Path Toward a World Free of Nuclear Weapons

The Euro-Atlantic Challenge
29 March 2010

The Sam Nunn Bank of America POLICY FORUM

Georgia Institute of Technology
The Sam Nunn School of International Affairs
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Executive Summary

- Opening remarks by former Senator Sam Nunn
- Keynote speakers: Thomas P. D'Agostino, Under Secretary for Nuclear Security and Administrator, National Nuclear Security Administration, U.S. Department of Energy; Michèle Flournoy, Under Secretary of Defense for Policy, U.S. Department of Defense; Sergey Kislyak, Ambassador Extraordinary and Plenipotentiary of the Russian Federation in Washington D.C.
- Panel Discussions: "Euro-Atlantic Strategic Tensions and Fault Lines" and "Euro-Atlantic Strategic Cooperation: Prospects for Advancing Regional and Global Nuclear Security"

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Summary Statement

> **"The goal of a world free of nuclear weapons is like the top of a very tall mountain. It is tempting and easy to say: 'We can't get there from here.' It is true that today in our troubled world we can't see the top of the mountain. But we can see that we are heading down – not up. We can see that we must turn around, that we must take paths leading to higher ground, and that we must get others to move with us." --Senator Sam Nunn**

Debate over the desirability and feasibility of eliminating nuclear weapons has gathered unprecedented momentum across the globe. New thinking on practical arms control and security related steps and visions for a world free of nuclear weapons has been propelled by the moderate political center of American and international strategic communities. A number of current U.S. officials, together with many former leaders of the national security establishment, now openly acknowledge anachronisms in current nuclear force posture and debate the fundamental long-term value of nuclear weapons.

This forum highlights underlying political, security, economic, and energy issues that currently complicate reassurance among Europe, Russia, and the United States, and also proposes realistic directions for redressing these fault lines and strengthening cooperation and identifying avenues for cementing closer Euro-Atlantic partnership on nuclear issues.

Accordingly, the forum has proposed specific steps towards deep reductions in U.S. and Russian nuclear arsenals, changing respective declaratory policy and force postures, cooperating on missile defense and early warning, and advancing nuclear risk reduction more broadly. Also addressed are the important challenges and opportunities for deepening Euro-Atlantic strategic engagement and confidence building with steps suggested to advance U.S.–Russian nuclear arms reductions while enlisting other nuclear weapons states to join in nuclear threat reduction and the disarmament process.

The forum has sought to integrate and build upon Senator Nunn's co-leadership of two projects – the Nuclear Threat Initiative's (NTI) Nuclear Security Project, which, in cooperation with the Hoover Institution, aims to promote global steps toward reducing reliance on nuclear weapons; and the Carnegie Endowment's Euro-Atlantic Security Initiative (EASI), which strives to foster new approaches to collective security – as well as new initiatives to assess future requirements for strategic stability underway at Georgia Tech's Center for International Strategy, Technology, and Policy.

Morning Session

9:00 - 9:45 Introductions and Welcoming Remarks

Brian Woodall, Acting Chair, Sam Nunn School of International Affairs, Georgia Institute of Technology

The Honorable Sam Nunn, Distinguished Professor, Sam Nunn School of International Affairs, Georgia Institute of Technology
Co-Chairman and Chief Executive Officer, Nuclear Threat Initiative

9:45 - 10:30 Morning Addresses

Adam N. Stulberg, Associate Professor & Co-Director, Center for International Strategy, Technology, and Policy, The Sam Nunn School of International Affairs, Georgia Institute of Technology

Video Featuring The Honorable Gareth Evans, President Emeritus, International Crisis Group

Ambassador Sergey Kislyak, Ambassador Extraordinary and Plenipotentiary, Embassy of the Russian Federation in Washington DC

10:30 - 10:45 Break - Refreshments

10:45 - 12:00 Panel Discussion: "Euro-Atlantic Strategic Tensions and Fault Lines"

Fyodor Lukyanov, Editor-in-Chief, *Russia in Global Affairs*

General Charles Boyd, United States Air Force (Ret.)

Karl Kaiser, Adjunct Professor of Public Policy, Harvard University, John F. Kennedy School of Government

Moderator: Ambassador Sergey Kislyak

12:00 - 1:30 Introduction & Lunch Speaker

Kenneth J. Knoespel, Interim Dean, Ivan Allen College of Liberal Arts, Georgia Institute of Technology

Thomas P. D'Agostino, Under Secretary for Nuclear Security and Administrator, National Nuclear Security Administration, U.S. Department of Energy

Afternoon Session

1:45 - 2:15 Introduction & Afternoon Speaker

The Honorable Sam Nunn

Michèle Flournoy, Under Secretary of Defense for Policy, U.S. Department of Defense

2:15 - 3:45 Panel Discussion: "Euro-Atlantic Strategic Cooperation: Prospects for Advancing Regional and Global Nuclear Security"

Alexei Arbatov, Scholar-in-Residence, Carnegie Endowment for International Peace – Moscow Center

Camille Grand, Director, Foundation for Strategic Research

George Perkovich, Vice President for Studies, Carnegie Endowment for International Peace

Moderator: Under Secretary Michèle Flournoy

3:45 - 4:00 Closing Remarks: "The Way Forward"

The Honorable Sam Nunn

4:15 - 5:15 Film: "Nuclear Tipping Point"

Morning Session

Former Senator Sam Nunn, Distinguished Professor, The Sam Nunn School of International Affairs, Georgia Institute of Technology

Nothing will move our government faster in the right direction than a public armed with the facts. That's not an original thought. This is the defining idea of democracy. It is also the idea of this Bank of America forum.

We are bringing together experts on technology, public policy, and international affairs to tackle some of the most important issues that we face. We will be grappling with the challenges and opportunities of deepening cooperation between the U.S., Russia, and Europe so that we can reduce, and hopefully one day eliminate, major security dangers in that region of the world, including threats posed by nuclear weapons.

For the first time in a decade, the North Atlantic Treaty Organization (NATO) alliance is engaged in a process to update what is called the strategic concept. This is a road map for NATO strategy over the next ten years taking into account the threats and opportunities that we have today and will have in the future. The announcement this past Friday by President Obama and President Medvedev that the U.S. and Russia have reached a new nuclear arms agreement has created an improved climate for the NATO strategic review.

I assert that there can be no effective coherent NATO or European security strategy to reduce dangers that does not take into account Russia: its strengths, weaknesses, aims, history and ambitions. So two decades after the Cold War, it is remarkable and dangerous that the U.S., Russia, and NATO have not developed an answer to one of the most fundamental security questions that we face. What is the longtime role for Russia in the Euro-Atlantic security and economic arc? Whether caused by the absence of vision, lack of political will, or nostalgia for the Cold War, the failure of both sides to forge a mutually beneficial and durable security relationship marks a collective failure of leadership in Washington, European capitals, and Moscow.

Over the past 20 years, Russia's conventional military capability has eroded due to the breakup of the USSR and economic downturn. Thus, it has come to rely more on nuclear weapons. It has declared that it might use nukes first, before being attacked, a right that NATO reserves. So does this mean that we're headed back in time?

With the Strategic Arms Reduction Treaty(START) Treaty, April Summit, and Non-Proliferation Review Conference, we have the opportunity to examine the our current trajectory. This includes NATO, U.S., and Russia asking the question: Does NATO want Russia to be inside or outside of the Euro-Atlantic security arc?

If Russia is to be outside, then we will continue unchanged. However, if Russia is to be inside, then we must ask:

1. From a NATO perspective, does an expansion of membership to distant states obligate us to incur enormous increases in the defense budget or be forever committed to the higher risks to the Cold War concepts of deterrence, including the possibility of first use of

nuclear weapons? Are we really examining the security implications of NATO expansion over the long-term or has expansion primarily become a political exercise with little thought to risks or resources?

2. From a Russian perspective, is it wise to pressure neighbors so that they hurry to join in the strongest alliance available today in the form of NATO? Ratcheting up the pressure in various ways on Ukraine and Georgia does not encourage these countries to work with Moscow. Instead, it drives them to seek NATO's protection. Is this what Russia really wants in the future?
3. Can Russia avoid the temptation to use its emerging energy-superpower status to achieve political ends? Will it become a reliable and responsible market participant following the rule of law? And President Medvedev, to his great credit, has repeatedly emphasized that as the direction he wishes Russia to move in. Will Europe and the United States assure Russia of economic cooperation if they do move in that direction?
4. Are Russia and the West destined to continue the assumption that Russia will always be outside the Euro-Atlantic security arc? Both sides spent trillions of dollars during the Cold War. Do we want to see this movie repeat itself with huge risk and resource implications?

On the nuclear side of the ledger, when you have this many nuclear weapons, things can go badly wrong. We continue to live with the risk of catastrophic nuclear accidents or nuclear terrorism. The threat is greater than zero and higher than it should be after the Cold War. We still have concern over Russia's early-warning commanding control posture. U.S. and NATO policies might compound the risk as this includes the Russian perception that our conventional forces and long-range capabilities threaten their nuclear deterrence.

With Obama and Medvedev's announcement of reset relations between Russia and the United States, I believe we have a window of opportunity to reduce risk and improve the security of Russian, U.S., Europe, and, indeed, the world in a very meaningful way.

I suggest that in order to reduce the risk of a mistaken nuclear launch to as close to zero as possible, which should be our goal, the U.S. and Russia should take steps to increase warning and decision time for both U.S. and Russian leaders. Such steps could include bilateral and unilateral measures relating to U.S. and Russia early warning command and control postures including reductions in warheads on prompt launch status on both sides. Long overdue cooperation on missile defense should also be a high priority and could be a game-changer if we're able to have a breakthrough in that regard. It will not be easy, as getting the U.S. Air Force, Army, and Navy to work together is enough of a challenge. Getting U.S. and Russia to work together on missile defense is a huge challenge. But the stakes are so high that it could change the whole psychology; it could change everything about our nuclear posture and nuclear relationship. So it's worth the effort, but it will only happen with the strong leadership of our two presidents—and it will not come from the bureaucracy. It is my hope that Obama's nuclear posture, soon to be released, will lay the foundation for meaningful discussion between the U.S., NATO, and Russia in the crucial area of warning and decision time as applied to nuclear postures, conventional postures and missile defense cooperation. The good news and challenge is that these questions are moving to the front burner now where they should have been many years ago. The U.S. and Russia should also be concerned about tactical nuclear weapons, a terrorist's dream. Stored and deployed in the thousands. So we need to question the security of those storage areas.

If we are going to be successful in dealing with the hydra-headed threats of emerging new nuclear weapons states, proliferation of enrichment technologies, unsecured nuclear material and catastrophic terrorism, as well as energy and environmental concerns, many nations must cooperate, especially Russia and China.

Dr. Adam Stulberg, Associate Professor, Georgia Institute of Technology

The report issued by the International Commission on Nuclear Non-Proliferation and Disarmament represents a global framework for discussion and debate on non-proliferation and disarmament that is distinguished by presenting realistically achievable goals and recommendations for eliminating nuclear threats. That includes, for example, slashing global nuclear arsenals by 90% by 2025, capping U.S. and Russian arsenals at about 500 nuclear warheads, and calling for a unilateral declaration by the nuclear weapons states that the sole purpose of nuclear weapons is to deter their use by others.

Gareth Evans, President Emeritus, International Crisis Group

This is an introduction to the report from the International Commission on Nuclear Non-Proliferation and Disarmament which will make a path-breaking contribution to the goal of a nuclear weapons free world. The value of this report is outlined in the following four points:

1. It is timely. For the first time, the world is riding a wave towards progress. Consider Sam Nunn and President Obama's commitment to a world without nuclear weapons.
2. It is comprehensive. The report deals with the issues of disarmament, non-proliferation, and peaceful uses, showing their interdependence rather than concentrating on one or another of these areas.
3. It has a representative character of the commission that produced it with the processes of consultation and advice.
4. It has hard-headed pragmatism and realism by mapping a way forward by setting short, medium, and long-term agendas that reflect realities.

The report is built around a short term agenda to 2012, a medium-term to 2025, and a long-term beyond 2025.

- Short–term agenda:
    - Create building blocks for non-proliferation and disarmament.
        - Ensure physical security for nuclear materials
        - Bring Comprehensive Test Ban Treaty into ratified force
        - Have successful negotiation to reach an agreement about the cut-off of any further production of fissile material, highly enriched uranium, or plutonium
    - Make major progress on non-proliferation agenda
        - Have a successful outcome for the May 2010 Nuclear Non-Proliferation Treaty review conference, which needs to strengthen compliance, enforcement, and verification safeguards of the treaty
        - Containment of the nuclear scene of North Korea and Iran
    - Need for progress specifically on disarmament.
        - The current nuclear armed states have to show a commitment to disarmament

        - Conclude the Russia/U.S. Treaty to reduce strategically deployed weapons
        - Need to see the beginnings of a serious multilateral process. It will be hard to get countries like China to reduce their weapons until we see more progress and leadership from the U.S. and Russia. We need to advance strategic studies and dialogues that will show us the way forward.
        - Need for a serious commitment, starting with U.S., to reduce the role and salience of nuclear weapons and reliance on nuclear weapons, particularly dealing with non-nuclear threat contingencies

- Medium-Term Agenda:
    - Achieve a minimization point by reducing the total number of weapons from the present 23,000+ down to less than 2,000, a 90% reduction.
    - Establish a commitment to no first-use of those weapons that do remain by any of the nuclear arms states.
        - Create a deployment arrangement that gives credibility and effect to that no first-use commitment. That means having very few of those 2000 weapons actually physically deployed, having most of them disassembled or not readily available for use and long lead-times in firing decision.
- Long term Agenda: the final goal is to have zero nuclear weapons. For this to become a reality, a lot of volatile situations will have to be resolved. States need stronger verification provisions in order to feel comfortable in making this shift.

The basic themes of this report are as follows:

1. It is solely luck that we have managed to survive without a major nuclear explosion catastrophe (not a result of good management or policy)
2. We cannot be complacent about this issue considering the risk associated with the possible use of the existing nuclear stockpile, such as proliferation breakout, terrorists, sense of entitlement, and expansion of civil nuclear energy expansion (in particular, if accompanied by enrichment and reprocessing facilities)

There is no other option to create a safe world than to eliminate nuclear weapons. So long as any state has nuclear weapons, others will want them. So long as any state retains nuclear weapons, they are bound, one day, to be used by accident or miscalculation, if not outright design. And any such use would be catastrophic to this planet as we know it.

Sergey Kislyak, **Ambassador Extraordinary and Plenipotentiary of the Russian Federation in Washington D.C.**

The list of things that unite Russia and the U.S. is longer than that which divides. There is no need for the revival of the Cold War. However, the difficulties inherent from the Cold War are part of our overall relations. Nuclear weapons also factor into our relationship today. We all are very much committed to reducing nuclear weapons, possibly to zero.

There has been a revival of interests to answer the question, what can we do to make this world better and more stable? This needs to be done not through the build up of unilateral force, rather, through cooperative arrangements. Will Russia be a part of the Euro-Atlantic security arc? Not if the arc refers to NATO's spheres or providing security at the expense of non-member states. Russia wants to see the Euro-Atlantic as a security system that is inclusive for all, providing an equal sense of security and predictability for all, whether you are a member of NATO or not. This must be achieved in order to reduce nuclear and non-nuclear weapons.

In order to achieve this goal, a lot of things need to be done. For example, the U.S. should ratify the CTBT. I am not suggesting that the moment the U.S. ratifies it, each country will jump on board—the world is much more complex than that. But, I would submit that if the U.S. stays out of the Treaty, there is no chance of enforcing it, and we need to force acceptance by all countries that possess nuclear activities.

The biggest problem that we all face today is the risk of proliferation of nuclear weapons. If we want others not to pursue nuclear weapons, we need to reduce ours and show commitment to Article 6 of the Treaty. In this Treaty, there should be no barrier to the knowledge of nuclear energy. However, with interest in nuclear energy comes an expansion of nuclear materials, facilities, and increased interest in the independent ability to enrich and reprocess (important elements of nuclear fuel cycle). Therefore, even if a country has the financial ability to invest in nuclear energy, it must have specialists, infrastructure, knowledge, and legislation that has the ability to protect nuclear materials, at least to the standards stipulated by the International Atomic Energy Agency (IAEA).

In the context of non-proliferation, political ambitions and concerns do not exist in a vacuum. Regional crises persist, and the nuclear weapon is still seen as the deterrent of choice at the regional level. The ability of Russia, the U.S., and Western countries to work on these crises areas together in a way that is productive is yet to be achieved. When it comes to Europe itself and the Euro-Atlantic space, there are several features of the current situation to consider. From the Russian perspective, there is no war risk between the U.S. and Russia. At the same time, Russia still has concerns about the stability and security of Europe. We want to be part of a Europe that is stable, predictable, and equally secure for all, but there is a NATO-Russia divide. NATO expansion becomes less and less friendly to Russia. And previous difficulties have not dissipated. For example, I am to be the first Russian ambassador to present credentials to the Secretary General of NATO. Furthermore, NATO started the war with Serbia without mandate of the Security Council. This resulted in some attempts at dialogue between Russia and NATO. However, NATO was unwilling to make joint decisions and take responsibility with us. Relations were further damaged after the events in Georgia. NATO supported the leader that we saw as

being responsible for spilling Russian blood. Russia's plea to the Security Council was blocked by the U.S.

In regards to conventional arms control, NATO decided not to ratify the amended conventional treaty in Europe unless Russia implemented some things. Incorrectly, they thought we would bend under political pressure. NATO began pocketing holdings despite the fact that the new Treaty was introduced but has never been ratified. Furthermore, NATO's expanding territory reduces Russia's strategic predictability. Consequently, Russia proposed the new Treaty for the security of Europe—and it was criticized for offering political norms.

However, relations are improving. President Obama's efforts and the New Start Agreement is a step in bringing back a cooperative structure to ensure predictability and stability. Also, Russia shares the goal of having zero nuclear weapons. But at the same time, we understand that we live in the real world. And if we are to move toward a world free of nuclear weapons, we need to work on issues that have prompted us to have nuclear weapons. There has to be a better substitute for Mutually Assured Destruction (MAD), such as a mutually assured security. However, we have to be able to afford to phase out nuclear weapons and phase in a new system. We also must be sure that while removing nuclear weapons from the arsenals of deterrence, we are not introducing systems that will have the same role based on other physical principles, such as strategic weapons with conventional warheads. Thus, a situation stable enough to dispense with that kind of deterrence rather than simply seeing a change of arsenals is needed. The first priority is to work with nuclear weapon countries recognized in the Non-Proliferation Treaty. Also, new countries must not acquire nuclear capabilities; this can be ensured by taking preventive measures, such as having multilateral roles for enrichment and reprocessing with the guaranteed stockpile of fuel.

Panel #1 Moderator: Sergey Kislyak, *Ambassador, Russian Federation to the United States*

We all profess that we want nuclear weapons to play a lesser role in political and military relations. Non-proliferation and the relationship between NATO and the U.S. is a major Russian concern. Our view of what the security challenges in Europe are differ from NATO's view. Recently, NATO has resumed exercises next to us and the Baltic former republics calling for more contingency planning. Clearly, Russia and NATO need more cooperation.

Russia has good relations with the majority of NATO countries, including the U.S.. Furthermore, the absolute majority of Europeans are our biggest economic partner, and we enjoy dialogue on building economic and humanitarian spaces together that would provide for an expansion of cooperation from the European Union to Russia. However, these NATO countries are making decisions that are not encouraging because NATO only has one toolkit at their disposal: military might. And they are still considering us a less-than-predictable neighbor. So what is dividing us?

Fyodor Lukyanov, Editor-in-Chief, *Russia in Global Affairs*

When discussing Euro-Atlantic security, we need to take into account the enormous shift that happened in the early 21st century: the Euro-Atlantic is not the center of International strategic affairs anymore. This realization should be the prism through which Russians, Americans, and

Europeans look into the future of the security model of the northern hemisphere. Since the end of the Cold War, all Euro-Atlantic members have experienced a sort of strategic deterioration. Russia collapsed and lost its superpower status. Europe started to lose its strategic relevance while experiencing unprecedented prosperity. The United States has struggled with exercising its global leadership as the international system failed to sustain a balance like that of the Cold War. The international system today depends on several uncertainties, such as the future development of China. Due to diverging ideals, another uncertainty is the future of transatlantic relationships. Europeans have pursued internal perfection while abandoning global ambition. Furthermore, European-NATO members are deeply divided about the admission of East and Central European countries.

The question is whether the U.S. will make efforts to mend NATO or prefer to construct new means with which to address challenges worldwide. If the former, then how likely are attempts to make NATO back into something like a closed European club? If the later, gradual American disengagement, then how will European security be structured? Will the U.S. and Central European countries try to compensate this functionality of NATO by striking bilateral security deals? The way the U.S. previously conducted negotiations and missile defense with Poland, the Czech Republic, and now Romania shows a prototype of that kind of approach.

Another uncertainly is Russia's strategic orientation. Russia is facing several challenges, such as growing instability in the south, the rise of China in the east, and confused relations with neighbors in the west. Russia has become a target of more active Chinese policy. There are improving relations with U.S. yet only in the limited area of non-proliferation. Major European powers are trying to compensate for the lack of foreign policy efficacy of the European Union. This variety of circumstances makes a glaring contradiction to the Euro-Atlantic security agenda which, with minor corrections, resembles the Cold War design—discussions centered around divisions that do not exist and institutions that were supposed to work in a completely different environment.

Present Medvedev's proposal about new security architecture in Europe is an attempt to overcome the fixation of NATO as the main possible security actor in the Euro-Atlantic area. The scale of global changes is such that there are doubts as to whether we can manage challenges only by reforming existing institutions. Institutional redesign is needed to address any international problem, as almost all of them originate from a lack of correspondence between goals necessary to achieve and means available. Nuclear disarmament can be achieved only if major actors create a new model of world governance and order. This new framework should provide powers with new instruments of security and deterrence. In the last 20 years, the international system has become more democratic. Discussion on Euro-Atlantic security reflects unwillingness from all to get rid of the world view of the past which places the U.S., Russia, and Europe at the center of the universe.

Developments are now unfolding in other parts of the globe. Russia traditionally belonged to the West but cannot reunite with it due to an undigested legacy left by the Cold War. Russia is still trying to prove that the strategic collapse was an accident. And the U.S. still has moments of triumphalism while Europe is enjoying its escapist stance. Global problems such as terrorism and proliferation cannot be approached without regional perspective. There is the idea for the U.S. and Russia to resume bilateral disarmament. However, we know that countries want

nuclear capabilities for regional purposes. It is up to great powers to work on conflict resolution and coordination of mutual interests.

General Charles G. Boyd, United States Air Force (Ret.)

NATO was the centerpiece of U.S. strategy. However, it began to take on a different character. A new security environment began to emerge with the breakup of the Balkans and Yugoslavia. We worked only through coalitions of the willing. The bargain that we struck in those days can be characterized as one in which the U.S. agreed to continue to participate and engage militarily with NATO in exchange for which NATO would provide out of area operations. But that was and is an uneasy relationship. Increasingly, the European nations of NATO themselves have very different perspectives on what a collective security arrangement means. The U.S. is increasingly confused about what its objectives of security are. We focus on non-state actors. We worry about failing states, the periphery of NATO, and about what the rise of China means. The U.S. does not have clarity about what the future of its security means.

In the long-term goal relevant to nuclear weapons, no Security arrangement is workable that excludes Russia. In 1993 in the events that led up to the NATO summit, the Clinton administration had called for a summit without a clear idea of what it wanted to achieve. As the fall approached, the Department of Defense convened a small group of senior people in Europe to try to tease it out, under the pleading of several former Warsaw pact countries, who should be included in NATO (recall that at the time the Czech Republic, Poland, and Hungary were hoping for a relationship with NATO). At this meeting, I advanced that we invite Russia to join NATO and worry about the security concerns of the former Warsaw pact countries when Russian feels secure. The arguments against that were primarily militarily.

Today, the Euro-Atlantic security initiative wants to create a comprehensible security arrangement that, if not including Russia as a full member, certainly includes Russia as a full and meaningful partner. Consider the work of RAND, who calls for recasting the strategic concept. RAND sets forth 5 different directions in which the alliance might go:

1. Refocus on Europe itself—the out of area operations could be put aside
2. Focus on the Middle East—there are common interests here such as energy and Iranian nuclear aspirations
3. Focus on failed or failing states that could be a security concern to Europe. Develop the skills such as counter insurgency techniques and nation building that would be appropriate to that world
4. Focus on non-state actors such as cyber warfare or transnational crime
5. Focus on new alliances with liberal democracies of the world that have shared values, democratic principles, rule of law, to create a stabilizing effect on the world

None of those by themselves is useful. We need a NATO alliance and new security alliance that includes Russia. Russia does not have shared values in many respects with NATO. How do we overcome that? Since we cannot really be secure without Russia, then there is a motivation to work on this problem.

NATO worries about Russia as a member having a veto power over its agenda. We can work on that as an objective. We need a new focus not excluding non-state actors, or failed states but

including them with the big objective of some arrangement in which Russia can be a real partner or a real member of this alliance.

Karl Kaiser, Adjunct Professor of Public Policy, Harvard Kennedy School

Seen from Europe, what is Russia's view for this transatlantic relation? From your perspective, what is Russia today?

If you want to have serious, real disarmament, you have to first address the security threats that were at the origin of the decision to arm, in other words, politics. If you go to the eastern rim of NATO today and look at their threat perception, you can see that it is shaped 60% by the Cold War, 20% by WWII and history, and the rest by the new modern threats, terrorism, and weapons of mass destruction. The further you go west and south, the third item becomes more important. That is the reality of NATO today.

What is the consequence of that perception? There are two—conventional and nuclear. On the conventional side, there is still fear of Russian aggression. These fears have been so strong in NATO that it is now in the process of creating contingency plans. The Russian military will react to this planning. We are back to this mutual reinforcement of threat perception. I am not saying that Russia does not have a certain responsibility here too.

The second consequence is on the nuclear side. We must remember that during the Cold War, nuclear deterrence was central for the entire political and military class of NATO. It was considered the equalizer to deal with what was perceived as the conventional superiority of the Warsaw Pact. This class dealt with protest—governments were in danger because of this nuclear element. Thus, the remaining nuclear weapons have such symbolic value as instruments of reassurance although they are antiquated; no military commander would use them. The old way of thinking surfaced when governments argued that we should remove these. The reaction to their proposal showed the importance given to these unusable tactical weapons. We must come back to the politics of the relationship between Russia and the members of NATO. It is the political nature of the relationship that defines the relevance of the weapons.

You have to remove the conventional drivers of the feeling of insecurity which leads to the role of nuclear weapons as the means of equalizing. The revival of conventional arms control is a necessary precondition for starting nuclear disarmament in Europe. We need to address the questions of imbalance, of threat perception through conventional arms control in particular, and confidence building. Second, we should start the debate on tactical nuclear weapons. We should consider negotiations between Russia and NATO. We should have dialogue with the hope that we can remove the weapons and make them disappear in actuality and in our doctrine.

Panel #1: Q&A:

Q: You have heard people say that Russia is not an ally and does not share Western values. For the Russians, what is the United States today? What is the view of normal Russians about American and the West?

A: Fyodor Lukyanov, Editor-in-Chief, *Russia in Global Affairs*: There are different perspectives. In terms of day to day life, people enjoy all positive and negative fruits of American culture. Russia is part of the globalized world. In this regard, American presence is huge. In terms of opinion

polls, we see the degradation of perception. Polls show that the majority of Russia do not see America as an ally and friend. At the same time, the problem is not with the Cold War but in the post-war development that played a much more negative role for American perceptions. There is a thought that the U.S. exploited Russia. When George Bush Senior claimed that the U.S. was the winner of the Cold War, it had made us feel like the losers. Previously, we had not felt that way. There is now a backlash of intellectual effort in Russia devoted to proving that the Soviet Union did not lose the Cold War but simply surrendered.

Q: NATO is expanding its role. For example, they are adding a role of energy security. What type of NATO tools can NATO bring in reinforcing energy policy? The biggest problem in the NATO-Russia relationship is stereotypes. So what type of NATO will we see tomorrow?

A: General Charles G. Boyd, United States Air Force (Ret.)**:** We have distinct stereotypes and erasing them from our national and historical narrative will be difficult. What can NATO bring to Russia that could be useful to Russia? We have much more in common than is different. We see transitional crime fragmenting nations along ethnic and religious lines, violence, and proliferation emerging on the perimeter. These are all things that we share. We need to work together with a common, inside security arrangement of some sort in which we both have shared objectives. It is the framework, the acceptance that we can together be more secure than we can separately.

Q: When NATO adopts a new mission to ensure energy security, for Russia, that means it might be tempted to secure access to sources of energy. What type of role might it assume?

A: Karl Kaiser, Adjunct Professor of Public Policy, Harvard Kennedy School: I think it is a bad idea to have an energy NATO. There are mechanisms available of solidarity: we have the IEA, EU, and ways of helping if there are shortages. The notion that Russia is different should not hinder the West to cooperate closely. The question of values is secondary—we want to agree on security. The idea has been around of a global NATO among all liberal democracies. This is an exceedingly bad idea. One can cooperate but then it comes near to a counter proposal to the UN. Where do we end? Who is a democracy? Does that mean that Russia is outside? You would differentiate and do exactly the opposite of what we intend to do, which is to engage Russia.

Q: You had suggested that we need to frame the debate in terms of Russia and NATO or Russia and the U.S.. But I would submit that we need to look at the relationship between Russia and the Baltic or Russia and Poland. How should we approach these issues and what should the role of the U.S. in facilitating that dialogue be? As we know, a lot of these countries are participating in Afghanistan, so the U.S. has a strong commitment to their security.

A: Karl Kaiser, Adjunct Professor of Public Policy, Harvard Kennedy School: The problems that some of these countries have with Russia would be positively factored if we redefine the relationship between Russia and the U.S.. For those who supported NATO enlargement, it was done on the assumption that we would restructure our relationship with Russia. That was not done. We are right in the middle of doing it again if we do not pick up the proposals of President Medvedev. On the whole between Russia and Poland, they have basically disappeared but with the Baltic, it is different. Both sides have to address them, but it is counterproductive to create

contingency plans and use that as a pretext to create a military plan. I am just waiting for Russia to use that as an excuse to use their military.

A: Fyodor Lukyanov, Editor-in-Chief, *Russia in Global Affairs*: The relationship between Russia and her neighbors is poisoned by the use of history as a political tool. This is a bad precondition to reconciliation. The secret to success of the EU is that countries decide not to use history in politics. They knew that progress is more important than history. In the post-communist world, that is not yet the case.

A: General Charles G. Boyd, United States Air Force (Ret.**):** After WWII France and Germany established a commission in which they would examine each other's textbooks. This is a hugely effective tool. If I can no longer slander you in my textbooks, that will have a very long-term and positive impact.

Q: What signs of hope do you see in the popular culture and the university life for the accelerating and sustaining the elimination of nuclear weapons? Are you surprised that there's not more energy in youth culture?

A: Karl Kaiser, Adjunct Professor of Public Policy, Harvard Kennedy School: I think we missed our chance after the Cold World ended. There should have been thousands of Russia students in the U.S.. Societies have to make this effort under the framework of the government. In order to eliminate the divisive nature of history requires governmental action.

A: Not all cultural exchange is positive. There are limits to this notion.

A: Fyodor Lukyanov, Editor-in-Chief, *Russia in Global Affairs*: Nuclear arms are not about warfare, they are about psychology and politics. Mutually learning about strategic cultures in different countries would be very useful--first to understand and then to inform conclusions about whether we should be concerned or not.

Q: I am less concerned about cooperation being impeded by Russia's views of the U.S. than I am about the U.S. view of Russia. There are a number of things that Russia has done to generate suspicion in the U.S. that are susceptible to more than one view. Where do we see the Russian point of view that this is not something that is contrary to our culture? Why does Russia not do a better job of pointing out that they view things very differently, that there is more than one view of Russian actions?

A: Sergey Kislyak, Ambassador, Russian Federation to the United States: I do agree that we do less than an enviable job of explaining ourselves. A lot of difficulties that we have are the results of stereotypes. There have been things that have incriminated Russia. And certainly, Russia has made some mistakes being only 18 years old and going from the state owning everything to a country where most assets are in private hands. However, there are stereotypes that Russia is combating. For example, Americans think about Russia as if we are a continuation of the Soviet Union. However, we are different countries that share exactly the same values as you do, with the prime focus on the well-being of people. For that, we need to ensure the security of the state.

We will welcome more exchanges in culture and working together on positive projects, such as the economy.

Q: On the subject of tactical nuclear weapons, there is an unhelpful polarization between the block that says we need to remove nuclear weapons right away to show our commitment to disarmament and the block that says this would be catastrophic and would lead to proliferation. The middle ground says these weapons are still strategically significant. What are the preconditions to coming to a point in time where we can in the near-term hope to remove these weapons?

A: Kaiser, Adjunct Professor of Public Policy, Harvard Kennedy School: We have to improve the political relationship. If you have a different relationship between Russia and the West, that is already helpful. We need a dialogue about doctrine. Let us talk about the usefulness of these old, antiquated weapons. There are other ways to reassure countries other than by having nuclear weapons. Let us discuss this. There is no need to remove them right away, rather gradually. But within a foreseeable future, they should be removed and deactivated.

A: General Charles G. Boyd, United States Air Force (Ret.): The military would celebrate the removal of these weapons: they are a useless nuisance. The U.S. is reducing the money it spends on defense. Standby for some significant reductions in what the U.S. spends on defense in the next five years. It is inevitable. It will reshape how our nation sees itself in its security context.

A: Sergey Kislyak, Ambassador, Russian Federation to the United States: We are not broke. We have accumulated $600 billion in reserves prior to the crisis, and we spent about $250 billion during the crisis. So, all the expectations are that when the overall world economy starts improving, we will have a higher curve than the others.

A: Fyodor Lukyanov, Editor-in-Chief, *Russia in Global Affairs*: A huge distribution of financial resources in the world is an unintended consequence of globalization. And that will shape development in the years to come. Asia will play a much bigger role than anyone had expected. The European Union experience is unique. We cannot expect for it to be repeated elsewhere. This idea to overcome was possible only in special circumstances under the American security umbrella and with the Soviet threat. The next institutions should be based on more tradition principles.

Luncheon

Thomas P. D'Agostino, Under Secretary for Nuclear Security and Administrator, National Nuclear Security Administration, U.S. Department of Energy

The Department of Energy's National Nuclear Security Administration must maintain the safety and security and effectiveness of our deterrent as we move towards a world without nuclear weapons. For more than 65 years, we have worked to assure the nation that our nuclear stockpile remains safe and effective. However, the world climate is changing—terrorist acts, etc. underscore the importance of these topics. The potential for a terrorist to acquire nuclear weapons is the most important and extreme threat to global security.

President Obama has outlined an ambitious nuclear security agenda. For example, we are committed to reducing nuclear arsenals, halting the proliferation of nuclear arsenals to new states, preventing terrorists from acquiring nuclear weapons or materials to make nuclear weapons. The President's vision presents opportunities for cooperation with Russia and our European partners. This morning, you heard about the Euro-Atlantic fault lines and strategic tensions. This afternoon, I am talking about cooperation on reducing arms and preventing proliferation, as well as the positive contributions and cooperative efforts that we have underway in the NNSA and the Department of Defense. The NNSA must insure that the evolving strategic nuclear posture and nuclear stockpile along with arms control, non-proliferation, and anti-terrorism programs are melded together to demonstrate that there is one comprehensive strategy that protects America and its allies. In pursuit of that strategy and the President's national security agenda, I would like to focus on two components that have implications on U.S. national security.

The first is the infrastructure that we employ to support that deterrent. President Obama has made it clear that nuclear weapons remain a fundamental element of the security environment of the 21st century. The Department of Energy works with the Defense Department to ensure that our stockpile remains safe, secure, and effective to deter any adversary and to meet our commitments to our allies in Europe. However, in the future, there will be fewer warheads in the stockpile, no tests to test their functionality, tighter controls on weapons materials worldwide, and effective counter action against nuclear terrorist activities.

Another asset to infrastructure is our ability to leverage our scientific, technological, and engineering assets to address other nuclear security challenges as well as other national security challenges. Without these capabilities, we will have a hard time realizing this vision of zero nuclear weapons. It is essential that our infrastructure be updated and available to support the deterrent and other national security programs. And it remains important that science, technology, and engineering capabilities remain even after we achieve a world with no nuclear weapons.

As a result of technology, arms reductions treaties, and changing military requirements, the stockpiles have evolved. Obama has conducted a comprehensive review of the nation's nuclear posture. This Nuclear Posture Review will shape our NNSA's nuclear security programs and

infrastructure. We will implement the necessary actions to ensure that the remaining strategic triad continues to have safe, secure, and effective deterrence capabilities that underpin our nation's defense. The Departments of Defense and Energy have made tremendous progress in dismantling nuclear warheads. The stockpile will be less than one quarter what it was at the end of the Cold War. With such a reduced stockpile, it is essential that we are very clear on how we deploy the remaining warheads. Negotiating a New START Treaty is another important demonstration of our commitment to continue fulfilling our obligations under the Non-Proliferation Treaty.

The second component of our strategy is our non-proliferation efforts. We are working closely with Russia and our partners around the world to secure all vulnerable material in the next 4 years, including radiological materials. Several key NNSA programs already play a role, including our first line of defense activities such as the Global Threat Reduction Initiative (GTRI), our second line of defense programs, and our fissile material disposition program. Working with our Russian partners, our Material Protection Control and Accounting program (MPC&A) has significantly reduced the threat of nuclear material theft by installing and updating security systems. Our Global Threat Reduction Initiative, working with Russia and the IAEA, has already removed over 2, 500kg of Highly Enriched Uranium and plutonium in civilian sites worldwide. We are working with Russia to eliminate 68 metric tons of plutonium as well as hundreds of tons of surplus uranium in the U.S. and Russia. Furthermore, they have completely removed Highly Enriched Uranium in 17 countries, 10 in Europe. The GTRI has also worked with 70 countries to secure high priority radiological sites to make sure that the dangerous materials there do not fall into the wrong hands. Our second line of defense has installed radiation detection equipment in airports, hospitals, and strategic border crossings, and sea ports around the world to screen cargo regardless of its destination. Moreover, the Non-Proliferation Program of the NNSA operates with a 9.4 billion dollar budget.

However, it is only successful in partnership with other countries, governments, and organizations such as the NTI working together to discuss policy and program implementation. With the evolving nuclear security agenda that we have, what are the major issues to be concerned about?

- Responsibility to maintain deterrent--job of NNSA or the Defense Department
- Development of a generation of scientists, engineers, and technicians
- Vision to take old Cold War nuclear weapons complex and shift into a 21st century nuclear security center
    - Modernize the nuclear security enterprise

All of these issues are intertwined even though they compete with each other financially. The difficulty is striking a balance.

Afternoon Session

Michèle Flournoy, Under Secretary of Defense for Policy, U.S. Department of Defense

Twenty years ago, as the Soviet Union was collapsing, the world was just beginning to grapple with the challenge of loose nukes and a new round of proliferation of weapons of mass destruction. Sam Nunn and Richard Lugar recognized a burgeoning threat and conceived a framework for dealing with it. The threat they saw then was a vast WMD infrastructure and stockpile of the former Soviet Union suddenly lacking the vast USSR security apparatus to keep it under control. The solution they envisioned was based on, then, a radical concept. The U.S., wealthy in resources but vulnerable to unconventional threats, would extend itself in a cooperative effort to secure nuclear weapons and materials in former Soviet states. We would not merely shake hands with our former adversary. We would act in partnership with the new Russian Federation to ensure that the deadliest weapons on earth would remain secure. This paradigm shift was based on the proposition that the two greatest adversaries in history could recognize a common interest and a common responsibility to address this threat. It is this kind of paradigm shift that we are seeking today.

The U.S. has a special responsibility. We were the first nation to develop nuclear weapons and use them. From their creation, nukes have presented a paradox. On the one hand, the awful logic of nuclear deterrence worked. But on the other hand, nuclear weapons remain the only true existential threat to the U.S. and to countries around the world. As President Obama has said, the threat of global war has gone down but the risk of a nuclear attack has gone up. This administration takes seriously its responsibility to lead on issues of nuclear non-proliferation and the prevention of nuclear terrorism. In Prague, President Obama promised that the U.S. will seek the peace and security of a world without nuclear weapons and reduce the number and role of nuclear weapons; and he called for other countries, particularly Russia, to do the same. But as long as these warheads exist, the U.S. will maintain a safe, secure, and effective arsenal to deter any adversary. We will not endanger the U.S. or our allies by reductions that go too far too fast and are not thought through. So in this new climate in which the nature of nuclear threat is protean and unpredictable, the Nuclear Posture Review identifies 5 core policy objectives:

1. Prevent nuclear proliferation and terrorism
2. Reduce the relevance of nuclear weapons
3. Maintain strategic deterrence and stability at lower nuclear force levels
4. Strengthen regional deterrence and reassure our allies and partners
5. Sustain a safe, secure, and effective nuclear arsenal as long as it exists

These objectives signal a re-centering of our strategy on two new priorities: discouraging additional countries from acquiring nuclear weapons capabilities and stopping terrorist groups from acquiring nuclear bombs and/or the materials needed to build them. These objectives are in addition to the goal of maintaining a safe, secure, and effective arsenal. To pursue this objective, we will invest in modernizing the nuclear infrastructure. This will allow us to pursue deeper reductions without compromising our security. The U.S. and Russia are pursuing this path. The U.S. and Russia have reached agreement on the New START Treaty, demonstrating our

resolve to uphold our part in the Non-Proliferation Treaty, cutting deployed warheads by 30% and the number of deployed strategic vehicles by more than half.

Overcoming the twin dangers of nuclear proliferation and terrorism requires a threefold approach:

1. Support and rejuvenate the multilateral non-proliferation initiatives and treaties
    a. Accelerate efforts to work with allies and partners
    b. Renew commitment to an international legal framework
    c. Strengthen the NPT
    d. Discourage abuse of treaty withdrawal provisions
    e. Ratify the CTBT
    f. Show our commitment by maintaining our unilateral moratorium on nuclear weapons testing
    g. Seek a fissile material cut-off treaty
    h. Enact export control reform
    i. Recognize the benefit of multilateral activities to prevent proliferation
    j. Pressure states presenting proliferation threats through diplomatic means
    k. Promote universal adherence to the Additional Protocol, improving verification of treaty compliance, and enforcement of penalties for non-compliance
2. Reduce and eliminate nuclear dangers at their source
    a. Secure vulnerable nuclear materials worldwide within four years
    b. Convince countries to be more transparent about their nuclear security practices and policies
3. Enhance the ability to detect and respond to emerging nuclear threats
    a. Enhance interdiction and elimination of capabilities as well as preparations to react quickly to such a crisis should preventive measures fail
    b. Increase the budget for threat reduction activities
    c. Establish a standing Joint-Task Force Elimination headquarters
    d. Enhance nuclear detection in forensics to counter WMD
    e. Expand operational capabilities
    f. Create new verification technologies to support arms control agreements

Together we need to build an enduring and bipartisan consensus around a new approach to nuclear security.

Panel #2 Moderator: Michèle Flournoy, Under Secretary of Defense for Policy, U.S. Department of Defense

Alexei Arbatov, Scholar-in-Residence, Carnegie Endowment for International Peace, Moscow Center

The new treaty of Strategic Arms Reduction is an important event but signing the Treaty is only the beginning of the process. We need the ratification by both sides as soon as possible and need to create a new treaty to lay the groundwork for better relations instead of those based on mutual suspicion and incrimination. We need these treaties to open the door for much deeper reductions. Russian public opinion has some concerns about the Treaty, especially in the Russia strategic community. The precursor attack on the new Treaty has started with severe criticism

of the START I Treaty. The political elite, the strategic community, and the public consider nuclear weapons to be a symbol of Russian prestige and legacy of our super power status. Today, Russia feels less secure than it did back then. In large part, this is due to Russia's own mistakes in its economic and domestic policy. However, it is also due in part to things that happened abroad.

Consider nuclear disarmament and use of force in the world. Nuclear weapons are considered to be a central instrument in Russian security, an instrument to make up for Russian inferiority in conventional forces. NATO now has as much superiority over Russia as Russia and the Warsaw pact had over NATO 20 years ago. Russia also perceives nuclear weapons as a way to make up for its inferiority in advanced technologies, such as long range precision guided systems, ballistic missile defense technologies, and military use of outer space technologies.

Upon examination, the new Russian military doctrine is not as bad as an initial glance may suggest. It postulates only two situations in which nuclear weapons might be used:

1. Retaliation to a nuclear, chemical, or biological weapons attack on Russia or its allies
2. Deterrent to stop an overwhelming conventional attack that would put in doubt the very existence of the Russian state.

According to Russian perceptions, moving NATO military forces to Russian borders is the number one military threat. Proliferation of weapons of mass destruction is seventh on the list and international terrorism is eleventh. This is a political and strategic reality.

The main argument in favor for New START Treaty is that it is a Treaty for American reductions. Obsolete weapons are withdrawn in massive numbers and new weapons only in small numbers. In ten years, Russia will have all of its nuclear forces modernized. And then, if we are planning further nuclear disarmament, several important conditions must be met:

1. Persuade Russia that with a smaller nuclear arsenal its interest in the world will not be respected less
2. Ensure that Americans are serious about nuclear disarmament
3. Persuade Russia that Americans are serious about nuclear disarmament to make the world more secure, not to showcase its other advanced technologies
    a. For example, the massive deployment of precision guided long range conventional systems is regarded by the Russian military as its number one security threat, called threat of air space attack
        - American military needs to pursue consultations with Russian military to persuade Russia that these technologies are not going to be used against them. Otherwise, this development will prevent disarmament, the removal of launch on warning concepts, and dealing with tactical nuclear weapons
    b. The same is true for ballistic missile defense. Much more transparency is needed to prevent Russia from considering it a threat.

These conditions are very important. They will determine if this Treaty is the first step to nuclear disarmament or the last.

Camille Grand, Director, Foundation for Strategic Research

We have an interesting context in which to pursue closer Euro-Atlantic cooperation on reducing nuclear dangers. Within NATO, three factors are in conjunction:

1. The new strategic concept to be decided on in the Lisbon Summit in November
2. Re-opened debate on NATO's nuclear policy
3. Decisions to be made about NATO's missile defense policy

We should not ignore the factors that are complicating the situation. They are as follows:

1. Russian fears and behaviors
    a. Although the September 2009 announcement by the Obama administration was welcomed, the issue of missile defense is not resolved
    b. Western conventional dominance cannot be easily resolved. The U.S. and NATO will not abandon its leadership role in technology or its ability to be a dominant conventional power
2. Europe is divided. There are those that seek nuclear, missile, and conventional reassurances. On the other hand, there are those eager to get rid of U.S. and European nuclear weapons.
3. This is not purely a Euro-Atlantic debate. There is missile and nuclear proliferation taking place near Europe, such as in Iran.
4. We are in a multi-player system. It is not only a U.S. and Russia debate; France and Britain have their own nuclear forces and NATO has a nuclear policy to consider. Also, there are non-nuclear players in Europe that have their own opinions.
5. The lack of active European specific regimes and frameworks to deal with these situations, such as missile defense

However, Europe is less complicated than the Middle East or Asia. Thus, it is a good test case to study and prepare for a nuclear order. Europe already has some key elements of a nuclear order not featured elsewhere, listed as follows:

1. There are already low numbers of nuclear weapons
2. The system is far more transparent than anywhere else due to inspections and confidence building measures
3. There is a genuine effort to bring in the missile defense debate into the zone without making it a destabilizing element
4. There is low risk for armed conflict
5. There is very limited risks of proliferation

There are many challenges that need to be addressed, such as:

1. Linkages: you cannot separate conventional and nuclear forces; they are inter-linked.
    a. There are new technologies to consider such as cyber and outer-space technologies
    b. The introduction of nuclear missile defense balance. Should the introduction of missile defense alter strategic stability?
    c. Is deterrence only about nuclear weapons?

d. Dynamic between regional and global.

George Perkovich, Vice President for Studies, Carnegie Endowment for International Peace

Consider the relationships within the transatlantic region and how that affects the rest of the nuclear order. The U.S., Russia, and Europe are only a small piece of that problem, and in many ways, are the least dynamic of this puzzle. Problems with U.S. and Russia will not affect the global situation as much as we would hope. Its effect would be in lowering values and rules put onto nuclear weapons; the effect would be normative. Furthermore, the transatlantic space is much more settled than the other environments. Even the part that is least settled—the border of NATO and Russia—is still relatively settled. However, the U.S. alone does bear heavily on the rest of the globe.

For example, the U.S. bears heavily on the India and Pakistan relationship. The nuclear cooperation agreement begun in 2005 had a big affect on India's capability to produce nuclear weapons but more importantly on Pakistan's perceptions of its own threat environment. They are not going to sign the fissile material cutoff. They are going to produce more nuclear weapons. There is going to be new plutonium production capability. They are lowering the threshold of use and they are going to blame it on the U.S.. Whatever we do with the New START Treaty is not really going to affect India or Pakistan.

China is an interesting model. It secured nuclear weapons in 1964. They were motivated by U.S. cohesion. Since then, China has produced a few hundred nuclear weapons. This provides some insight—going to low numbers, not having them launch-ready.

In the transatlantic, we are making the nuclear weapons in Europe a bigger deal than they really are. But those weapons are not going to be used. The argument for them is that they show the cohesion of the alliance, except the nuclear weapons actually show the alliance's non-cohesion. If the discussion of using them ever came up, it would highlight the division within NATO. There are serious issues of European security, but they do not have as much to do with nuclear weapons. They have more to do with Article V of NATO—the commitment of allies to fight as one if any suffers an armed attack. Is cyber warfare an armed attack? Is it subversion or interference in state affairs? These are the security problems with which NATO must deal.

Panel #2: Q&A:

Q: What are the kinds of engagements on ballistic missile defense and conventional arms control in Europe that would start to make a difference in terms of Russia's willingness to look beyond New START for Russia to begin thinking of reducing its nuclear arsenal.

A: Alexei Arbatov, Scholar-in-Residence, Carnegie Endowment for International Peace, Moscow Center: With respect to ballistic missiles, as long as the U.S. is planning to deploy ballistic missiles on ships and land that are within the limits as negotiated in 1997 between Russia and the U.S., then it would be easier to discount them as factors of strategic arms controls and balance. We could move with cooperation on joint development and deployment of such systems. Those are easier for us to cooperate on because we do not have weapons that could be intercepted by those missiles because we have a Treaty on intermediate and shorter range missile elimination. It does not encroach on our strategic balance. If we have success on strategic arms reduction, we will go forward on joint strategic ballistic missile defense. The main problem for conventional arms

control in Europe is political. The best way to proceed is to return to a transparency regime as a confidence-building measure. That should be important to Russia if it is concerned with NATO superiority.

Q: You have characterized the conventional arms control as a European obsession. Would you agree with this diagnosis? How would Europe like to move forward in this area?

A: Camille Grand, Director, Foundation for Strategic Research: The responsibility lies on both sides. For a number of years, Europe, NATO countries, and the U.S. have not paid enough attention to issues raised by Russia and attempts to open serious debates on the Adaptation Treaty. Now we are left with a situation where we have lost one of its features because of the Russian suspension. At the movement, we do not really notice. But if we do not find a solution to this, we will be back to Cold War thinking, fearing buildups. I have seen this in Moscow when people raise the question of NATO's infrastructure in the neighboring countries of Russia. We need a transparency regime that allows for inspections and exchanges of information or else we will go back to spending millions on finding out where the bases and tanks are in terms of intelligence. It is a central, defining issue. At the moment, the issue starts with going back to a military transparency regime. The Vienna Document is offering a path for this purpose because it has not been frozen by Russia.

Q: What happens in the Euro-Atlantic sphere has a normative impact on proliferation. But when we are thinking of keeping nuclear material out of the hands of terrorist or influencing states like Iran, U.S.-Russia cooperation is critical. Where do you see U.S.-Russia cooperation as critical?

A: George Perkovich, Vice President for Studies, Carnegie Endowment for International Peace: It is critical in the places that you mentioned. The Security Council is ultimately important in non-proliferation. However, nuclear arms reduction is not necessarily helpful in U.S.-Russian cooperation but is essential for the future of the non-proliferation regime, especially in compliance. If there is a clear sense that Russia, the UK, France, and the U.S. are all solid on this, there is a good chance to get China on board as well, which is a very strong deterrent.

It is also important to the future of nuclear industry. The infrastructure and the states that regulate it must ensure that sales are only going to states that have appropriate legal infrastructure and expertise. That cooperation with the U.S. and Russia is very important.

Q: What does success look like from the standpoint of the NPT? And to echo the Russian ambassador in proclaiming the importance of the Comprehensive Test Ban Treaty (CTBT), what is the role of the citizenry (religious organizations, academic institutions, and NGOs) in moving forward?

A: Alexei Arbatov, Scholar-in-Residence, Carnegie Endowment for International Peace, Moscow Center**:** The role is very important. It is important to note that the nuclear disarmament initiative was not started by the government but by responsible citizens and supported by non-governmental organizations. This initiative and drive should continue with this vision; public involvement is very important.

A: Michèle Flournoy, Under Secretary of Defense for Policy, U.S. Department of Defense: To add in regard to NGOs, the U.S. has not ratified a treaty on nuclear arms control in many years. The Senate has not had to go through this process. The good news is that they will have ample opportunity with New START, CTBT, and other defense treaties. So, hearing from the citizenry and NGOs is very important to gauge the support of the American people for these treaties.

On the NPT Review Conference, it is a great opportunity to reaffirm the basic bargain and the U.S. commitment of the Treaty to try and strengthen the regime in a very concrete way, such as getting more countries to embrace the Protocol, giving the IAEA the tools that it needs to be more effective, and becoming more serious as an international community in dealing with non-compliance and trying to bring countries that are outliers back into the fold.

A: George Perkovich, Vice President for Studies, Carnegie Endowment for International Peace: A successful NPT Review Conference is one that is not a disaster. These conferences operate by consensus. There are 191 countries that show up, including Iran and Syria, that have been problematic in terms of their compliance and can block an agreement. So if it reaffirms that people still think that it is a useful treaty, then it is a success.

A: Camille Grand, Director, Foundation for Strategic Research: It is a mistake to have expectations around having a final document. If we achieve some progress in obtaining consensus that disarmament, non-proliferation, and nuclear cooperation is important, then we have taken a great step forward. I want to discuss nuclear threats vs. non-nuclear threats. Because of the experience of WWII, the French are reluctant to separate the two. For that reason, we are sensitive to the argument that both should go hand-in-hand with the need to make security progress.

A: Alexei Arbatov, Scholar-in-Residence, Carnegie Endowment for International Peace, Moscow Center: One problem of the NPT Review Conference is that they are discussing too many questions and cannot come to any conclusion on any of them. I suggest that the nuclear weapon states agree on one clear priority, such as making the recommendation to nuclear supplier groups that all future deals have the precondition on acceptance of the 1997 Additional Protocol which provides the IAEA with full capability to verify all declared and undeclared activities.

Q: Central and Eastern European countries seek NATO as a safeguard against a perceived Russian threat. What could Russia do to safeguard these countries and reassure them of peaceful intentions?

A: Alexei Arbatov, Scholar-in-Residence, Carnegie Endowment for International Peace, Moscow Center: I think Russia committed many mistakes in its policy towards Central European states and neighboring post Soviet republics. However, the underlying biases of Russia were explained by the fact that all of those nations were conquered by communist Soviet Union under Stalin; and they were liberated by Soviet leadership under Gorbachev and Russian democratic leadership under Yeltsin.

The way for the future is for Russia to take a clear position saying that Russia is committed to the sovereignty of these states. But it will certainly expect its security interests to be taken into

account by NATO and NATO's relationships to those states. This is implied by the New Draft Treaty that was proposed by President Medvedev. It was dismissed; I think that was a mistake on the part of the U.S. and NATO. It should be used to repair our relationship. With respect to Central European states, Russia should be more farsighted and tolerant and pursue economic relationships so we can leave behind our historic bilateral grievances.

A: Camille Grand, Director, Foundation for Strategic Research**:** On the NATO side, it is about fine-tuning reset and reassurance. You need to reconcile both agendas if you want to engage Russia. Part of that is the issue of enlargement. The door should be fairly open with clear conditions. Why not Russian membership in NATO? NATO should not be exclusive as a principle. Russia is part of the Euro-Atlantic region. Conditions need to be met on both sides. This would change the nature of the debate of Poland and Ukraine membership.

Q: There are those who would argue that to see headway on disarmament at the Review Conference, the problems are going to stem from France. What would France like to see as a disarmament outcome at the Review Conference and what might we expect the P5 statement to say with respect to disarmament?

A: Camille Grand, Director, Foundation for Strategic Research: The NPT is a reminder that for the French it is a package that works both ways. It is not only about pressuring nuclear weapons states about disarmament but it's also about having a successful non-proliferation regime.

The French tend to focus on practical steps. And we have done very well in these areas. For example, with our nuclear arsenal, we signed and ratified the CTBT, and dismantled production sites. The French do focus on this in contrast to focusing on a declaratory policy. Consider the NPT in 2000, which proposed 13 steps in disarmament and arms control. France has done very well on 10 of the steps but is not concerned with the other three. Based on that, there can be progress forward. They have been more active on transparency.

I do not see the French as a spoiler on disarmament as long as the overall issue is balanced. If the conference becomes an issue of who signs up for global zero by 2020, then yes, the French will spoil of the event. However, if the conference is about how we make the regime stronger by reinforcing non-proliferation, making progress on disarmament, achieving an FMCT by 2015, continuing to go down in numbers and become more transparent, then the French will not pose a problem.

To put it bluntly, if you focus on the declaratory policy, you do not please the French, but you please the Chinese because they are not interested in any concrete steps. If you focus on practical steps, you do not please China.

Michèle Flournoy, Under Secretary of Defense for Policy, U.S. Department of Defense

If we are going to make steps progressively towards global zero, we will have to broaden the frame from narrow issues, such as nuclear balance and nuclear counting rules and nuclear treaties to deal with the much more fundamental security conditions that allow that progress to take place in critical regions in the world and between countries who view nuclear weapons in the context of their overall security concerns.

So, I applaud opening up the frame to start to explore the more fundamental security issues that we will have to address and start to make progress beyond the important but still limited steps that we have taken recently.

Participant Bios

Alexei Arbatov
Scholar-in-Residence
Carnegie Endowment for International Peace, Moscow Center

Dr. Alexei Arbatov graduated from the Moscow State Institute of International Relations in 1973 with a diploma in international politics.

Since 1976, Arbatov has worked at the Russian Academy of Sciences Institute of World Economy and International Relations (IMEMO). He received a post-doctorate degree and completed his dissertation on U.S.-Russian strategic relations in 1982, and is currently a professor at the Academy on security, defense, and law enforcement under the President of Russia.

In 1990, Arbatov became head of the IMEMO Center for Geopolitical and Military Forecasts, which in 2001 was transformed into the Center for International Security, comprising departments on nuclear nonproliferation, regional conflicts, terrorism, and strategic studies.

From 1994 to 2003, Arbatov was a member of the YABLOKO faction in the Russian Parliament (State Duma) and Deputy Chairman of the Defence Committee. After parliamentary elections in 2003, Arbatov returned to IMEMO on a full-time basis.

He is a member of the Advisory Council to the Foreign Minister and heads a panel on strategic planning for the Scientific Board of the Security Council of the Russian Federation. Arbatov is a member of the influential non-governmental organization Council for Foreign and Defense Policy (similar to the U.S. Council on Foreign Relations). Arbatov is the Russian representative at the Weapons of Mass Destruction Commission under the leadership of Hans Blix and is a member of the Governing Board of SIPRI, the International Advisory Board of the Geneva Centre for the Democratic Control of Armed Forces Institute, and the Monterey Institute Center for Nonproliferation Studies.

He is the author of numerous books, articles and papers on issues of global security, strategic stability, disarmament, Russian military reform, and various current domestic and foreign political issues, published in Russia and abroad. He has been awarded military and academic medals and honors.

General Charles G. Boyd
United States Air Force (Ret.)

General Charles Boyd served as president and CEO of Business Executives for National Security from 2002 until 2009. Previously he was senior vice president and Washington program director of the Council on Foreign Relations.

Boyd retired from the United States Air Force in 1995 as Deputy Commander-in-Chief of the U.S.-European Command. He served thirty-five years in the Air Force, logging more than 3,000 flight hours. A fighter pilot in the Vietnam War, Boyd was shot down on his 105th mission and was a prisoner of war for seven years. He is the only former Vietnam POW to have reached the four star rank.

He also served in NATO's Southern and Central Commands and as executive director of the Hart-Rudman Commission, a three-year comprehensive review of national security.

Boyd is a member of the Board of Directors of the Nixon Center, DRS Technologies, Inc., Forterra Systems, Inc., and In-Q-Tel. He is a member of the U.S. Air Force Air University Board of Visitors, is chairman of the Board of Trustees for the Air University Foundation, and serves on the Transformation Advisory Group for U.S. Joint Forces Command as well as the U.S. European Command Senior Advisory Group. He earned his bachelor's and master's degrees from the University of Kansas before studying at the Air War College at Maxwell Air Force Base in Alabama.

Thomas P. D'Agostino

Under Secretary for Nuclear Security and Administrator, National Nuclear Security Administration, U.S. Department of Energy

Thomas D'Agostino was sworn in on August 30, 2007, as the Under Secretary for Nuclear Security and Administrator of the National Nuclear Security Administration. President Barack Obama chose to keep him in those same roles in September 2009.

The National Nuclear Security Administration maintains the safety, security, and effectiveness of the U.S. nuclear weapons stockpile without nuclear testing; reduces the global danger from the proliferation of nuclear weapons and materials; provides the U.S. Navy with safe and effective nuclear propulsion; and provides the nation with an effective nuclear counterterrorism and incident response capability.

In addition to his lengthy career in the federal government, D'Agostino achieved the rank of Captain in the U.S. Naval Reserves, where he helped develop concepts for new attack submarine propulsion systems. He also served with the Deputy Chief of Naval Operations for Plans, Policy, and Operations in the Pentagon's Navy Command Center. He spent more than eight years on active duty in the Navy as a submarine officer.

D'Agostino's awards include the Presidential Rank Meritorious Executive Award, a Navy Commendation Medal with Gold Stars, a Navy Achievement Medal, a Navy Expeditionary Medal, Meritorious Unit Commendation, and the National Defense Service Medal. He earned his bachelor's from the United States Naval Academy and master's degrees from Johns Hopkins University and Naval War College.

Gareth Evans

President Emeritus
International Crisis Group

Gareth Evans studied arts and law at the University of Melbourne before completing an MA in politics, philosophy, and economics at Oxford. He joined the Oxford Law School, teaching constitutional law from 1971 until 1976. He also practiced as a barrister, specializing in industrial law.

As a member of the Australian Senate and later the House of Representatives from 1978 to 1999, Evans held several positions but was best known as Minister for Foreign Affairs (1988-1996) in the Hawke and Keating Labor governments. He took a key role in the development of the United Nations peace plan for Cambodia and the creation of APEC, the Asia-Pacific Economic Co-Operation forum.

Evans' work in international affairs continued after his retirement from parliament in 1999. He was a member of the Weapons of Mass Destruction Commission and the United Nations Secretary General's High Level Panel on Threats Challenges and Change, and chaired the World Economic Forum Peace and Security Expert Group. He has been President and Chief Executive of the International Crisis Group since 2000. He was awarded an honorary Doctorate of Laws by the University of Melbourne in 2002.

Michèle Flournoy

Under Secretary of Defense for Policy
U.S. Department of Defense

Michèle Flournoy was confirmed by the U.S. Senate as the Under Secretary of Defense for Policy on February 9, 2009. She serves as the principal staff assistant and advisor to the Secretary of Defense and the Deputy Secretary of Defense for all matters on the formulation of national security and defense policy and the integration and oversight of Department of Defense policy and plans to achieve national security objectives.

Prior to her confirmation, Flournoy was appointed President of the Center for a New American Security (CNAS) in January 2007. Previously, she was a senior adviser at the Center for Strategic and International Studies, where she worked on a broad range of defense policy and international security issues, and served as a distinguished research professor at the Institute for National Strategic Studies at the National Defense University (NDU), where she founded and led the university's 2001 Quadrennial Defense Review working group.

Prior to joining NDU, Flournoy was Principal Deputy Assistant Secretary of Defense for Strategy and Threat Reduction and Deputy Assistant Secretary of Defense for Strategy. In that capacity, she oversaw three policy offices in the Office of the Secretary of Defense: Strategy; Requirements, Plans, and Counterproliferation; and Russia, Ukraine, and Eurasian Affairs.

Flournoy was awarded the Secretary of Defense Medal for Outstanding Public Service in 1996, the Department of Defense Medal for Distinguished Public Service in 1998, and the Chairman of the Joint Chiefs of Staff's Joint Distinguished Civilian Service Award in 2000. She is a former member of the Defense Policy Board and the Defense Science Board Task Force on Transformation. Flournoy earned a bachelor's degree in social studies from Harvard University and a master's degree in international relations from Balliol College, Oxford University, where she was a Newton-Tatum scholar.

Camille Grand

Director
Foundation for Strategic Research

Camille Grand has been managing director of the Foundation for Strategic Research since September 2008.

Prior to this assignment, he was deputy assistant secretary for disarmament and multilateral affairs in the French ministry of foreign affairs (2006-2008). In this capacity, he was in charge of chemical and biological nonproliferation, conventional arms control, small arms and light weapons, land mines and cluster munitions, the Organization for Security and Co-operation in Europe, and Council of Europe affairs, and has been directly involved in several arms control negotiations. He has also been the French representative in several groups within the EU and NATO.

From 2002 to 2006 he was the deputy diplomatic adviser to French minister of defense Michèle Alliot-Marie, after three years as an expert on nuclear policy and nonproliferation for the ministry's strategic affairs department. He was a visiting fellow for the European Union Institute for Security Studies (1999-2000), a research fellow for the Institut des relations internationales et stratégiques, and editor of the quarterly *Relations Internationales et Stratégiques* (1994-1998).

His publications include several books and monographs and numerous papers in European and American books and journals on current strategic affairs primarily focused on nuclear policy, nonproliferation, and disarmament. Grand holds graduate degrees in international relations, defense studies, and contemporary history and is a graduate from the Institut d'études politiques de Paris. He also followed the training of the Institut diplomatique of the French ministry for foreign affairs.

Karl Kaiser
Adjunct Professor of Public Policy
Harvard Kennedy School

Karl Kaiser is an adjunct professor of public policy at the Kennedy School and Director of the Program on Transatlantic Relations of the Weatherhead Center for International Affairs. He was educated at the Universities of Cologne, Grenoble, and Oxford and taught at the Universities of Bonn, Johns Hopkins (Bologna), Saarbruecken, Cologne, the Hebrew University, and the Departments of Government and Social Studies of Harvard.

Kaiser was a Director of the German Council on Foreign Relations, Bonn/Berlin and an advisor to Chancellors Brandt and Schmidt. He was a member of the German Council of Environmental Advisors.

He serves on the Board of *Foreign Policy, Internationale Politik*, the Advisory Board of the American-Jewish Committee, Berlin, and the Board of the Federal Academy of Security Policy, Berlin. He is a recipient of the Atlantic Award of NATO.

Kaiser is the author or editor of several hundred articles and about fifty books in the fields of world affairs, German, French, British and U.S. foreign policy, transatlantic and East-West relations, nuclear proliferation, strategic theory, and international environmental policy. He holds a PhD from Cologne University and an Honorary Doctorate of the Russian Academy of Sciences.

Sergey Kislyak
Ambassador Extraordinary and Plenipotentiary of the Russian Federation in Washington D.C.
Russian Federation

Sergey Kislyak is the Ambassador of the Russian Federation to the United States. He was appointed in July 2008.

Prior to this assignment, he served as the Deputy Minister of Foreign Affairs (2003-2008), where he focused on arms control and nonproliferation issues. From 1998 to 2003, he served as Ambassador to Belgium and as the Permanent Representative of Russia to NATO.

Previously, he was Director of the Department of Security Affairs and Disarmament of the Russian Foreign Ministry (1995-1998) and Director of the Department of International Scientific and Technical Cooperation at the Foreign Ministry (1993-1995). Kislyak has also served in a number of other positions during his career of more than thirty years in the Foreign Ministries of the Soviet Union and Russia. He graduated from the Moscow Engineering Physics Institute in 1973 and the Soviet Academy of Foreign Trade in 1977.

Fyodor Lukyanov
Editor-in-Chief
Russia in Global Affairs

Fyodor Lukyanov is editor-in-chief of *Russia in Global Affairs*, published in Russian and English in cooperation with *Foreign Affairs*. As head of Russia in Global Affairs since its founding in 2002, he greatly contributed to making this journal Russia's most authoritative source of expert opinion on global development issues.

Lukyanov worked as a correspondent, commentator, and editor for numerous Russian print and electronic media. He is an international columnist with *Vedomosti*, *Kommersant*, and Gazeta.ru and a commentator on leading national radio stations and TV channels. Lukyanov writes the monthly "Policy Line" column for *The Moscow Times* and the "Geopolitics" column in the Russian edition of *Forbes* magazine. As commentator of

Russian foreign policy he is widely contributing to the most influential media in the United States, Europe, and China.

Lukyanov is a member of the Presidium of Council on Foreign and Defense Policy, an influential independent organization providing foreign policy expertise. He is also member of Presidential Council on Human Rights and Civic Society Institutions. Lukyanov graduated from Moscow State University in 1991 and holds a degree in Germanic languages.

Sam Nunn

Distinguished Professor, Sam Nunn School of International Affairs, Georgia Institute of Technology
Co-Chairman and Chief Executive Officer, Nuclear Threat Initiative

Sam Nunn is co-chairman and chief executive officer of the Nuclear Threat Initiative (NTI), a charitable organization working to reduce the global threats from nuclear, biological, and chemical weapons. He served as a U.S. Senator from Georgia for twenty-four years (1972-1996) and is retired from the law firm of King & Spalding. In addition to his work with NTI, Senator Nunn has continued his service in the public policy arena as a distinguished professor in The Sam Nunn School of International Affairs at Georgia Tech and as chairman of the board of the Center for Strategic and International Studies in Washington, D.C.

During his tenure in the U.S. Senate, Senator Nunn served as chairman of the Senate Armed Services Committee and the Permanent Subcommittee on Investigations. He also served on the Intelligence and Small Business Committees. His legislative achievements include the landmark Department of Defense Reorganization Act, drafted with the late Senator Barry Goldwater, and the "Nunn-Lugar" Cooperative Threat Reduction Program, which provides assistance to Russia and the former Soviet republics for securing and destroying their excess nuclear, biological, and chemical weapons.

Raised in the small town of Perry in middle Georgia, Nunn attended Georgia Tech, Emory University, and Emory Law School, where he graduated with honors in 1962. After active duty service in the U.S. Coast Guard, he served six years in the U.S. Coast Guard Reserve. He first entered politics as a member of the Georgia House of Representatives in 1968.

George Perkovich

Vice President for Studies
Carnegie Endowment for International Peace

George Perkovich is vice president for studies and director of the Nuclear Policy Program at the Carnegie Endowment for International Peace. His research focuses on nuclear strategy and nonproliferation, with a focus on South Asia and Iran, and on the problem of justice in the international political economy.

He is the author of the award-winning book *India's Nuclear Bomb*. He is co-author of the Adelphi Paper "*Abolishing Nuclear Weapons*," published in September 2008 by the International Institute for Strategic Studies. This paper is the basis of the book *Abolishing Nuclear Weapons: A Debate*, which includes seventeen critiques by thirteen eminent international commentators. Perkovich is also co-author of a major Carnegie report, *Universal Compliance: A Strategy for Nuclear Security*, a blueprint for rethinking the international nuclear nonproliferation regime. The report offers a fresh approach to deal with states and terrorists, nuclear weapons, and missile materials to ensure global safety and security.

He served as a speechwriter and foreign policy adviser to U.S. Senator Joe Biden from 1989 to 1990. Perkovich is an adviser to the International Commission on Nuclear Nonproliferation and Disarmament and a member of the Council on Foreign Relations' Task Force on U.S. Nuclear Policy.