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“Reducing the Nuclear Threat in the 21st Century”

**Symposium on International Safeguards: Verification and Nuclear Material
Security**
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It's an honor to be here with so many who have devoted their lives and their expertise to the study and practice of nonproliferation. We have come together to discuss a great global challenge – how to reduce the threats posed by nuclear weapons, stop their spread, and, especially, how to make sure nuclear weapons and nuclear weapons materials never fall into the hands of those who would do us harm.

Before I get too far into my remarks, I would like to offer congratulations to Dr. ElBaradei on his re-appointment; his leadership both before and after the events of September 11 has confirmed the wisdom of asking him to serve a second term as Director General.

It is, as always, a pleasure to be here in Vienna – the site of so much historic international diplomacy. It was here in Vienna, 40 years ago this summer – at the height of the Cold War – that U.S. President John Kennedy and Soviet Chairman Nikita Khrushchev met for a very difficult and contentious summit which increased world anxiety about nuclear security. We made it through the peril of the Cold War. But today we face a new nuclear danger, which in many ways is more complex and insidious. It is no exaggeration to say today that what the people in this room do, and are able to persuade their governments to do, may shape our nuclear future every bit as much as any summit ever held in this city.

The world is now united in the fight against terror. We all have our role. It will fall to others to find terrorists and bring them to justice. It falls to the people in this room, in a significant way, to prevent terrorists from acting out an even greater horror by acquiring nuclear weapons or the materials to create them.

Nearly three years ago, Osama bin Laden told an interviewer from ABC News that acquiring weapons of mass destruction is “a religious duty.” That ought to alarm us, because the attacks of September 11 give us little hope that if these terrorists had them, they would hesitate to use them. They showed their willingness to take innocent lives is unbounded; their capacity for killing is limited only by the power of their weapons. And so we are now in a new arms race. Terrorists and certain rogue states are racing to get weapons of mass destruction, and we are racing to stop them. The outcome of this arms race will define global security in the 21st century.

When I last came to an IAEA conference, I came as an official of the U.S. government. Today I speak as the President of the Nuclear Threat Initiative – a newly formed charitable organization dedicated to reducing as urgently and comprehensively as possible, the global threat from nuclear, biological and chemical weapons.

This urgent task united CNN founder, Ted Turner, and former U.S. Senator Sam Nunn, who co-chair the Initiative. And they, in turn, have recruited an experienced, distinguished Board of Directors, who come from a wide range of nations and backgrounds. On our Board are:

- Two sitting U.S. Senators, Pete Domenici and Richard Lugar;
- A current member of the Russian Duma, Andrei Kokoshin;
- Susan Eisenhower, President of the Eisenhower Institute and a well recognized expert in U.S.-Russian relations;
- Rolf Ekeus, who led the UN Special Commission on Iraq, which was responsible for eliminating the Iraqi infrastructure for nuclear and other weapons of mass destruction, and now leads the Stockholm International Peace Research Institute;
- Gene Habiger, retired U.S. Air Force General and former Commander-in-charge of the U.S. Strategic Command;
- Dr. Amartya Sen, a Nobel Prize winning economist and Master of Cambridge University;
- William Perry, now at Stanford University and a former U.S. Secretary of Defense;
- Dr. Nafis Sadik, special adviser to the UN Secretary-General; and former head of the UN Population Fund, and
- Dr. Jessica Matthews, President of the Carnegie Endowment for Peace.

Those of us who have been in the public sector understand how difficult it is – while in government – to step back from handling day-to-day crises to take a strategic view, design fresh concepts, or consider new approaches. So part of what NTI offers is fresh thinking on long-standing problems. But we also aim to do more than think. We mean to match our thought with action. So we are taking steps we hope will help:

- Reduce the quantities of nuclear, biological and chemical weapons materials, and bring them under secure control;
- Restrict the spread of weapons know-how;
- Reduce the risk of intentional or accidental use of weapons of mass destruction;
- Develop better strategies and means to guard against the emerging threat from biological weapons;
- Bring about changes in nuclear forces to enhance safety, security and stability; and

- Increase public awareness, encourage dialogue, catalyze action and promote new thinking about reducing the danger from weapons of mass destruction on a global basis.

Public education is a priority for NTI because:

- Most people do not know, for example, that large quantities of fissile material exist in civilian nuclear reactors and research facilities around the world, all defended with different levels of security.
- Most people do not know that global inventories of separated plutonium are growing by many tons a year.
- Most people do not know that Russia alone has enough uranium and plutonium to make more than 60,000 nuclear weapons – some of it stored in locations that have no surveillance camera in the facility and no detector at the door.
- Most people do not know that Russia is dismantling its nuclear arsenal and reducing its weapons, but as it does so, it is increasing its stock of fissile material.
- Most people do not know that the rising supply of weapons materials – combined with the rising demand for the materials by terrorist groups – greatly multiplies the threat. And yet, funds to reduce this threat have not kept pace with the dangers. This has created a growing and increasingly dangerous gap between the threat and our response.

It is one of NTI’s fundamental missions to make the public aware of these gaps, because we believe that if the public understood them, they would not stand for them.

Since September 11, the public in many countries has become intensely aware of the clear and present danger of terrorist sabotage of nuclear power plants. Much has also been said in the press about the possible threat of radiological “dirty bombs.” Surely we must do more worldwide to address both of these threats – and the IAEA will have a critical role to play in that effort. But I want to focus my remarks today on another issue of rising public concern – the threat of terrorism and the threat from poorly protected nuclear weapons materials. Since September 11, people are coming to understand that these threats are not separate, but interrelated and reinforcing, and if joined together, become our worst nightmare.

The people in this room are keenly aware of the gap between the threat and the response, and have long been urging the world to increase its efforts to prevent the theft, trafficking and smuggling of nuclear material. Until now, few have listened. But one of the greatest obstacles to addressing the threat is gone now. And that is the view that there is no threat – or rather, that addressing the threat is important, but somehow, not urgent.

That view is finished. The threat is serious, it is immediate, and more and more people know it. As an example – I recently ran a search in major world newspapers for news stories about terrorism and nuclear weapons. In the month before September 11, there were 57 stories about terrorism and nuclear weapons. In the month following, there were 1,106.

As people are suddenly ready to support far stronger action to keep nuclear weapons out of terrorist hands, we have to make sure people understand that IAEA is the only international institution of global scope devoted to controlling access to weapons-usable material. There is little hope that we can build an effective global system to secure nuclear material from terrorists without an effective and well-financed safeguards system at its foundation. We all need to be able to make the case for the work of the IAEA. As we do so, we must call attention to its funding gap. It is no longer fiscally prudent or rational for an organization whose mission is so important to be asked to do so much, with so little, for so long.

Governments, the press, and the public need to understand that the IAEA is responsible for monitoring more than 900 facilities to make sure no nuclear materials at those facilities are diverted to military use. They need to know that during 15 years of zero real growth in the IAEA's safeguards budget, the number of states who are part of the nonproliferation regime, the number of safeguarded facilities in those states, and the amount of plutonium and HEU requiring safeguards have all increased dramatically. Fifteen years ago, there was some "fat" in the Agency's budget. But we have long since passed the point where adding more safeguards responsibilities without adding more budget is trimming out fat – we are cutting into the bone.

The IAEA's safeguards system is facing a quiet crisis. There is already a gap between the nuclear threat and our global response. Zero growth budgets at IAEA widen the gap. Governments, the press and the public need to know that the entire global safeguards budget for preventing one of the world's greatest security threats is under 100 million U.S. dollars a year -- less than ten percent of the cost of building a single nuclear power plant – and a tiny fraction of the economic cost of the non-nuclear terrorist strikes of September 11. They need to know that there is a growing danger that budget constraints will force decisions that could irrevocably weaken the safeguards regime. The time has come, instead, for member states to agree to a substantial real increase in the IAEA's regular safeguards budget.

The discovery in Iraq in 1991 of a substantial covert nuclear weapons program led to the establishment – for the first time – of an Additional Protocol, with wide-ranging new inspection authorities and information access that will give the IAEA what it needs to conclude that there are no covert nuclear activities in states subject to the protocol. The adoption of this Additional Protocol is a great advance in nuclear security, but Governments, the press and public need to understand that the Board has approved Additional Protocols for only 58 member states, and only 22 of those have entered into force or are being provisionally applied. That means the IAEA does

not yet have the full authority it needs to detect and expose any covert nuclear programs that may be underway around the world.

They also need to understand, as the people in this room do, that safeguards – even where they are fully in force – offer no assurance against theft, seizure or unauthorized acquisition of nuclear material inside the state.

When U.S. President Eisenhower made his 1953 speech to the United Nations promoting the peaceful use of atomic energy and proposing the creation of IAEA, he said: “The Atomic Energy Agency could be made responsible for the impounding, storage and protection of the contributed fissionable material. The ingenuity of our scientists will provide special safe conditions under which such a bank of fissionable material can be made essentially immune to surprise seizure.”

In fact, that vision is far from realized for the hundreds of facilities that have or store fissionable material around the world. Preventing a “surprise seizure” of these materials must be one of our most urgent missions.

Yet Governments, the press and the public need to understand that there is no international standard or requirement for the physical protection of nuclear material within a state. There is a Convention on the Physical Protection of Nuclear Materials, but as the people in this room know, it covers only transport of materials across international borders. It does not cover transport, storage or use of nuclear materials within a state – leaving nations to select whatever level of security they may choose. This state of affairs poses a danger to all nations.

The worldwide system of security for nuclear materials is no stronger than the system of security at the weakest, worst-defended site, which in many cases amounts to no more than a poorly-paid, unarmed guard sitting inside a chain link fence. The theft of nuclear materials anywhere is a threat to everyone everywhere. This has been a difficult point to get across. One of the most important efforts we made when I was in the Department of Energy was convincing Members of our Congress that funds spent securing nuclear materials in Russia was not solely for the security of Russia; it was for our own national security as well. If terrorists want nuclear materials, and they do, they are going to go where it’s easiest to get them.

As the people in this room know, the theft of potential bomb material is not just a hypothetical worry, but an ongoing reality. This includes the attempted theft – by a conspiracy of insiders – of 18.5 kg of HEU from a weapons facility in the Urals. It includes nearly a kilogram of HEU in the form of fast reactor fuel pellets seized last year in the Republic of Georgia. It includes 600 grams of HEU found by police in Colombia in April. Authorities still do not know the source, but no Latin American nation has a facility that uses or is capable of producing such material. The IAEA illicit trafficking database has recorded more than 550 reported incidents of trafficking since 1993. The great majority do not involve weapons-usable material, but 16 cases have involved plutonium or enriched uranium. Sixteen cases is a disturbing number,

but it also may not tell us what we really need to know: what percentage of the actual thefts do we uncover? Is it close to one hundred percent – or closer to five or ten percent? We simply do not know. Nor can we ever know with absolute certainty. But we can considerably narrow the window of vulnerability by strengthening physical protection as we strengthen diversion safeguards.

There is now momentum to take more serious action in this area. A May conference in Stockholm called for a comprehensive approach to security of material. The General Conference last month passed a resolution calling on the Agency to review all its programs to enhance security of nuclear material and facilities. This December, Director General ElBaradei will convene an open-ended group of experts to draft an amendment to the Convention. The Convention needs to be toughened, deepened, broadened. We must do all of these things and speed the resulting amendment's adoption and entry into force. That states are not obligated to meet any standard of security for their facilities is a gap in the global security system that must be rapidly closed. Whatever the experts may have recommended before September 11, after September 11, it seems clear that an amended Convention should include a binding commitment to meet high security standards – such as those set out in the IAEA's recommendations – along with a requirement for each nation to report regularly on its procedures, regulations, and standards for securing and accounting for its nuclear material.

Right now, it is not possible even to learn which facilities are in the greatest need of upgrades. The only insight the Agency can get into the security of a specific facility comes when the country in question invites the Agency to help review security there. And even then, there are not the resources to answer every call as it comes. The IAEA has fewer than three full-time staff working on physical protection of nuclear materials and preventing illicit trafficking. The regular budget expenditure for this program in the last year was under one million dollars – total.

This staff and resource investment is grossly inadequate to address the dangers we face. The reported price paid for the 600 grams of HEU found in Colombia was \$1.5 million. And yet, in many facilities around the world, this material is not guarded as one would guard something of such value or that could have such catastrophic consequences if it should get into the wrong hands.

Binding international standards should be created for physical protection of material, for the same reason safeguards were instituted as an international obligation more than 30 years ago – to make sure the material isn't diverted to a destructive purpose. Significant security improvements could be made for costs that would be quite small when judged against what societies routinely spend for military security, or when judged as a percentage of the cost of nuclear generated electricity. A good start would be investing more immediately in the existing IAEA program for nuclear materials security as we move toward binding international safeguards for the security of nuclear materials.

Earlier in my remarks, I discussed with you the role of my organization, the Nuclear Threat Initiative. Promoting public awareness of the threat is a priority of overarching importance. But we also intend to take direct action where we can to meet urgent and immediate needs.

That's why I am pleased to announce today a 3-year grant from NTI to the IAEA in the amount of \$1.2 million dollars to expand the Agency's ability to review security for nuclear facilities worldwide, identify needed security upgrades, and organize contributions from member states to carry out the upgrades. We are intending this contribution to be matched – and more-than-matched – by member states. We see this as an early installment in what we hope will become a wave of new contributions to this important work.

While there is a great deal that the IAEA must do, let me state emphatically there is also a great deal that leading nuclear states must now do – to reduce and control weapons of mass destruction and their essential ingredients and technologies. The Nunn-Lugar cooperative threat reduction initiative was born of a unique moment in international security – the end of the Cold War and the collapse of the Soviet Union. The attacks of September 11 and the subsequent realignments of international relationships create a new unique moment that calls for a new initiative of similar scale. At their upcoming summit, President Bush and President Putin should commit their countries to a course of action that would ensure that any nuclear, chemical and biological weapons and materials are safe, secure, and accounted for – with reciprocal monitoring sufficient to assure each other, and the rest of the world, that this is the case.

Such was the vision of the recent bipartisan panel, chaired by former Senate Majority leader Howard Baker and former White House Counsel Lloyd Cutler, who urged that the United States develop, with Russia, a plan to secure or neutralize all of Russia's potential bomb material as rapidly as possible; appoint a senior official to take charge of getting the job done; and fund a four-fold increase in U.S. resources to accelerate and strengthen these efforts. Leading states in Asia and Europe must increase their contributions to these efforts as well – not only in Russia, but throughout the Former Soviet Union and wherever proliferation vulnerabilities exist.

In the end, we need to ask: is keeping nuclear weapons out of terrorist hands a priority or an afterthought? If it's an afterthought, after what? What comes before it? If it's a priority, do our effort and investment reflect that?

Thanks to the IAEA, the vision of its founders and the stamina of its leaders – the world today has an organization ready, capable, competent, and well positioned to meet these challenges. However, that organization needs strengthening and greater financial support. As I noted earlier, Dr. ElBaradei and his fine staff have for too long been asked to do too much with too little. We need to invest more energy, more resources and more diplomatic muscle – now – to make more nations more accountable to one another, and more willing to minimize the risk they may create for one another.

That means we need an even stronger and better-financed safeguards system. We need many more nations with comprehensive safeguards agreements in place. We need many more nations with the Additional Protocol in force. We need to integrate the new safeguards measures with the traditional ones in a way that strengthens the safeguards system – not weakens it. We need a dramatic increase in national and international efforts to ensure that all potential bomb material worldwide is secure and accounted for. We need an amended Convention on Physical Protection of Nuclear Material that creates international norms for security that are not a matter of choice or a question of convenience, but a binding requirement arising from a shared commitment to our common security. We need to make the most of this moment and the attention it brings to widen, deepen, and strengthen IAEA efforts -- and send the world a proper and reasonable bill for the priceless work the IAEA does to harness the power of the atom for peaceful purposes and provide for our nuclear security.

Albert Einstein once famously said: “The release of atom power has changed everything except our way of thinking ... the solution to this problem lies in the heart of mankind.” Einstein has a point, but we cannot wait for a solution in the heart of humankind. We have to forge a solution from what we have at hand. The insight of people in this room cannot stay in this room. What you know and understand must be known and understood by those in the highest circles of the governments you serve. We need nothing less than a rededication to the founding principles of the IAEA and a sustained international commitment to reduce toward zero the risk that the power of the atom will ever be employed for an evil purpose. Much will depend on your skills and the strength of your voice. Thank you.