won't -- you know, it will save lives, it won't avenge them. "And I will share it with you."

And Gorbachev said, "Oh, you won't even share farm machinery for milking cows with us. You know, why should -- " -- (laughter)

Well, recently, the Reagan library has declassified most of the National Security Planning Group minutes of the Reagan administration. And one of the interesting things I discovered there was that in the late Reagan presidency, in the second term, they ran a red team, kind of a small simulation, to see what would happen in the even that the Strategic Defense Initiative could be shared with the Soviet Union. And the results were presented to the President. And all the experts, and people that ran the simulation came to him and said, Mr. President, you can't do it.

So, you know, could there be a shared system? We're not in the Cold War. Things are different. Yes, we could integrate data and radars and so on. I think that would be easy.

But, you know, I think we should get over the mindset of people building large, complex weapons systems like this. I don't see it.

MR. PIFER: Could I add two points?

MS. O'DONNELL: Yes -- Steve?

MR. PIFER: I think in the list of the countermeasures that the Russians have put out there, they've talked about, in effect, building their own sort of Phased Adaptive Approach. They talked about the S-400 and the S-500, which are anti-aircraft missiles, being given better and better capabilities against ballistic missiles. And I think somebody even said at one point the plan was to deploy 2,000 of these things by the end of the decade.

MR. HOFFMAN: Oh, but they admitted just recently that the S-400 has never, ever successfully hit a ballistic missile.

MR. PIFER: Yeah. Yeah. And when you talk to people around here, they're not at all concerned about that system.

The other point -- on your last point about SDI and the Russians, and the sharing possibility, I think it really is hard.

But there was an interesting idea that Dean Wilkening, out at Stanford -- or I guess he's now at Lawrence Livermore -- wrote about three months ago. And while most of the ideas that have come up for U.S.-Russia, or NATO-Russia missile defense cooperation talk about how you would combine existing systems, exchange data and such, he actually is the one that's proposed a hardware cooperation.

And what he suggested is that NATO and Russia together build, in the middle of Russia, basically a phased-array radar that would have a 360 degree view. And he said this would be of interest to both sides. He said this would be useful to the Russians because it would actually help the Russians plug a gap that they still have in their early warning coverage looking out around Russia. But, also, it would provide useful tracking information for the United States if Iran ever got an intercontinental ballistic missile and was launching it towards the western part of the United States. Because very

quickly, that missile would pass out of view of the radar in Turkey, and it would be some time before it would be picked up by existing radars in Alaska and Greenland. And this would give you tracking information all the way across Russia. So he says here's an idea.

Now, the cost of it is pretty impressive when you're looking at strained defense budgets. And it would get into a degree of technology sharing. But, you know, it is kind of an interesting idea about, you know, actually in terms of sharing something that might have appeal to both sides.

MR. THIELMANN: I'd just like to say that I do not worry about full-fledged Russian or Chinese pursuit of ballistic missile defense. What I worry about is the prudent worst-case reactions of other countries to a vigorous Indian pursuit of ballistic missile defense, and Chinese inevitable experimentation, research and development into ASAT and ballistic missile defense.

If the U.S., if some people in the U.S. can get so upset about the number of miles of underground tunnels and imagine them populated by nuclear weapons every few feet, you can imagine what they will do to a vigorous R&D program in China on strategic missile defense. And what prudent Pakistani strategic planner would ignore a vigorous Indian prosecution of ballistic missile defense that might have a prospect of attenuating the effectiveness of Pakistani missiles.

This is what happens with strategic missile defense. Other countries react. They react not just to the reality, but what could happen if it's even worse than people think. And therefore it's terrible for efforts to moderate or reduce offensive ballistic missiles.

MS. O'DONNELL: Thank you.

Yes -- I have, sir, second row.

MR. GREGORI: Thank you. Alex Gregori, Voice of America Russian Service.

I can imagine, you know, for a lot of Russian leaders, and a big part of Russian population, that missile defense becomes not just political, a military factor is part of a symbol of life, that's proof of American aggressiveness. And I can imagine that Moscow will never agree with missile defense sites in Poland, for example. Any proposals from United States or NATO --

Do you think the United States really needs a missile defense system in Eastern Europe, considering such a rational position?

Thank you.

MR. PIFER: I mean, I think the missile defense system is going to go forward for a number of reasons. And this is where, I guess, I'm a little bit more optimistic than your question suggests about how the Russians are going to look at it.

I think when the Russians at the system, and they back away a bit from their rhetoric -- you know, if you look at where the United States is going to be in 10 years' time, and even if we go ahead and we augment the ground-based interceptors in Alaska, and we build as many SM-3 Block IIBs as we probably can in 10 years, you're still talking about probably only 100 to 125 U.S. interceptors in Alaska California, at ships at sea elsewhere, that would have the capability to engage a Russian ballistic missile warhead traveling at the speed that an ICBM warhead, or an SLBM warhead would be traveling.

And when you're looking at, today, when the Russians have more than 1,400 ballistic missile warheads on strategic missiles, plus all sorts of countermeasures, that doesn't compute to me as a threat.

Now, I think, you know, obviously, if there were a Phase 5, or 6, or 7, or 8, going on, at some point the Russians might have a reason of concern. And at some point, an American president, I mean, if he was pursuing President Obama's vision of bringing weapons down, might face a dilemma. The may be some point where you can't reduce any more without doing something about missile defense.

But I think that's a question for the future.

If the Russians choose not to engage -- and the ideas I described earlier were designed to make it as easy as possible for them to say yes. But at the end of the game, they may say they don't want to play.

But I think the Russians, A, they're not going to have a way to affect the deployments from going forward, and the plans in Romania and Poland. But there's also a certain risk that Russia looks sort of impotent in terms of not being able affect that ability. It seems to me that Russia has a better stake at trying to get in the game, and working from within in terms of being able to affect those missile defense arrangements, than if it sits on the outside and continually tosses out threats that probably only solidify the determination of countries to go forward.

MS. O'DONNELL: Any other comments?

There was one more question here on the right. Yes, sir.

MR. OELRICH: Hi. Ivan Oelrich.

The Russians -- I don't read Russian, but in their English-language statements they say they want "legal guarantees," of some sort of restrictions on missile defense. And then we here in Washington always interpret that as a treaty, and we say, well, that can't get through the Senate.

But they're always very careful about their choice of words. When they say "legal guarantees," do they really mean ABM Treaty II? And you say, Steve you

said, well, we can give them political guarantees. Well, why can't we just give them what you're calling "political guarantees," and say that's a legal guarantee?

Are they really, really insisting that we have a treaty, and get a two-thirds Senate ratification? Or can we do something in between and just call it a legal guarantee, and everybody's happy.

MR. PIFER: Well, the full formulation is often "legal guarantees, accompanied by objective criteria." And what they explain the objective criteria to be are limits on numbers of interceptors, limits on locations, limits on velocity. So it looks to me like something like the ABM Treaty, with possibly parts of the Demarcation Agreement from 1997 thrown in.

And, again, as a legal matter, I think that that's very hard to foresee in current circumstances of ever saying yes to something like that.

Now, if you backed it off and said -- if the Russians are looking for at the end -- and I thought it was interesting, David's point about in this instruction, "firm guarantees." Now, I don't want to read too much into that word, but maybe there's a possibility that Russia is creating a bit more space to accept something less than legal guarantees.

But if it was a political assurance that "our systems aren't going to be directed against you," my sense is that the White House is prepared to, you know, put words like that down in writing, and maybe even have the President sign them.

But the legal guarantee, as at least explained sometimes by Russians, with all of the added baggage of limits on velocities, numbers, and locations, I think is problematic.

MS. O'DONNELL: Any other -- all right, then on the other side. Yes, I have the gentleman in the middle who caught my eye. Yes.

SPEAKER: I have two interrelated questions.

The assumption of, well, I guess, most of the panelists, was that you have a program that isn't going to be, in terms of the American position, isn't going to be affected by the politics in America over the next 10 years. It assumes no change of administration.

From the standpoint of Moscow, given what's happened over the past number of decades, is there any reason to believe that they can assume that there will be no change?

And the related question -- and maybe Steve spoke to this, but I'm not sure -- what effect will the continuation of the program, particularly if they can do stage four and beyond perhaps, have on the prospects of further reductions in U.S. and Soviet missiles, and on the attitude of someone like China, looking at where this whole thing is going?

Because I think if you look at it over the decades -- which I like to do -- we're losing the battle to deny the interrelationship of offense and defense. And so this will add to the need to have offensive increases, it would seem to me.

MR. PIFER: I can't resist taking the question from my former instructor, who first got me into arms control, way many years ago.

No, I think certainly there is an issue there. And there was an interesting quote by now-Deputy Prime Minister Rogozin in January, where he basically said of the Phased Adaptive Approach. But he goes: the Americans aren't going to stop with Phase 3. There will be a Phase 4, a Phase 5, a Phase 6, a Phase 7.

And I think, for serious Russian military analysts, that's the concern. It's not so much about what happens in the next 10 years, but if American technology

continues to improve, is there some point where a serious threat to their capabilities emerges?

And I think that that is a legitimate concern on the part of the Russians. And at some point, it may very well affect Russians' readiness to reduce strategic offensive forces. And that point, the President is going to have to choose -- does he want to go forward with further reductions of strategic forces, which may require making something, perhaps even a legal agreement on missile defenses? Or does he want to continue with missile defenses and then accept that he can't reduce forces further?

For another president, that may not be a dilemma, but I think that that's probably a point out in the future. But that problem certainly lingers out there.

On the question about change of administrations, I think the Russians do take that into account. And one of the reasons why they have been perhaps slow to pick up the offer on missile defense cooperation that's on the table now is because they want to see what happens in our election in November.

Now, a more clever Russian approach actually might have been to embrace missile defense cooperation, and embed the U.S. European Phased Adaptive Approach in that, so that you had a NATO-Russia plan this year, which might actually give them some protection against a change of administration, and a new administration wanting to go back, for example, to ground-based interceptors in Poland. Because, in that case, I suspect that Washington would have a problem not only changing the plan with Russia, but perhaps would have a problem in changing that plan if it would be with NATO, with a number of European capitals.

But sometimes the Russians don't want to take that kind of a risky gamble.

MS. O'DONNELL: Any further comments?

MR. THIELMANN: Yes, I would just add one comment on the worries about Chinese reactions.

One of the things I worry about, even though I'm very much an advocate of missile defense cooperation, it is an interesting intellectual exercise to imagine close U.S.-Russian cooperation on missile defense at some time in the future, and how China would react to that. I don't think it would necessarily convince China that it could continue its no-first-use, very modest kind of ICBM structure.

So there are concerns at various points along the timeline that missile defense generates.

MR. PIFER: And the Russians do think about that. In one of the track-two dialogues that I took part in, when we were talking about a joint center, there was possibility you could do these joint centers virtually, having just computer hook-ups. But several Russians, including a couple retired Russian generals, say, no, you want a jointly manned center, where you have NATO, Russia people physically there. And one of the advantages was you could bring Chinese observers. They could come there from time and time and say, "This is what we're doing," and precisely using that as a vehicle to help allay the Chinese concerns. Because Russia also, I think, is mindful that it does not want its cooperation with NATO to be seen somehow as directed against the Chinese.

MS. O'DONNELL: Yes -- and I had a lady here, in the third row.

And if I could just check, are there remaining questions. Sir, at the back. Have I missed anybody else?

MS. FORTIER: Thank you. Allison Fortier, with Lockheed Martin. Steve, I have a question for you on the U.S.-Russia cooperation.

U.S. industry has been brought into this dialogue in the past. We were a part of it. There's been a lot of interest and support for it; it's a very good idea. The joint

data center was originated in the Clinton administration. Russia through up taxes and liability, which most people thought was a spurious objection.

We were asked to participate in an analysis of systems integration of Western radars and the radar at Gabala. That went nowhere.

Targets, that was -- I personally went to Moscow to talk to Russians about cooperation on targets. That went nowhere.

RAMOS, which was in Arizona State, Missile Defense Agency finally stopped funding it because of lack of Russian cooperation. They're invited every year to the multinational missile events conference, they refuse to come. They haven't come to observe missile launches. And a lot of this is -- or interceptor tests -- was well before the IIB and before the Phased Adaptive Approach.

And the transparency measure that you mentioned, all you have to do is go on the Missile Defense Agency website and look at the public documents, which go forward five years and talk about the number of interceptors that we're going to build.

So why do you think the Russians would now accept missile defense cooperation, if we upped the ante and gave up systems that could offer defense to the United States in very small numbers?

MS. O'DONNELL: Thank you.

And then what we'll do, we'll take the last question, as well, from the fellow at the back.

MR. DENNISON: Hi. My name is Ben Dennison. I'm with Executive Intelligence Review Magazine. I wanted to some clarification on the question of missile defense, and it was -- SDI was brought up a number of times.

And it was my understanding that the origin of the whole SDI policy went back even pre-Reagan to -- I think there's a statement by an Air Force General by the

name of Keegan, who had reacted specifically to Russia's, the Soviet Union's development of beam technologies, and demonstration that beam and laser technologies were being developed by the Soviet Union. And that, from what I understand, spurred the discussion of the SDI, not necessarily the kinetic missile-to-missile defense systems, but the development of beam, particle-beam and laser-beam systems.

And as far as I understand, when Reagan spoke of rendering nuclear weapons impotent and obsolete, it's wasn't in reference to hitting missiles with missiles, which is a pretty difficult process, but it was in reference to work being done at the National Labs and other frontier scientific work on new physical principles, so-called, of laser and beam defense systems.

So I'm curious, what the comment is on that aspect of missile defense and cooperation with the Russians on new frontier technologies, which would also, obviously, have large economic spinoff benefits from pursuing new frontier scientific areas. So I'm wonder what the comments are to that aspect of the discussion.

MS. O'DONNELL: Thank you.

So these will be the closing remarks. So we'll take them from reverse order, starting from Steve, David, and Greg. And then, answering questions, and any other closing remarks you'd like to make.

MR. PIFER: Okay, well, let me take the first question.

First of all, I don't know if we all this out, if the Russians, at the end of the day, will say, yes, we want to cooperate, or not. But I think the objective of the United States and NATO should be to make it as easy as possible for them to say yes, because my judgment is that having the Russians in the tent in a cooperative arrangement is in our interest. I think it will make for a better defense of Europe, and I think it will prevent this problem from undermining other aspects of U.S.-Russia cooperation, on a

relationship that is already pretty complex, and that has questions where we want to have Russian help.

On the question of Phase 4, I think I -- maybe I should have been clearer -- the offer, I think, should be condition. And the point would be to the Russians to say, look, if the Iranians are not making progress toward an ICBM, we might put off Phase 4. But I guess I'd flip the question around: If it's apparent in six or seven years that the Iranians aren't going to get an ICBM, you know, why do you go ahead and build a defense for which there's no threat?

MS. O'DONNELL: Dave?

MR. HOFFMAN: I'd like to answer both questions quickly.

On your question, you know, I think it's hard to predict what Russia's going to do, but they will say no repeatedly until they say yes. And I would ask you to refresh your memory about what happened at Reykjavik, where Gorbachev set a trap and used this issue to sandbag Reagan a little bit on offensive cuts and trading them, and Reagan said no. And what happened after that? Well, what happened after that, it was in February, Alexander Yakovlev went to Gorbachev and said, "Look, you don't need to tie all this stuff together anymore. Why don't you just untie the package, and let's make some concessions? They haven't given us anything on missile defense, but let's negotiate an INF, let's move ahead." And they did.

And I suspect, at some point, when Russia concludes it's in its interests perhaps to cooperate rather than be on the outside that might happen again -- if they reach that point, and if the incentives are structured that way. Certainly, I don't know anybody in Russia in the know on these subjects that believes building a new liquid-fueled massive ICBM out there in Siberia, which is what they're talking about doing, is

realistic, or that they want to do that, rather than have a hand on some -- or several data centers and be part of it.

On the question of particle beams, and new physical principles, and lasers, I would just recall -- you've got a very selective, small piece of the beginnings here. When Reagan said to make nuclear weapons impotent and obsolete, I think he was talking about all of the efforts, not necessarily on that.

But Reagan also said, at the same time, in 1985 especially, in a series of series, that the Soviets were way ahead of us in these particle-beam and laser technologies. And he was wrong. And we now know that the Soviets did try, and worked very hard to achieve progress on these things, and they had largely failed by 1978. And into the '80s, when we were repeatedly told that the Strategic Defense Initiative was necessary to avoid a Soviet breakout from the ABM system, the Soviets were nowhere near breakout. They were actually much closer to breakdown.

So I think we should be careful, a little bit, in some of these exotic technologies, both in our interpretation of their role in the history, and in whether or not they could succeed today. I don't know anybody who's very optimistic today, even in the United States, about using directed-energy weapons in missile defense.

MS. O'DONNELL: Thank you.

Greg?

MR. THIELMANN: And just adding to that point, I think the National Academy of Sciences had some pretty definitive language about how difficult that would be, which supports David's point.

I think that Russian position right now on demanding a legal guarantee is a holding pattern, as I think Steve alluded to, and David would support. I don't think that a second Obama administration would prevent progress on missile defense cooperation, or on finding an avenue to continue the strategic nuclear reductions.

On the rogue-state threat, though, I think I would just conclude with a reference to a remark made earlier this week by Walt Slocombe, talking about, in his view, the critical need to convince the leaders of Tehran that a nuclear attack on the United States would not only be fatal, but would also be futile.

Well, in my mind, U.S. security relies mostly on our deterrent, both our nuclear and conventional deterrent, that if the leaders of Tehran and Pyongyang are convinced that a nuclear attack on the United States would be fatal, I think they are convinced of that, rightly so, then we don't need to make it futile, as well.

MS. O'DONNELL: Thank you very much. Well, thank you very much to everyone.

I think maybe two points really did obviously come through throughout this debate. It was, on the one hand, that it does clearly seem to be, both in the U.S. and Russian interest to cooperate on missile defense in Europe, be it because it will make missile defense more effective, be it because the pursuit of retaliatory methods would be very costly for everyone involved, and also, of course, because there is a risk that it could adversely affect -- if we're not cooperating on this matter, this can adversely the scope for negotiations between Russia and the United States on nuclear reductions.

At the same time, of course, what also has come through is that unfortunately it does look like political realities in both Washington and Moscow are likely to continue to pose somewhat of a challenge to moving forward towards cooperation.

But, hopefully, the report released today will help move both sides forward towards cooperation.

And on that, all that is left to me is to thank you very much for your questions, and ask you to join me in thanking our speakers, Greg Thielmann, David Hoffman, and Steven Pifer. (Applause)

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