

**U.S. COOPERATIVE THREAT REDUCTION AND
NONPROLIFERATION PROGRAMS**

JOINT HEARINGS
BEFORE THE
SUBCOMMITTEE ON EUROPE
AND THE
SUBCOMMITTEE ON
INTERNATIONAL TERRORISM, NONPROLIFERATION
AND HUMAN RIGHTS
OF THE
COMMITTEE ON
INTERNATIONAL RELATIONS
HOUSE OF REPRESENTATIVES
ONE HUNDRED EIGHTH CONGRESS

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U.S. COOPERATIVE THREAT REDUCTION AND NONPROLIFERATION PROGRAMS

THURSDAY, MAY 8, 2003

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON EUROPE, AND
SUBCOMMITTEE ON INTERNATIONAL TERRORISM,
NONPROLIFERATION AND HUMAN RIGHTS,
COMMITTEE ON INTERNATIONAL RELATIONS,
Washington, DC.

The Subcommittees met, pursuant to call, at 2:36 p.m. in Room 2172, Rayburn House Office Building, Hon. Doug Bereuter [Chairman of the Subcommittee on Europe] presiding.

Mr. BEREUTER Today, the Europe Subcommittee, along with the Subcommittee on International Terrorism, Nonproliferation and Human Rights, will hold the first of two hearings on the Cooperative Threat Reduction [CTR] programs.

I want to thank the Chairman of the ITNHR Subcommittee, Mr. Gallegly, for his cooperation in putting together this joint hearing.

Today, we will receive testimony regarding the threat reduction and nonproliferation programs administered by the Departments of State, Defense, and Energy. Our primary focus in this hearing is to review those programs in Russia and the nations evolving from the former Soviet Union.

When the former Soviet Union collapsed in 1991, the new Russian government inherited the largest arsenal of weapons of mass destruction [WMD] in the world. According to a recent GAO report, the arsenal included some 30,000 nuclear weapons, 600 metric tons of weapons-usable nuclear materials, 40,000 metric tons of declared chemical weapons, over 2,000 missiles and bombers capable of delivering WMD, some 40 research institutions and 30,000 to 75,000 senior nuclear, chemical, and biological weapons scientists devoted to the development and production of weapons of mass destruction. Of course, the nature and extent of their massive and diverse arsenal of biological weapons has yet to be fully revealed, but, from what I have learned, without exaggeration, it constitutes one of the most terrifying threats to the survival of the planet.

Recognizing this critically important situation, the Congress, in 1992, responded by initiating what has become known as the Nunn-Lugar Cooperative Threat Reduction Initiative. The original purpose of the CTR program was to provide assistance for short-term, high-priority elimination of former Soviet strategic nuclear weapons. Over this period, however, the program has expanded to include chemical and biological weapons programs as well.

I would ask unanimous consent that my full statement be considered a part of the record, and I would now recognize for his opening statement the Chairman of the Subcommittee, Mr. Gallegly, because we are about to have to go vote. Mr. Gallegly.

[The prepared statement of Chairman Bereuter follows:]

PREPARED STATEMENT OF THE HONORABLE DOUG BEREUTER, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NEBRASKA, AND CHAIRMAN, SUBCOMMITTEE ON EUROPE

Today the Europe Subcommittee, along with the Subcommittee on Terrorism, Nonproliferation and Human Rights, will hold the first of two hearings on the Cooperative Threat Reduction (CTR) programs.

I want to thank the Chairman of the ITNHR Subcommittee for his cooperation in putting together these joint hearings.

Today we will receive testimony regarding the threat reduction and non-proliferation programs administered by the Departments of State, Defense and Energy. Our primary focus in this hearing are those programs in Russia and the nations evolving from the former Soviet Union.

When the former Soviet Union collapsed in 1991, the new Russian government inherited the largest arsenal of weapons of mass destruction (WMD) in the world. According to a recent GAO Report, the arsenal included some 30,000 nuclear weapons, 600 metric tons of weapons-usable nuclear materials; 40,000 metric tons of declared chemical weapons; over 2,000 missiles and bombers capable of delivering WMD, and some 40 research institutes and 30,000 to 75,000 senior nuclear, chemical and biological weapons scientists devoted to the development and production of weapons of mass destruction. Of course, the nature and extent of their massive and diverse arsenal of biological weapons has yet to be fully revealed, but from what I have learned, it constitutes one of the most terrifying threats to the survival of the planet.

Recognizing this critically dangerous situation, the Congress, in 1992, responded by initiating what has become known as the Nunn-Lugar cooperative threat reduction initiative. The original purpose of the CTR program was to provide assistance for a short-term, high-priority elimination of former Soviet strategic nuclear weapons. Over this period, however, the program has expanded to include chemical and biological weapons programs as well.

Assessments we have seen suggest that over the past twelve years and with over \$7 billion invested in WMD elimination and securitization, the CTR program has achieved a respectable level of success. Various published documents indicate that roughly 6,000 nuclear warheads have been removed as immediate threats. Over 1400 ballistic missiles, cruise missiles, submarines and strategic bombers have been decommissioned or eliminated. The transport and storage of nuclear weapons has been made more secure. Warhead control and accounting has been improved. Security of excess plutonium and highly enriched uranium has been tightened. Some weapons grade uranium has been eliminated.

On the other hand, progress has been extremely slow in attempting to eliminate Russia's large arsenal of chemical weapons and the biological programs to which I have already made reference. And, many of the large number of unemployed and under-employed weapons scientists have not been transitioned to suitable alternative research or employment. Additionally, we are told that Russia has not always provided its share of the funding for these programs and that it has been less than forthcoming in providing access to nuclear sites and certainly not all biological weapons and research facilities.

Finally, several extraordinarily knowledgeable Members of Congress, past and present, have expressed concerns over the mismanagement of the programs and with the commitment of funds for questionable projects.

Today's hearing is intended to review the exiting programs, to take stock of the accomplishments thus far, to review the problems incurred in implementing the programs, and to determine what the Bush Administration hopes to accomplish through these programs.

I look forward to the testimony of our witnesses.

Mr. GALLEGLY. I thank the Chairman, my good friend from Nebraska, for working with me today.

The Subcommittee on International Terrorism, Nonproliferation and Human Rights and the Subcommittee on Europe are holding

its first of two hearings on the issue of threat reduction and non-proliferation programs in Russia and other former Soviet states.

In late 1991, as the Cold War was just ending, Congress established a program so that the United States could assist Russia, Ukraine, Belarus, Kazakhstan, and Tajikistan with the safe and secure transportation and disposal of nuclear and other weapons. The program was started after a coup in Moscow and the impending collapse of the Soviet Union raised concerns about the security of the Soviet Union's nuclear weapons arsenal.

During the next 10 years, our nation expended more than \$2 billion on this program. Initially, the program had focused on securing and destroying Soviet-era nuclear weapons. Today, the threat reduction program has become a part of America's comprehensive, nonproliferation effort and war against terrorism.

It is my hope that today's witnesses will elaborate on this connection between the threat reduction and counterterrorism efforts, especially on the key issue of how best to prevent international terrorist groups from buying or stealing nuclear, chemical, or biological weapons and materials. I am also looking forward to hearing the witnesses' views on the 10-Plus-10-Over-10 Initiative and how they see this agreement contributing to our country's overall nonproliferation and threat reduction strategy.

I will have a longer statement at next week's hearing on Cooperative Threat Reduction programs; however, I did want to take this opportunity to thank you, Chairman Bereuter, for agreeing to hold this joint hearing on an issue that is so critical to our relationship with Russia and our efforts to prevent the spread of weapons of mass destruction. I yield back.

[The prepared statement of Mr. Gallegly follows:]

PREPARED STATEMENT OF THE HONORABLE ELTON GALLEGLY, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA, AND CHAIRMAN, SUBCOMMITTEE ON INTERNATIONAL TERRORISM, NONPROLIFERATION AND HUMAN RIGHTS

Thank you Mr. Chairman. Today, the Subcommittee on International Terrorism, Nonproliferation and Human Rights and the Subcommittee on Europe are holding their first of two hearings on the issue of threat reduction programs in Russia and other former Soviet states.

In late 1991, as the Cold War was just ending, Congress established a program so that the United States could assist Russia, Ukraine, Belarus and Kazakhstan with the safe and secure transportation and disposal of nuclear and other weapons. The program was started after a coup in Moscow and the impending collapse of the Soviet Union raised concerns about the security of the Soviet Union's nuclear weapons arsenal.

During the next ten years, our nation has spent over two billion dollars on this program. Initially, the program had focused on securing and destroying Soviet-era nuclear weapons. Today, the threat reduction program has become part of America's comprehensive nonproliferation effort and war against terrorism.

It is my hope that today's witnesses will elaborate on this connection between threat reduction and counter-terrorism efforts, especially on the key issue of how best to prevent international terrorist groups from buying or stealing nuclear, chemical or biological weapons and materials. I am also looking forward to hearing the witnesses' views on the 10+10 Over 10 Initiative and how they see this agreement contributing to our country's overall nonproliferation and threat reduction strategy.

I will have a longer statement at next week's hearing on cooperative threat reduction programs. However, I did want to take this opportunity to thank Chairman Bereuter for agreeing to hold these two joint hearings on an issue that is so critical to our relationship with Russia and our efforts to prevent the spread of weapons of mass destruction.

We are fortunate that we have before us today two State Department witnesses that are critical in the battle against international terrorism. Ambassador Cofer

Black is the Coordinator of the Office of Counterterrorism at the Department of State. His office has primary responsibility for developing, coordinating and implementing U.S. counterterrorism policy.

Tony Wayne is the Assistant Secretary of State for the Bureau of Economic and Business Affairs, which formulates and carries out U.S. foreign economic policy. It is also the office within the State Department with expertise on the sources of financing for international terrorist organizations and leads the effort to develop greater international cooperation in attacking terrorist financing sources.

I look forward to hearing from our witnesses and I will now turn to Mr. Sherman, the Ranking Member on this subcommittee, for any remarks he may wish to make.

Mr. BEREUTER Thank you, Chairman Gallegly. Now, it is my pleasure to recognize the distinguished gentleman from Florida, the Ranking Member of the Europe Subcommittee, Mr. Wexler.

Mr. WEXLER. Mr. Chairman, in the interest of time, I, too, will submit my statement for the record. The witnesses have waited quite a long while. I would simply just request that the witnesses here today, when we have an opportunity to hear from them, if they could elaborate, to the degree that they can, on how best we can address the challenges and the obstacles that Nunn-Lugar faces, with some degree of specificity in terms of a response to the recent GAO report, which assessed the U.S. efforts, as well as Russian obstacles, to improving security at specific Russian weapon sites.

I strongly believe that our nonproliferation policies and the Cooperative Threat Reduction programs need to be revamped and expanded in order to address the threats posed by the weapons that face America, and I would be very curious to hear the testimony of the witnesses as to their views on expanding the Nunn-Lugar program beyond Russia and the former Soviet Union. Thank you, Mr. Chairman.

Mr. BEREUTER Thank you, Mr. Wexler. I think we should have time to hear from the distinguished Ranking Member of the Subcommittee on International Terrorism, Nonproliferation and Human Rights, the gentleman from California, Mr. Sherman, and he is recognized.

Mr. SHERMAN. We have time if he speaks very quickly. Thank you for holding these hearings. Dealing with the nuclear arsenal of the former Soviet Union is perhaps the greatest proliferation challenge faced by the United States.

First, the sheer number of weapons the Soviet Union had, and Russia now has, and the number that the United States has is a concern to people everywhere; second, Russia's system for controlling its nuclear weapons is an appropriate focus of concern, in these hearings; and, third, the potential for Russia's loose nukes and fissionable material to fall into the hands of terrorists and rogue nations is perhaps the greatest immediate concern. It is the most likely source for the misuse of nuclear weapons, even if it wouldn't cause as great a harm, as we could have imagined in the days of the Cold War.

Russia's continued assistance to Iran's so-called "civil nuclear program" demonstrates that Russia can and will put aside its own security concerns in order to make much-needed cash from its nuclear prowess. I am particularly concerned about not having a full accounting for Russia's battlefield or substrategic nuclear weapons. There were perhaps 27,000 such weapons at the time of the Soviet Union. How many of them are left, we cannot know until Russia

gives us an accounting. We need an agreement to provide that accounting, and so far, the Russians have resisted such an agreement, but we need to continue and make that one of our major bilateral objectives.

I also take exception to what I understand is the Bush Administration's decision to focus almost half of the Pentagon's cooperative threat reduction funding on a particular chemical weapons program. While chemical weapons are, of course, of concern, anything that reduces the total amount we spend dealing with Russia's nuclear weapons is money poorly saved.

So I look forward to this panel, and I thank you for holding these hearings.

Mr. BEREUTER Mr. Schiff, we are about out of time, but I recognize you because I understand you would like recognition.

Mr. SCHIFF. Thank you, Mr. Chairman. I will be very brief, and I would request unanimous consent that my full statement, as well as the statement prepared by the Nuclear Threat Reduction Campaign, be admitted in the record.

Mr. BEREUTER Without objection.

Mr. SCHIFF. I recently introduced a bill that would grant the President permanent waiver authority of six original Nunn-Lugar conditions. This has particular relevance to the Shchuch'ye chemical weapons destruction facility. Current law requires a 3-year waiver of six original Nunn-Lugar conditions. This waiver expires in 2005.

We have also drafted legislation to expand Nunn-Lugar outside of the former Soviet Union, authorizing efforts to dismantle and destroy nuclear, chemical, and other weapons in nations such as Pakistan, India, North Korea, China, Iran, and Iraq. The goal of this program is to reduce stockpiles of nuclear and non-nuclear materials in both military and nonmilitary facilities.

Finally, I think we have to place increased focus on the problem of former Russian weapons scientists, and, indeed, as the Administration recently alluded, Iraqi weapons scientists as well, and make sure that we are aggressively finding alternative and more productive sources of employment, and also in the case of the Russian former weapons scientists facilitating their work with U.S. institutions. And I will be happy to yield back the balance of my time.

Mr. BEREUTER Thank you, Mr. Schiff. I want to say to the distinguished panel, I regret the amount of time you have waited, and you have been very patient, but we are going to have to ask you to wait again because we have four votes, and I think, realistically, it is going to be about 2:55 before we can come back.

We have a commitment for the whole House later at 4 o'clock, and so we will complete the hearing at 3:50, and I will not shorten the time that you have for your testimonies; we will simply, as required, submit questions to you because I do not want to shorten your testimony. So, with your indulgence and patience, we will recess the Subcommittees' jointly meeting until 2:55 p.m.

[Whereupon, a recess was taken.]

Mr. BEREUTER The Subcommittees will come to order. Well, of course, I regret that I am unable to predict the House's activities, but we are going to hear from our witnesses and give them a third each of the time remaining.

I would like to introduce, first, John Wolf, assistant secretary of the Bureau of Nonproliferation. He has served as a Foreign Service officer since 1970. Mr. Wolf has served as a principal deputy assistant secretary for international organizational affairs and Ambassador to Malaysia from 1992 to 1995.

Ambassador Wolf, I am prepared to give each of you about 9 minutes, which will be splitting the time available. So please proceed as you wish. Your entire statements in all cases will be made part of the record.

STATEMENT OF THE HONORABLE JOHN S. WOLF, ASSISTANT SECRETARY, BUREAU OF NONPROLIFERATION, U.S. DEPARTMENT OF STATE

Mr. WOLF. Thank you, Mr. Chairman, and I will be glad to start, and I will summarize my summary statement and leave some more time for Ms. Bronson and Mr. Baker. Mr. Chairman, thank you for the invitation to appear, and I thank Chairman Gallegly for the invitation to appear. Preventing the spread of weapons of mass destruction and the materials and skills needed to make them are a partnership we share with you and the Congress.

This has never been more important because trends in the nonproliferation world are not good. Today, more countries and more terrorists than ever have access, or are seeking access, to weapons of mass destruction and their means of delivery. South Asia has crossed the nuclear threshold, and rogue regimes like North Korea, Iran, and Libya seek to replicate that ambition. With globalization, there are more potential sources of sensitive-materials technologies in countries that used to be buyers of weapons, materials, and technology that are now supplying such materials to others.

What is needed is much greater international vision and more determination, much more determination, to combat proliferation. We, in the United States, do a lot, and the statements that you will hear today detail part of that. Others, though, must do more.

I would like to offer some observations, though, based on my participation in Geneva last week at the Preparatory Conference for the 2005 Nonproliferation Treaty Review Conference. There was broad support for the treaty, but interpretations of its meaning differed in worrisome ways. All too many states ignore that there are three pillars to the treaty: Disarmament, nonproliferation, and the peaceful uses of nuclear energy. The first and third pillars depend on successfully combating proliferation; indeed, that is the treaty's title.

Too many states focus exclusively on disarmament, and they do so only in the narrowest way, focusing only on warheads, the numbers of warheads. Notably, they take no account of our Cooperative Threat Reduction programs, which, with the cooperation of Russia and the other former Soviet states, have rid the world not only of significant numbers of warheads but also of significant quantities of fissile material and other dangerous materials. We live in a safer world thanks to this effort.

Our CTR programs are designed to assure that the still-significant stocks of weapons, dangerous materials, and weapons expertise left over from the Soviet military programs are being downsized and that protection is being consistently deepened. It is

a huge but important task for U.S. national security because we continue to receive reports that terrorist groups and sponsor states are trying to access these stockpiles.

For a decade, State, Energy, and the Department of Defense have all worked together to eliminate the Soviets' dangerous legacy where we can, secure what cannot be eliminated, and ensure that the scientists and engineers who designed and built weapons of mass destruction do not sell their know-how abroad.

In many cases, it is State's responsibility to help facilitate the work for either Defense or Energy. In March, for instance, the State Department's diplomatic support was crucial to making it possible for Secretary Abraham to sign an amendment to the Plutonium Production Reactor Agreement, and that is going to help Russia to close down its three plutonium-production reactors. That is what I mean when I say the disarmament process and the process of dealing with dangerous materials is going forward, and people need to take account of the two tons of plutonium a year which will not be produced when the reactors are shut down.

We are working with the G-8, and even this week there was a meeting of G-8 senior officials to pursue creation of the Global Partnership that was announced at Kananaskis last summer. The idea is that others will match the \$10 billion over 10 years that we are prepared to pledge. We need their help. It has been too long that Europe and Japan haven't done enough to help these threat-reduction that we have been working on for a decade.

What we want, therefore, is to press our partners to firm up their pledges, commit to specific projects, and, in the case of Russia, to provide the necessary access and tax and liability protections needed for others to begin work.

I am happy to report, we have \$6 billion of new pledges in hands, including expressions of interest from states outside the seven, including such states as Norway. The others are prepared to contribute to priority projects like plutonium disposition and the Shchuch'ye chemical weapons destruction facility. More needs to be done with Russia, particularly pertaining to the liability issues, and the G-7-plus-others still needs to find more money to fund their pledges fully, but we are making progress.

Our programs at State have a lot to do with keeping Soviet WMD expertise at home. We oversee participation in the International Science Centers, and these are platforms for the engagement of former weapons scientists. We propose to channel \$52 million in the current year. We are also still working with \$30 million that the Congress provided us in 2002 for bio-weapons production facilities to convert them.

These are important programs, and they are targeted at reconfiguring facilities capable of producing large quantities of weaponized agents, such as anthrax and smallpox. We have had results. We have had results in terms of gaining access, although it is too slow, access to places like the Vostok biological plant, the Prokrof bio-preparations facility, the Ross Agro-bioprom, a network of 10 animal-vaccine facilities, and we are working on other places where we haven't yet gotten in: Kyrof 200, where we have a number of projects, to the science centers, which will be the start, we hope,

of cooperation. And not only are we getting access, but we are actually getting real results.

The cooperative research we sponsor often benefits both scientists and U.S. business. One project we sponsored resulted in the development of a high-altitude, laser-imaging device that can detect leaks from gas pipelines; another, new electronics applications for beryllium that allows shift from weapons production to commercial manufacturing.

We are doing a number of things in the bio-medical sphere. Russian scientists have identified two antiviral compounds, including for individuals who may have adverse reactions to existing vaccines. We are doing a lot of other things related to West Nile virus, Newcastle, and Avian flu. I know Congressman Gallegly is interested because Newcastle is one of those things that affects poultry-producing states.

Improved access, I have mentioned. With the additional money, we are going to step up this process because now we need to graduate both institutions and scientists. This can't be a perpetual dole. What we want to do is get these institutions on a self-sustaining basis and get the scientists into commercial work.

Russia and Eurasia aren't the only problems, and we have a variety of threat-reduction programs, including the Nonproliferation and Disarmament Fund, which tackles tough, urgent problems, such as the removal of highly enriched uranium from Venshia, near Belgrade, to safe storage in Russia, and in the future, we expect the NDF to focus on unanticipated opportunities to eliminate missile systems, chemical agents, secure orphaned radiological sources. We are going to use it as the project incubator for our Dangerous Materials Initiative, designed to put better controls on dangerous materials, whether they are chemical, biological, or nuclear, all around the world. With DOE, we intend to accelerate our effort to return spent fuel and fresh, highly enriched uranium to safe storage.

There are other areas that we are working on that I will summarize very briefly. The export control and border security programs; we are now in 35 countries. We have gone well beyond Central Asia, where we stopped. My written statement explains the program thoroughly, and I would just like to make one point. Good export controls are important, but enforcement is the key. Without good enforcement, it doesn't matter how extensive the rules are. Proliferators and their suppliers must know that the international community will enforce accountability.

We are also working with the International Atomic Energy Agency in a variety of ways. Our voluntary contribution is currently helping to strengthen the safeguards program.

Mr. Chairman, I look forward to working with you on our agenda. We seek your support for the President's proposal to broaden cooperative threat reduction spending beyond the former Soviet Union by allowing the President to use those resources wherever and however best he can. Each program will be different, and the kind of footprint that we want to have in South Asia will be different from the former Soviet Union and different in other parts of the world.

I hope the Congress will also support the President's request for permanent authority to waive the requirements for CTR certification and for authority to construct the Shchuch'ye chemical weapons destruction plant.

With that, Mr. Chairman, I will yield the remaining 22 seconds, and thank you very much.

[The prepared statement of Mr. Wolf follows:]

PREPARED STATEMENT OF THE HONORABLE JOHN S. WOLF, ASSISTANT SECRETARY,
BUREAU OF NONPROLIFERATION, U.S. DEPARTMENT OF STATE

Chairman Bereuter, it is an honor to appear before the House International Relations Committee's Europe Subcommittee. Chairman Gallegly, it is especially appropriate for me to appear before the newly formed Subcommittee on Counterterrorism, Nonproliferation, and Human Rights. Preventing the spread of weapons of mass destruction and the materials and skills needed to make them is my mission.

Never has this responsibility been more important. Trends in the nonproliferation world are not good, and the tensions that result are becoming a serious challenge to world peace and stability. During the first 40 years following World War II, we and our allies depended largely on deterrence and tight export controls to limit the spread of dangerous weapons. Today, however, we face a substantially increased risk from countries and international terrorist groups with access to chemical and biological weapons, and at least several states with access to components and technology for making nuclear weapons.

Against this grim backdrop, there is a risk that complacency, inertia, and timidity are preventing the international community from blocking attempted violations, or from reacting decisively to them. Clearly, we cannot simply wring our hands and hope things will get better. We have an active agenda, in partnership with a wide range of other countries and international organizations, and unilaterally.

In pursuit of this agenda, I have set five goals for the Nonproliferation Bureau. They are to:

- Curb the access of proliferators, terrorists, and state sponsors of terrorism to materials, equipment, and technology for WMD and missiles;
- Discourage states seeking to acquire, develop, or use WMD and missiles;
- Maintain and strengthen the international system of nonproliferation treaties and regimes by raising standards and enforcing increased compliance;
- Promote international nuclear cooperation under the highest nonproliferation and safety standards; and
- Contain the transfer of advanced conventional arms to states of concern, and to terrorists.

As we pursue these goals, task one is preventing the outflow of weapons of mass destruction, dangerous materials, and weapons expertise from the states of the former Soviet Union (FSU). As you are well aware, the Soviets left behind a potential mother lode for terrorists and rogue states. While it is, of course, Russia and the FSU countries that have first responsibility to protect their sensitive capabilities and/or technologies, it's in the US interest to help—and we are leading an international effort to do just that.

This is a government wide effort—and I am honored to appear here with members of that team. Close cooperation among State, Energy, and Defense is essential, and it is an every day fact.

In Russia and Eurasia, we must eliminate weapons and dangerous materials where we can, secure what cannot be eliminated, and ensure that the scientists and engineers who designed and built these things do not sell their know-how abroad. With regard to nuclear issues, this means we must:

- Improve security at Russian storage facilities;
- Consolidate stored fissile materials;
- Stop new production; and
- Purchase, down-blend, or effectively dispose of former nuclear weapons materials to reduce supply.

Energy and Defense have effective programs to do these things, and State's job is to provide them the diplomatic support they need to get on with the job. In March, for example, State's diplomatic support was crucial to making it possible for Secretary Abraham to sign an amendment to the Plutonium Production Reactor

Agreement, as well as an implementing agreement, committing Russia to a program that will eliminate production of plutonium in that country by 2011. State is also providing the lead in multilateral negotiations on an agreement to finance Russia's plutonium disposition program, which will utilize nuclear reactors under strict controls to burn excess weapons plutonium corresponding to well over 4,000 nuclear weapons.

In addition, State is working to increase the international community's contribution to the threat reduction effort in the former Soviet Union. Until recently, the threat reduction efforts were largely a U.S. show. At last year's G-8 summit in Kananaskis, Alberta, however, the other seven G-8 partners agreed to the creation of a Global Partnership in which they would match the \$10 billion we plan to spend on threat reduction efforts in Russia and Eurasia over the next 10 years.

Since then, this Department has been energetically pressing the seven to firm up their pledges, commit to specific projects, and, in the case of Russia, to provide the necessary access and tax and liability protections needed for the others to begin work. As we meet today, I am happy to report that we have approximately \$6 billion in firm pledges, expressions of interest in contributing from states outside the Seven such as Norway, and strong interest from our partners in contributing to such U.S. priorities as plutonium disposition and the Shchuch'ye chemical weapons destruction facility. Knotty discussions are still ongoing with Russia to resolve longstanding differences on liability issues, but we are making progress. We will continue to pursue the issue vigorously when the U.S. assumes the G-8 presidency next year.

State also has its own nonproliferation programs. We oversee the U.S. Government's participation in the Moscow-based International Science and Technology Center and the Kiev-based Science and Technology Center of Ukraine. These centers provide flexible platforms for the engagement of former weapons scientists and for tasks that other U.S. agencies cannot accomplish through other means. State will use the centers to channel \$52 million in the current fiscal year to redirect former Soviet WMD/missile scientists to peaceful, commercial purposes through cooperative research. This funding includes \$20 million in FY 2003 specifically targeted at redirecting former biological and chemical weapons scientists. The Energy Department will use the centers to oversee expenditure of \$12 million on Initiative for Proliferation Prevention (IPP) projects that are also designed to guide former weapons scientists to commercial employment. In addition, the Defense Department uses the Moscow center for projects to secure dangerous pathogens at Russian biological institutes. The State Department also provides funding to the U.S. Civilian Research & Development Foundation, a non-profit organization established by Congress with a broad charter to engage former weapons scientists of the FSU.

State is also responsible for implementing the Bio-Industry Initiative, established with \$30 million provided by Congress in Defense Emergency Response Funds in June 2002 for conversion of former bio-weapon production facilities. This is the only U.S. program targeted at reconfiguring former Soviet biological production facilities, which are capable of producing large quantities of weaponized agents such as anthrax and smallpox. This initiative also supports our efforts to combat bio-terrorism by supporting accelerated drug and vaccine development for highly infectious diseases.

Our engagement effort produces results. It has forged strong links between the U.S. and FSU scientific communities. Former weapons scientists regularly tell us that our support provides them a genuine incentive to spurn offers from rogue states which we know continue to be made. But it also has made an impact in the marketplace. One project we sponsored resulted in the development of a high altitude laser-imaging device that can detect leaks from gas pipelines and is now under commercial development here in the U.S. Another has identified new electronics applications for beryllium that allow a shift from weapons to commercial manufacturing for one facility in Kazakhstan. Overall, the centers have produced 270 patentable ideas.

Some of our biggest achievements have been in the bio-medical sphere, where we have made real progress in public health and agricultural issues of concern both in the U.S. and abroad. In research jointly sponsored by State and the U.S. Public Health Service, Russian scientists have identified two anti-viral compounds that hold the promise of proving effective against smallpox, including for individuals who may have adverse reactions to existing vaccines. If this effort bears fruit, we could have an important new tool in the event our nation is ever exposed to attack with the smallpox virus. Another project involved U.S. collaboration with the Kazakh scientists formerly employed at the biological weapons facility at Stepnogorsk. The team developed new agents for which they are seeking patents to treat heart arrhythmia. Similarly, Russian researchers in the program are hard at work devel-

oping kits for rapid diagnosis of West Nile, Newcastle, and Avian flu—diseases that pose serious economic threats to U.S. poultry producers.

Improved access is another important benefit of our programs. The economic advantages of participating in our programs are so great—particularly with regard to the Bio-Industry Initiative—that with time and persistence, we have steadily reduced the number of institutes that are closed to us. In recent months members of my staff were the first Americans to receive a thorough tour of the Berdsk biologics facility and the Vostok joint stock company facilities at Omutninsk. They also were the first Americans to be received in any fashion at the Institute of Toxicology in St. Petersburg.

Sometimes engaging former weapons scientists leads to a direct improvement in our ability and techniques to halt proliferation. For instance, our establishment and support of the International Geodynamics Research Center in Bishkek, Kyrgyzstan, not only engages scientists, but has created a location capable of verifying and detecting nuclear and seismic activities in nearby India, Pakistan, and China.

Looking to the future, with the additional funds we are requesting this year, we plan to step up efforts to engage Russian chemical weapons scientists in accordance with the conclusions of the policy review this Administration conducted shortly after coming into office. This year, we introduced representatives from the U.S. chemical industry to Russian scientists from a former CW research facility that, until last year, was closed to foreigners, and collaborative research projects are under development. We have also initiated projects with newly contacted former CW institutes in Ukraine. We will use our additional funds to develop new projects and relationships with other high-priority chemical institutes in Russia, Ukraine, and Central Asia.

We also plan to use the funds to step up efforts to guide former weapon scientists and the institutes at which they work to commercial self-sustainability. After a decade of engagement in cooperative research, it is high time that we begin implementing the steps that will eventually allow us to phase out these programs. Done right, this should produce more of those mutually beneficial situations I mentioned earlier. Commercialization efforts can, however, be more expensive in the short run than simple engagement programs. Former Soviet scientists and institutes often need advice on business development and ways to market their intellectual property.

Specifically in the coming year, we will reorganize the Moscow and Kiev centers to make them more effective at marketing the scientific research produced under their auspices. We will use Bio-Industry Initiative funds to assist former bio-weapon production facilities to obtain western business advice and to foster the formation of a consortium of key Russian industry, academic, and ministerial representatives. This consortium, led by the Moscow Medical Academy, will be used to support the development of a pipeline from research to commercialization for Russian biological researchers in the pharmaceutical industry. In the process, we will support American firms seeking to invest in projects at these institutes. The Eli Lilly pharmaceutical company has, for example, expressed interest in producing an anti-tuberculosis drug at one. If over time we can link former Soviet scientists into the international business community and allow their excellent scientific skills to be used to heal rather than to harm, we should be able to wind up these programs in a few years. Already, we have made considerable progress and I hope that within the next two years we can begin graduating institutes from our assistance programs.

This is not altruism, and it's certainly not corporate charity. Refocusing scientists and facilities reduces risk that proliferators elsewhere will successfully tap into this expertise. Our access and contacts give us substantial encouragement that leakage is not occurring. We are not complacent however, and we use regular reviews, internal controls and external audits to further reduce the risks.

While I have focused so far on Russia and Eurasia, these are not the only countries of concern, and our nonproliferation programs are not the only tools we have at our disposal. A glance at the headlines shows proliferation threats all over the globe. Iraq is on the way to solution, but others remain. Recent visits by the International Atomic Energy Agency (IAEA) to Iran have made it all too clear, for example, that Iran has made a sizable, heretofore clandestine, effort to acquire capabilities that make sense only as part of an effort to produce fissile material for weapons. North Korea has an openly avowed nuclear weapons program, and there are others who are in contravention of their obligations under the Treaty on the Non-Proliferation of Nuclear Weapons (NPT), Chemical Weapons Convention (CWC) and Biological Weapons Convention (BWC). Outside of these regimes there are additional concerns. The situation in South Asia deserves special mention. It is different from the dangers posed by the rogue states. India and Pakistan are two very different countries, with which we are pursuing boldly different relationships. Each

though has lethal arsenals, and the continuing friction between the two suggests the urgent need for dialogue and confidence building measures to lessen the risks.

Dealing with each of these challenges requires a different response. In most cases, we will not be able to fall back on the model of our proliferation threat reduction programs in the former Soviet Union. The scale of the potential threat is much smaller, and we are unlikely to encounter elsewhere the willingness we found there to build down or scrap weapons establishments. In some instances our focus will be on securing sensitive technologies. This is particularly true in South Asia, where we have active nonproliferation dialogues with Pakistan and India. There we may need to be able to seize opportunities quickly.

This also the reason for developing a Dangerous Materials Initiative (DMI). We want to help countries establish better accounting and control mechanisms to secure radioactive materials, pathogens, and sensitive precursors, from the laboratory to movement into internal and international commerce. DMI will aim for synergies among U.S. Government agencies and programs and also with international partners and international organizations.

At this point, we are not seeking separate funding for the DMI but expect that the Nonproliferation and Disarmament Fund (NDF) will be a major resource, along with other U.S. assistance programs. This is in part why the President has requested \$35 million in FY 2004 for NDF, more than double the FY 2003 appropriation.

NDF has tackled tough, urgent, and often unanticipated problems on a worldwide basis. In the recent past, it has negotiated and executed the removal of Highly Enriched Uranium (HEU) from Serbia, the destruction of missiles in Bulgaria and the return from Cyprus of nuclear reactor parts en route to the Middle East. The NDF has also led a successful international effort to develop a state-of-the-art automated tracking system, referred to as Tracker, designed to help governments strengthen their control over sensitive exports or transshipments. Tracker has been a key tool for engaging nearly two dozen countries—either as design partners, current users, or in discussions of future implementation. Now deployed throughout Central Europe to track sensitive exports, this system is of increasing interest to countries in Western Europe and Asia as a means to track terrorists and to monitor the movement of dangerous materials. The State Department is closely coordinating this export control assistance tool with other U.S. equipment assistance provided to European and Eurasian states.

In the future, we expect the NDF to focus on urgent, unanticipated opportunities to eliminate missile systems; destroy, secure and remove biological pathogens; eliminate chemical agents and weapons; rescue orphaned radiological sources; inventory and track dangerous materials; assist countries in developing laws and regulations to control the movement, storage, and security of dangerous materials; and encourage countries in the Middle East and South Asia to use the Tracker system and to assist with its development.

Another of our major programs to prevent transfers of sensitive goods to end-users of proliferation concern is centered in State's Export Control and Related Border Security Assistance (EXBS) Program. The EXBS program assists governments in strengthening their export controls by improving their legal and regulatory framework, licensing processes, border control and investigative capabilities. We also work closely with the Department of Defense to coordinate our efforts.

We currently have active programs in over 30 countries, with 20 EXBS program advisors serving overseas engaging foreign officials on ways to strengthen controls, and directing training activities and the delivery of much-needed detection and enforcement equipment. In a number of countries officials trained by the EXBS program or using EXBS program-provided equipment have seized sensitive goods or weapons components bound for terrorists, state sponsors of terror, or other proliferant entities. U.S. export control assistance is largely responsible for over a dozen European and Eurasian countries adopting comprehensive export control laws that meet recognized international standards.

Even before September 11, 2001, the EXBS program and its advisors were active in key Central Asian countries, a factor that doubtlessly paid unanticipated dividends when these countries were thrust into the front line of the war against terrorism. Following September 11, increased EXBS program resources were focused on this strategic region to help these countries, and key countries in the Caucasus as well, shore up vulnerable borders and improve capabilities to deter, detect, and interdict the transit of illicit goods and weapons.

In Europe, we are increasing export control assistance to the Baltics and South-eastern Europe, and Mediterranean transshipment points like Malta and Cyprus. All states, especially those with large ports, must do their part to forestall the transit and transshipment of dangerous materials and technology. Furthermore, EXBS

and NDF are working closely with our Allies and international partners to ensure that our assistance is non-duplicative and coordinated with international non-proliferation political and assistance efforts, and to ensure that the U.S. taxpayer receives the maximum value for his or her assistance dollar.

Given the global nature of the proliferation threat, the EXBS program has expanded its focus to include countries along key transit routes and countries with substantial volume of transshipment trade in the Middle East and Southeast Asia. In potential South Asia supplier countries, we continue to encourage the development, full implementation and enforcement of export controls that meet international standards.

The State Department also works cooperatively with other, related programs to harmonize efforts abroad. For example, we have a close working relationship with both the Department of Energy's National Nuclear Security Administration (DOE/NNSA), which funds and manages the Second-Line-of-Defense (SLD) program that provides advanced radiation detection equipment to foreign governments, and with Customs/DHS, which has the lead on the Container Security Initiative (CSI) designed to secure the supply line of cargo shipments destined for U.S. ports. The State Department's Export Control and Related Border Control Assistance (EXBS) program has worked with NNSA's SLD program to integrate it into overall USG export control assistance efforts and to jointly ensure that previously provided radiation detection equipment is repaired and maintained. My bureau, which manages the EXBS program, also is leading an interagency effort to complete a strategic plan for provision of overseas radiation detection equipment. The Nonproliferation Bureau also chairs a NSC-mandated Sub-Policy Coordination Committee to coordinate all USG nonproliferation export control assistance. State is also working closely with U.S. Customs/DHS officials to ensure that U.S. Government approaches countries with ports scheduled to join the Container Security Initiative are aligned with our broader nonproliferation policy and with the export control outreach and assistance efforts we are carrying out in some of these countries.

Our third goal, making the export control regimes stronger, is also one aimed at reducing supply. As we noted in our response to last year's examination of the regimes by the General Accounting Office, the Administration is in the process of reviewing the nonproliferation regimes. Since September 11, anti-terrorism has been adopted as a formal goal of the Australia Group, Missile Technology Control Regime, Wassenaar Arrangement, and Nuclear Suppliers Group. We have won Australia Group agreement to adopt catch-all and intangible technology control provisions, setting the standard for the other regimes. The Wassenaar Arrangement amended its dual-use export control list to begin adding items specifically of concern for terrorists, and this year is reviewing its controls on man-portable air defense systems (MANPADS) like SA-7s and SA-18s with a view to further strengthening them.

In the year ahead we intend to push adoption of catch-all controls and denial consultation in areas where they haven't yet been implemented; continue to review control lists to make sure they are keeping up with technology and the threat, and; as always, look for ways to strengthen implementation and enforcement. We are also working in the Nuclear Safety Group and Missile Technology Control Regime on other ways to tighten further these agreements.

While strong regimes are necessary, they are not enough. We also need to take concrete action to enforce commitments more strictly and make proliferation more costly—politically, and financially. This is one of my problems with the Europeans who seem to want to spend more time debating what I'd call "architecture"—treaties, arrangements, etc.—and not enough time discussing implementation. What we're not doing enough of is taking concrete action to make other countries live up to their commitments more strictly.

Tightening regimes and improved enforcement are part of the answer. Many governments tell us about their export controls and laws. But what counts is their willingness to enforce the law, to make clear there is a price for violation of the law. Proliferators need to know they face isolation and consequences if their efforts continue. Ending the threat posed by Iraq's weapons of mass destruction will send a powerful signal to other proliferators that the world will not stand by idly.

To help deal with determined proliferators not prepared to conform to international standards, we look among other things to the NPT and the International Atomic Energy Agency. Iraq's weapons programs is being dealt with, but the nuclear weapon ambitions of Iran, North Korea, and others are potential hot spots we must deal with now. When I spoke last week to the Preparatory Conference for the NPT 2005 Review Conference, I acknowledged that the NPT is built on three pillars: disarmament, nonproliferation and peaceful uses of nuclear power. While many speakers seemed fixated on the need to accelerate disarmament, I maintained that the

problem in 2003 is that the treaty is out of balance. The failure of the more than 180 members of the NPT who abide by their obligations to insist that the small minority stop cheating puts both disarmament and peaceful nuclear trade at risk. We must strengthen enforcement tools, like the International Atomic Energy Agency, and we must ensure that the IAEA's Additional Protocol, which gives the IAEA expanded inspections capabilities, is universally adopted. To enable the IAEA to use its strengthened capabilities effectively, we must ensure that the IAEA safeguards budget is fully funded. Even more importantly, the international community, not just the US and a few allies, must make clear to proliferators that the price of proliferation will be increased international political and economic isolation. Frankly, the ambivalent attitude of many governments in Europe and Asia is worrisome. We will not, however, be discouraged. We will press our friends, allies, and the world community as a whole to take decisive action to deal with a threat to us all.

Beyond multiple safeguards activities, the IAEA has an important role in preventing nuclear terrorism. After September 11, 2001, the IAEA moved quickly to develop a comprehensive Nuclear Security Program to help states protect against acts of nuclear and radiological terrorism. In March 2003, the Department of Energy, working with the IAEA and Russia, hosted an international conference to develop recommendations to help states, among other activities, identify and control their high-risk radioactive sources, and establish effective national infrastructures for the secure management of vulnerable radioactive sources. Part of our voluntary contribution to the IAEA will support this important effort.

In those instances when traditional approaches fail, the properly planned and executed use of targeted sanctions can make an important difference, and send a strong message—both to states considering whether to acquire WMD capabilities, and to those that are willing to spread them. Sanctions are a key component of our counterproliferation efforts—which constitute one of the three pillars of the President's National Strategy to Combat WMD. That said, U.S. legislation currently offers a number of overlapping requirements that lack the transparency and clarity needed to enable foreign entities to understand them. We hope to be able to work with you to consolidate and rationalize these important legal authorities and to do it in a way that ensures the Administration has the tools and the flexibility to advance our nonproliferation objectives.

Let me turn now very briefly to the fourth goal that my bureau is actively pursuing—strong support for international cooperation in the peaceful uses of nuclear energy, consistent with continued adherence to stringent nonproliferation and safety standards. We maintain and carefully implement an extensive array of bilateral agreements for peaceful nuclear cooperation with other nations, the “good guys,” nations that are firmly committed to a shared view of nonproliferation norms and values. In all, we have about 25 such agreements, including one with the European Atomic Energy Community—Euratom—which currently encompasses 15 member states and by this time next year will likely have ten more. Besides facilitating ordinary, day-to-day peaceful nuclear commerce, agreements for cooperation serve an important nonproliferation purpose, affording the United States bilateral controls over significant fuel cycle activities such as reprocessing and enrichment that go well beyond anything in multilateral nonproliferation instruments.

As we pursue our nonproliferation objectives, it is also very important for our broad political and economic relations with friends and allies that the United States continue to demonstrate that we are a predictable and reliable partner in civil nuclear affairs. Facilitating peaceful nuclear commerce under appropriate conditions and controls can directly support our broader nonproliferation agenda in very concrete ways. A case in point is the marketing worldwide of low enriched uranium reactor fuel derived from down-blended Russian weapons material under the U.S.-Russia HEU-LEU Agreement.

I have already spoken of IAEA safeguards in regard to the Additional Protocol, citing it as a valuable new nonproliferation tool. But I want to say a word here also about the enduring value of the traditional IAEA safeguards system. Traditional IAEA safeguards are essential to the ability of nations to engage in day-to-day commerce for peaceful nuclear purposes with a sufficiently high level of confidence that nuclear materials are not being diverted to non-peaceful purposes. Traditional IAEA safeguards are a key—indeed for the U.S. a legally mandated—feature of the agreements for cooperation I referred to a moment ago. The United States has historically made a tremendous contribution in support of traditional IAEA safeguards, and we will continue to do so.

One final point on this general theme: Ensuring safety and security, in transportation as well as at reactors and other nuclear sites, is obviously a key concern. The Nonproliferation Bureau at State is heavily engaged in matters relating to the safe

transportation and use of radioactive materials, and we will continue to devote significant resources to these efforts as well.

We know the important role that Congress has played over the years in providing the intellectual, legal, and financial foundations for programs. Looking forward, we urge the Congress to support the President's proposal to broaden the current Cooperative Threat Reduction spending authorities to permit use of up to \$50 million of CTR funds beyond the Former Soviet Union, allowing the President to use those resources in the best way he can.

And, of course, I strongly urge Congress to support the President's request that the authority to waive the requirements for CTR and Title V of the Freedom Support Act certifications be made permanent. We also strongly support permanent waiver authority to cover construction of the Shchuch'ye chemical weapons destruction plant in Russia. Finally, I urge that Congress revert to the annual CTR certification requirement to an annual year basis (from its current fiscal year basis) to prevent needless bureaucratic delays.

Conclusion—Nonproliferation is a Team Effort:

We are all partners in the worldwide effort to make the world safer. There are many areas where the interlocking nature of the challenges confronts us all.

Nonproliferation challenges are multiple and multiplying. We need to focus on the meat of the issue, and not lose the forest for the trees.

Enhancing nonproliferation dialogue with our worldwide partners is essential to success. But dialogue is no substitute for concrete action, and where dialogue fails we will have to use other means—whether multilateral, bilateral or unilateral. That is at the heart of President Bush's National Security Strategy.

There are lots of opportunities to make progress; it's up to us to transform opportunity into reality.

Thank you.

Mr. BEREUTER Ambassador Wolf, thank you very much. I don't think there is any subject on which the Europe Subcommittee and, I would say, the other Subcommittee can spend its time more productively and importantly than on the subject we are discussing today. We will look for your advice as to how the Subcommittees can be better informed.

Next, we will hear from Secretary Lisa Bronson, who is the deputy under secretary of defense for technology security policy and counterproliferation and director of the Defense Technology Security Administration. She has also served as a director for negotiations and implementation at the Department of Defense, where she oversaw the development and implementation of DoD policies concerning nuclear, biological, chemical, and missile-proliferation and arms-control issues.

Secretary Bronson, we are pleased to hear from you. You may proceed as you wish.

STATEMENT OF LISA BRONSON, DEPUTY UNDER SECRETARY OF DEFENSE FOR TECHNOLOGY SECURITY POLICY AND COUNTERPROLIFERATION, U.S. DEPARTMENT OF DEFENSE

Ms. BRONSON. Thank you, Mr. Chairman. I appreciate the opportunity to discuss the Department of Defense's Cooperative Threat Reduction program.

Congress established CTR in 1991 to assist the former Soviet states in dismantling, destroying, consolidating, and securing weapons of mass destruction and their means of delivery. Congress continues to provide strong, bipartisan support, as well as rigorous oversight. We appreciate both types of involvement.

Since its inception, the CTR program has assisted with the deactivation or elimination of a total of 6,032 nuclear warheads, 846 ballistic missile launchers, 109 strategic bombers, 26 strategic bal-

listic missile submarines, 554 air-to-surface missiles, and 888 ballistic missiles. These are important achievements.

The Administration is also acutely aware of the difficulties encountered by the program. The past 17 months have been challenging for CTR. In February 2002, Russia told us that a facility built with approximately \$106 million in CTR assistance would have no use. The missile fuel it was intended to neutralize had been diverted to the Russian commercial space program. The waste in U.S. tax dollars represented by the so-called "heptyl" situation was inexcusable.

In response, we impressed on the Russian government at all levels the gravity of the situation that their negligence had created. In addition, we looked inward at how the program had been managed, and we found ways to better protect CTR investments. We instituted a program of semi-annual executive reviews with Russia to revalidate plans, assumptions, and schedules on a regular basis.

We asked the DoD inspector general to review the heptyl situation and how CTR is organized more broadly. The first phase of the inspector general's report was completed in September 2002, and we have worked closely with the inspector general. The IG even participated in our January 2003 executive review meeting with Russian officials in Russia.

We analyzed all CTR projects for our reliance on good-faith, Russian promises or assumptions. We are converting those undertakings into formal, legal agreements. In a related step, we have pressed the Russian Ministry of Defense to guarantee access to loosely guarded nuclear weapons storage sites where CTR would like to assist with the security and inventory control systems. The access agreements for these sites were recently approved as a prerequisite for CTR assistance.

Another illustration of the difficulty of dealing with another country's infrastructure relates to local politics. In January of this year, DoD officials were informed that local leaders in Russia's Udmurt Republic had reversed their prior position and would bar construction of a solid-rocket motor destruction facility. This facility was intended to support the ambitious decommissioning schedule for Russia's mobile, SS-24 and SS-25 missiles. CTR had invested some \$14 million at this site near the city of Votkinsk. We had also invested approximately \$85 million in designs and testing for the rocket motor disposal facility that was also to have been built at Votkinsk.

The Votkinsk situation is similar to the heptyl experience in one respect: A significant, U.S. nonproliferation investment was jeopardized. However, Votkinsk is markedly different from the heptyl situation. Our information is that the Russian central government took significant steps to secure the necessary land and environmental permits from local officials. The Russian executive agent for this project alerted us as soon as possible of rumblings from local opposition as it appeared in September 2002. Although we were surprised that Moscow was unable to overcome local opposition, we knew that efforts were being made to address the problem.

In addition, the Russian government has taken the initiative to work around this impediment, including the commitment of Russian funds to partially resolve it.

Finally, over 400 SS-24 and SS-25 ICBMs are still scheduled to begin decommissioning later this year. Thus, as opposed to the heptyl situation, there remains a significant proliferable commodity here that the U.S. has an interest in destroying.

The heptyl situation was, indeed, a wake-up call for us. It underscored that while we would like to trust our CTR partners, we must remember that every assumption, every expectation, and every schedule for a project must be verified repeatedly.

That said, the U.S. has a strong interest in Russia becoming a full partner in the global war on terrorism and combating WMD proliferation. We want Russia to comply fully with its arms control and nonproliferation obligations. We want Russia to safely and securely store its nuclear weapons, fissile material, and dangerous pathogens.

This is a vision for Russia, parts of which CTR may help to realize. As we continue to pursue this vision, we are mindful that we must do so through responsible stewardship of U.S. investments.

Mr. Chairman, we are in a period of transition for the CTR program. The budget requests for fiscal years 2002 and 2003 include greater emphasis on the threats we confront in the global war on terrorism. As you know, we have requested additional funds to build the chemical weapons destruction facility at Shchuch'ye in Russia.

This new focus does not come at the expense of the classic threats addressed by CTR: Nuclear weapons and their delivery systems. Rather, we are trying to leverage the CTR experience in the former Soviet Union to address today's threats, including borders that cannot be policed against WMD trafficking, loosely guarded biological materials, BW expertise, the former Soviet BW infrastructure, and the large stockpiles of chemical weapons, especially the proliferable, nerve-agent weapons that Russia is ready to eliminate.

The reforms we are implementing during this transition are intended to reduce the risk to U.S. investment and ensure that we are investing to address the most pressing threats to U.S. national security. The CTR program is an increasingly important element of our strategy to combat WMD and terrorism. We urge your continued support of this vital, nonproliferation effort. Thank you, Mr. Chairman.

[The prepared statement of Ms. Bronson follows:]

PREPARED STATEMENT OF LISA BRONSON, DEPUTY UNDER SECRETARY OF DEFENSE FOR TECHNOLOGY SECURITY POLICY AND COUNTERPROLIFERATION, U.S. DEPARTMENT OF DEFENSE

Thank you for inviting me to discuss the Department of Defense (DoD) Cooperative Threat Reduction (CTR) Program.

WHY THE CTR PROGRAM EXISTS

The CTR program is a result of the Soviet Nuclear Threat Reduction Act of 1991, which directed DoD to assist the states of the former Soviet Union (FSU) in dismantling, destroying, consolidating and securing Soviet-era weapons of mass destruction (WMD) and their means of delivery. Since then, Congress has continued to support DoD in implementation of this program. CTR activities seek to increase national security by addressing WMD threats at their source.

In the Fiscal Year (FY) 1997 National Defense Authorization Act (NDAA), Congress authorized DoD to provide assistance through CTR programs to achieve the following broad objectives:

- Facilitate the elimination, and the safe and secure transportation and storage of nuclear, chemical and other weapons and their delivery vehicles;
- Facilitate the safe and secure storage of fissile materials derived from the elimination of nuclear weapons;
- Prevent the proliferation of weapons, weapons components and weapons related technology and expertise; and
- Expand military-to-military and defense contacts.

The FY 1997 NDAA remains the primary authority for conducting CTR assistance activities. The CTR program was subsequently modified to prohibit CTR assistance to:

- Peacekeeping exercises or related activities with Russia;
- Provision of housing;
- Provision of assistance to promote environmental restoration;
- Provision of assistance to promote job retraining;
- Promotion of defense conversion; and
- Elimination of conventional weapons or delivery vehicles primarily intended to deliver such weapons.

WHO IS INVOLVED IN THE CTR PROGRAM

DoD implements the CTR Program through the Defense Threat Reduction Agency, pursuant to policy guidance provided by the Office of the Assistance Secretary of Defense for International Security Policy. DoD coordinates implementation of CTR activities closely with the National Security Council staff and the U.S. Government agencies that provide nonproliferation assistance to FSU states.

DoD is authorized to provide CTR assistance only to FSU states, subject to annual certification of eligibility. The current states eligible for CTR assistance include Armenia, Azerbaijan, Georgia, Kazakhstan, Kyrgyzstan, Moldova, Russia, Turkmenistan, Ukraine and Uzbekistan. DoD has requested the authority to use up to \$50 million in CTR funds annually for non-proliferation activities outside of the FSU. We believe this will provide the flexibility to respond to evolving national security threats that will not duplicate other authorities.

Initial CTR assistance focused on the states that inherited the bulk of the Soviet Union's nuclear and chemical weapons: Russia, Ukraine, Kazakhstan and Belarus. Over time, DoD extended the CTR program to address the dangerous remnants of the Soviet arsenal in other FSU states such as Uzbekistan, Moldova and Georgia. In addition, DoD recognized the opportunity to address the threat of biological weapons proliferation with the CTR program.

WHAT THE CTR PROGRAM INCLUDES

In the beginning, DoD's CTR Program enabled FSU states to accomplish what they would not have been able to do otherwise. CTR assisted cash-strapped Belarus, Ukraine and Kazakhstan in removing nuclear weapons from their soil and eliminating strategic infrastructure. CTR also facilitated Russia's efforts to draw down the massive strategic nuclear weapons arsenal remaining at the end of the Cold War. This assisted Russia in addressing its arms control commitments faster than Russia would have done on its own. The CTR program helped reduce the threat posed by the former Soviet nuclear arsenal by consolidating thousands of nuclear weapons in secure storage in Russia and eliminating strategic bombers, ballistic missiles, fixed silos and strategic submarines.

ACCOMPLISHMENTS OVER THE PAST 12 YEARS

Since its inception in 1991, the CTR Program has facilitated the following reductions in strategic arms in FSU states:

- 6032 Nuclear Warheads
- 109 Strategic Bombers
- 554 Air Launched Cruise Missiles and Air to Surface Missiles
- 506 Intercontinental Ballistic Missiles (ICBMs)
- 382 Submarine Launched Ballistic Missiles (SLBMs)
- 438 ICBM Launchers
- 408 SLBM Launchers
- 26 Strategic Ballistic Missile Submarines

The CTR Program also has helped enhance the security of nuclear and chemical weapons storage facilities in Russia; demilitarized chemical weapons production and research facilities in Russia and Uzbekistan; removed and secured tons of highly enriched uranium from Kazakhstan and Georgia; enhanced the security of dangerous pathogen collections in Russia and Kazakhstan; demilitarized the world's largest anthrax production facility at Stepnogorsk, Kazakhstan; inhibited access to 181 nuclear test tunnels at Semipalatinsk in Kazakhstan; and destroyed residual pathogens at the former Soviet BW test site on Vozrozhdeniye Island, Uzbekistan.

WHERE THE PROGRAM IS GOING

The CTR Program continues to fund several classic WMD elimination projects. These include assisting Russia with elimination of ICBMs, SLBMs, fixed and mobile missile launchers, strategic submarines, and chemical weapon nerve agents. The program also assists Ukraine to eliminate strategic bombers and air to surface missiles.

In the beginning, a central concern of the CTR Program was the potential threat to U.S. security posed by residual WMD weapons and forces in Russia. The danger that Russia might employ these forces against the U.S., our allies, or global interests has declined dramatically. Today, the more significant threat to U.S. security stems from the possibility that WMD-related materials in the FSU might fall into the hands of terrorists or rogue states. The porous borders of the FSU states offer the potential for illicit transit of WMD and related materials to terrorist organizations and their sponsors. The September 2002 *National Security Strategy* and the December 2002 *National Strategy to Combat Weapons of Mass Destruction* highlighted the critical role that nonproliferation assistance programs must play in addressing these threats. Accordingly, DoD has adapted the CTR Program to address this evolving threat. We have refocused CTR to redouble our efforts to prevent the proliferation of WMD materials, technologies and expertise in support of the Global War on Terrorism.

We are working with the Russian Ministry of Defense (MOD) to implement comprehensive security upgrades at numerous nuclear weapons storage sites. Thus far, CTR-provided "Quick Fix" fencing and sensors have been installed at more than 30 sites by MOD as an interim measure. In the next year, we plan to initiate comprehensive security upgrade projects at nine nuclear weapons storage sites, recently identified by MOD. We also are assisting the MOD to enhance the security of Russian nuclear weapons while in transit from operational bases to dismantlement or consolidated storage facilities.

We are expanding CTR efforts to prevent biological weapons (BW) proliferation by:

- Consolidating and enhancing the security of dangerous pathogen collections at biological institutes to help prevent their theft, diversion, or accidental release;
- Eliminating infrastructure, equipment, and facilities previously used to perform BW related research, testing and production;
- Engaging former BW scientists in cooperative projects while providing transparency at FSU bio facilities, promoting higher standards of ethical conduct, and pre-empting a potential "brain drain" of scientists to rogue states and terrorist groups;
- Initiating a new Bioattack Early Warning and Preparedness project in Central Asia to detect and diagnose disease outbreaks, to attribute them to natural or terrorist causes, to access real-time medical intelligence, to consolidate pathogen collections in central labs, to modernize diagnostic capabilities and minimize need for pathogen retention at vulnerable field stations, and to develop a network of scientists trained and equipped to prevent, deter, and contain a bioattack.

The WMD Proliferation Prevention Initiative is designed to address the vulnerability of the FSU's porous borders. This initiative will enhance the capability of FSU states to deter, detect, and interdict illicit trafficking of WMD and related materials. The initiative will provide equipment, training, infrastructure and logistics support to help recipient countries develop the comprehensive capabilities required to develop an indigenous, self sustaining capability to prevent the trafficking of WMD materials across their borders. This initiative is being implemented in close coordination with other U.S. Government agencies to ensure it complements and reinforces other related US assistance projects.

Finally, we are looking beyond the Soviet WMD legacy. As mentioned above, the Administration has proposed legislation that would give the President authority to

use up to \$50 million annually in CTR funds outside the FSU to resolve critical emerging proliferation threats, or to take advantage of opportunities to achieve long-standing nonproliferation goals. This proposal recognizes that the world has changed since CTR began and that the program should change with it to best serve U.S. global efforts to combat WMD and terrorism. We would use this authority where DoD has a sizable presence, and in close coordination with other departments to maximize the expertise U.S. agencies can bring to bear against a proliferation threat.

LESSONS LEARNED AND IMPEDIMENTS

The past 17 months have been challenging for the CTR Program. In early 2002, we learned from Russian officials that a facility begun in 1994 and built with approximately \$106 million in CTR assistance would have no use. The missile propellant (heptyl) that it was intended to neutralize had been diverted to the Russian commercial space program. The waste in U.S. tax dollars represented by the “heptyl” facility situation was inexcusable.

This heptyl situation was a wake-up call. We impressed on the Russian government at all levels the gravity of the situation that their negligence had created. In addition, we looked inward at how CTR has been managed, and found ways to better protect CTR investments.

- We asked the DoD Inspector General to review the Program. The first phase of the IG’s report was completed in September 2002. DoD has worked closely with the IG, which has joined the CTR executive review teams in meetings with Russian officials.
- We instituted a program of semi-annual “executive reviews” with Russian agencies responsible for CTR projects. These reviews, of which three have already been conducted, revalidate project plans and permit more direct, senior level input on CTR to the Russian bureaucracy.
- We analyzed all pending CTR projects for risks that were similar to the heptyl facility situation—reliance on good faith Russian promises or assumptions—and are currently working to convert such undertakings to formal, legal agreements. Three of these agreements already have been signed.
- In the wake of the heptyl situation, we reaffirmed some key management practices that have protected US investments in the past: CTR does not provide direct cash grants to recipient governments; most CTR prime contractors are US companies, and when any Russian contractors are used today, they are hired on a firm, fixed-price basis.
- We have also reaffirmed the need for transparency and access to confirm requirements for, and use of, CTR assistance. For example, we pressed the Russian MoD for agreements guaranteeing access to loosely guarded nuclear weapons storage sites and transshipment areas where CTR would like to assist with security and inventory control systems. The necessary site access arrangements were concluded in February 2003, as a prerequisite for CTR assistance.
- In addition, negotiations continue on an agreement guaranteeing DoD access to the fissile material storage facility being built with CTR assistance. This agreement will provide for access during loading of the facility and permanently thereafter to ensure that only weapons-grade material is being stored.

Another illustration of the difficulty of dealing with another country’s infrastructure relates to local politics. DoD officials were informed that local leaders in Russia’s Udmurt Republic had reversed their prior position and would bar construction of a solid-rocket motor destruction facility. This facility was intended to support the ambitious decommissioning schedule for Russia’s mobile SS–24 and SS–25 missiles. CTR had invested some \$14 million in the Udmurt site, near the city of Votkinsk. CTR had also invested approximately \$85 million in designs and testing for the rocket motor disposal facility to have been built at Votkinsk.

The Votkinsk situation is similar to the heptyl situation in one respect. A significant US non-proliferation investment was jeopardized.

However, the Votkinsk situation is different in many other ways. Our information is that the Russian central government made significant attempts to secure the necessary land and environmental permits from local officials. In addition, the Russian executive agent has come up with its own alternatives to the Votkinsk facility, as well as some of its own funding. Moreover, Russian officials were fully transparent with us regarding the local political problems as soon as they began brewing last year. Finally, over 400 SS–24 and SS–25s are still scheduled to begin decommis-

sioning later this year. As opposed to the heptyl incident, there remains a proliferable commodity here that the U.S. has an interest in destroying.

A final decision on whether or how CTR might provide additional assistance to facilitate these goals has not been made. Yet, we are again confronted with a potentially significant loss of a CTR investment.

The past year has been extremely frustrating. It serves as a reminder that we need to do better internally; I think we have moved quickly to put better management controls in place. But, the past year also highlights how hard it is to pursue this type of program in a country like Russia, even if we do everything correctly.

In addition to the oversight changes described above, we are in the process of scrutinizing all ongoing and planned CTR projects to determine if they still serve U.S. nonproliferation and security interests; if the original rationale for their implementation remains valid; and if there might not be better, more effective ways to achieve the original goals the respective projects. We anticipate this review of CTR projects will result in more efficient and effective implementation, and revalidate the necessary link between a CTR project and current threats to US security.

One of the key lessons learned is that CTR recipients are not always all alike. The Administration's recent implementation of the program recognized that in the case of Russia, we cannot conduct business as usual. For example, for Fiscal Year (FY) 2002, Russia was not certified as eligible for CTR assistance, while all other states for which funding was requested were certified.

Russia was not certified in both Fiscal Years 2002 and 2003 because the Administration had continuing concerns over Russia's commitment to comply with biological and chemical weapons arms control agreements. This was a departure from years past. As a result, all new assistance for Russia was suspended until August of 2002 when, in order to continue CTR efforts to reduce and prevent the proliferation of WMD, the President exercised the first waiver granted by Congress. In Fiscal Year 2003, he executed a second waiver. In Fiscal Year 2003, he also exercised his authority to waive certification requirements on the CTR project to construct a chemical weapons destruction facility at Shchuch'ye, Russia. The Administration urges the Congress to make both waiver authorities permanent. We will, of course, examine closely each year recipients' records in meeting certification requirements before recommending any exercise of a certification waiver to the President. The same will be true regarding the conditions on the Shchuch'ye project.

FY 2004 BUDGET REQUEST

Russia. The United States would like to see Russia become a full partner in the Global War on Terrorism and combating WMD proliferation; comply fully with its arms control and nonproliferation obligations; and safely and securely store its nuclear weapons, fissile material and dangerous pathogens. This is a vision for Russia, parts of which CTR may help realize. The reality tells us that we must be very cautious, and find new ways to protect US investment in CTR projects.

Russia: Strategic Offensive Arms Elimination (SOAE). The FY 2004 budget request includes \$57.6 million for SOAE, a \$12.5 million decrease from FY 2003, reflecting a carryover of unobligated funds from previous years. The carryover results principally from the 2002 delay in certifying Russia for CTR assistance. SOAE assists Russia in eliminating strategic delivery systems and infrastructure. SOAE assistance is framed as an incentive for Russia to draw down its former Soviet nuclear forces. One of the larger project areas under SOAE relates to Solid Propellant ICBM/SLBM and Mobile Launcher Elimination, where \$25.9 million is requested for FY 2004. The termination of the Solid Rocket Motor Disposition Facility has resulted in a reassessment and potential restructuring of this project. \$18.7 million is requested for SLBM Launcher Elimination and SSBN Dismantlement. This is a \$7.3 million increase from FY 2003, resulting from our plan to dismantle two SSBNs in FY 2004 as opposed to one in FY 2003.

CTR's Nuclear Weapons Storage Security program assists Russia with safe and secure storage for nuclear warheads. We requested \$48.0 million in the FY 2004 budget for this program. The bulk of the funds, \$47.9 million, are directed toward the Site Security Enhancements project, which provides urgently needed security enhancements to Ministry of Defense (MOD) nuclear weapons storage sites and temporary transshipment points for movement of deactivated warheads. As noted above, we concluded agreements with the MoD last month that will guarantee CTR personnel the access necessary to oversee security upgrades at these sites.

We have requested \$23.2 million for the Nuclear Weapons Transportation Security program, which provides safe and secure transport of nuclear warheads from deployed sites to dismantlement or enhanced security storage sites. This is a \$3.6 million increase over the FY 2003 budget. The increase will support Russia's im-

proved efforts to draw down its nuclear stockpile pursuant to the Moscow Treaty. The FY 2004 budget request for the Weapons Transportation Safety Enhancements project area is \$5.7 million greater than for FY 2003. This will enhance safe and secure transport, to include purchase of ten replacement warhead transportation cars. Russia agreed to destroy two unusable warhead transport cars at its own expense in exchange for each new car CTR provides.

To assist Russia in providing a secure, centralized storage facility for fissile material removed from nuclear weapons, CTR is building a Fissile Material Storage Facility (FMSF) at Mayak. This project is over 90 percent complete and requires no additional funding. DoD is negotiating a transparency agreement to ensure that only weapons-grade material is stored at the FMSF.

Russia: Biological Weapons Proliferation Prevention (BWPP). Overall funding requested for the BWPP program remains roughly at the FY 2003 level, \$54.2 million. FY 2003 increases in BWPP funding reflected the Administration's interest in combating biological weapons proliferation as part of the war on terrorism. DoD anticipates obligating approximately \$31 million in FY 2004 for BWPP activities in Russia.

These activities will include additional cooperative research projects with Russian scientists and institutes that are designed to prevent proliferation of BW expertise, enhance transparency, improve standards of conduct and leverage the extensive expertise of the former Soviet bioweapons complex. Additional efforts are planned to dismantle and eliminate BW infrastructure in Russia as well as projects to enhance security against theft or accidental release of dangerous pathogens.

Russia: Chemical Weapons Destruction. The budget request for the Chemical Weapons Destruction (CWD) program in Russia is \$200.3 million, an increase of \$67.4 million. This reflects the President's direction to accelerate progress at the Chemical Weapons Destruction Facility (CWDF) project in Shchuch'ye (\$190.3 million). The Shchuch'ye project is a CW destruction facility for nerve agent-filled, man-portable, tube and rocket artillery and missile warheads. This facility will be able to destroy 1700 metric tons of nerve agent per year. \$126.6 million of FY 2003 funds and \$35.0 million in FY 2002 funds have been obligated for Shchuch'ye as a result of Russia's recent agreement to destroy all nerve agent weapons at Shchuch'ye. The President sought and Congress granted authority to waive certification requirements related to the Shchuch'ye project. The President exercised this authority on January 10, 2003 because of proliferation concerns about the types of munitions to be eliminated there. However, the Administration continues to press Russia for a full and complete accounting of its chemical weapons stockpile, in addition to completing a practical plan for eliminating nerve agents.

CTR continues to assist Russia with dismantling and demilitarizing the former CW production facilities at Volgograd and Novocheboksarsk. CTR is also enhancing security for highly proliferable chemical weapons stored at Planovy/Shchuch'ye and Kizner. DoD already has provided interim security enhancements, and is in the process of installing comprehensive security upgrades that will be completed this year.

Non-Russian FSU States. As with Russia, the vision for CTR assistance in the other FSU states is tempered by a mixed record of responsiveness. There are a number of areas in which certain FSU states have demonstrated a significant commitment to cooperation and transparency. For example, Kazakhstan and Ukraine are free of nuclear weapons with the help of CTR assistance.

Non-Russia FSU States: Elimination of Strategic Offensive Arms and WMD Infrastructure. Ukraine. We have requested \$3.9 million for CTR's Strategic Nuclear Arms Elimination program area in Ukraine. DoD has successfully removed all SS-24 missiles from their silos, and eliminated all launchers and launch centers. The SS-24s have been disassembled and the proliferable components destroyed. There is no longer a proliferation threat from these systems. CTR also will use prior year funds to continue elimination of Tu-142 Bear and Tu-22M Backfire bombers and KH-22 nuclear capable air-to-surface missiles in Ukraine.

For DoD's WMD Infrastructure Elimination program area in Ukraine, no new funds are requested for FY 2004. DoD will use FY 2003 funds to eliminate additional nuclear weapons storage sites.

Kazakhstan. CTR's WMD Infrastructure Elimination program area assists Kazakhstan in providing safe and secure storage of fissile material and in destroying former nuclear weapons and liquid propellant storage sites. We are requesting no additional funding in FY 2004 and will rely instead on FY 2003 funds.

Non-Russian FSU States: Biological Weapons Proliferation Prevention (BWPP). DoD has concluded Biological Threat Reduction Implementing Agreements with Uzbekistan and Georgia and negotiated an agreement with Ukraine. We are also providing BWPP assistance to Kazakhstan under the WMD Infrastructure Elimination

nation agreement. DoD already conducts BWPP projects in Kazakhstan and Uzbekistan and is planning to begin activities in Georgia and Ukraine in 2003.

- In Kazakhstan and Uzbekistan, CTR's BW Infrastructure Dismantlement and Restructuring program assists with destruction of WMD-related infrastructure. In Kazakhstan, CTR is helping eliminate the anthrax production facility in Stepnogorsk. The project has now entered into phase IV, which includes dismantlement of the facility. In Uzbekistan, CTR has implemented phase I of the destruction of the Soviet BW testing facility on Vozrozhdeniya Island. We believe this phase fully destroyed viable anthrax spores left in approximately 100 tons of anthrax weapons agent the Soviet military buried near the laboratory complex on the island in the late 1980's. DoD is working with Uzbekistan to determine whether additional work at Vozrozhdeniya is required.
- CTR's Collaborative Biological Research (CBR) projects in Kazakhstan and Uzbekistan help prevent the proliferation of BW expertise, enhance transparency, improve standards of conduct of former BW scientists and leverage their extensive expertise. There is currently one project in Kazakhstan and two in Uzbekistan. CTR plans to expand CBR projects to Ukraine and Georgia.
- In Kazakhstan, two CTR Biosafety and Biosecurity projects are (1) characterizing and protecting strain collections of dangerous pathogens at the Scientific Research Agricultural Institute in Otar, and (2) designing and constructing an earthquake-proof building to secure dangerous pathogens at the Kazakh Institute for Research on Plague Control in Almaty.
- The FY 2004 request calls for \$23 million for CTR's Bioattack Early Warning and Preparedness project. This new program area received 42% of the overall FY 2004 budget request for the BWPP program. Under this project, CTR will expand research cooperation with Ministry of Health institutes in Kazakhstan, Uzbekistan, Georgia and Ukraine to build infectious disease surveillance networks that will allow these countries and the US to better detect, characterize and monitor disease outbreaks and to consolidate pathogen collections in secure, DoD-accessible, institutes.

Weapons of Mass Destruction Proliferation Prevention Initiative (WMD-PPI). \$39.4 million is requested in FY 2004 to support this initiative, which is designed to enhance *non-Russian* FSU capabilities to prevent, deter, detect and interdict illicit trafficking in WMD and related materials. DoD is collaborating with other US agencies to develop an overarching US government strategic plan for export control and border security assistance to FSU states that will encompass assistance provided through this initiative. This initiative will build on the foundation created by the CTR Defense and Military Contacts program.

The 9/11 terrorist attacks, subsequent discoveries of terrorist plans to obtain WMD, and the need for a rapid expansion of border security efforts in Central Asia underscored the role that DoD could play through CTR in support of the war on terrorism. This initiative is designed to develop self-sustaining capabilities, not merely to provide equipment and services. This vision will require close coordination with other US agencies to ensure that recipient countries are developing the law enforcement and regulatory capabilities necessary for a comprehensive approach to WMD border security.

In implementing the WMD-PPI, DoD has developed projects designed to produce comprehensive operational capabilities based on the interagency approved US strategic plan and country/regional requirements. These projects will provide not only equipment and related training, but also self-sustaining operations and maintenance capabilities.

DoD is developing the following projects through the WMD Proliferation Prevention initiative:

- Providing a Caspian Sea maritime control capability in cooperation with Kazakhstan and Azerbaijan to interdict illicit trafficking in WMD and related materials.
- Supporting Ukraine's plans to develop mobile response teams to address WMD trafficking incidents between ports of entry on the land border with Russia.
- Completing deployment of fissile material portal monitors at key border crossings in Uzbekistan to detect illicit trafficking in nuclear materials.

- Developing a Regional Training Center to provide realistic training on border control operations and procedures to prevent illicit trafficking in WMD and related materials.

CONCLUSION

Since its inception, the CTR Program has assisted with deactivation or elimination of a total of 6032 nuclear warheads and 846 ballistic missile launchers, 109 strategic bombers, 26 strategic ballistic missile submarines, 554 air-to-surface missiles and 888 ballistic missiles. These are important achievements. The Administration also is acutely aware of the difficulties encountered by the program. The reality is that this program, which we undertake for our own national security purposes, comes with costs that we must bear if we continue to take advantage of this approach to threat reduction. This Administration believes that it is worth the cost. As we urge your continued support we pledge our efforts to ensure that additional non-proliferation achievements within, as well as outside, the FSU are won through responsible stewardship of US resources.

Mr. BEREUTER Secretary Bronson, thank you very much.

Next, we will hear from Kenneth E. Baker, who is the principal assistant deputy administrator for defense and nuclear non-proliferation at the Department of Energy. Administrator Baker held previously the positions of principal deputy assistance secretary and principal deputy director of the department's non-proliferation office. His previous experience included a substantial amount of time spent in the Strategic Air Command, which was of some interest to me.

Administrator Baker, we are pleased to hear your testimony now.

STATEMENT OF KENNETH E. BAKER, PRINCIPAL ASSISTANT DEPUTY ADMINISTRATOR FOR DEFENSE AND NON-PROLIFERATION, U.S. DEPARTMENT OF ENERGY

Mr. BAKER. Thank you, Mr. Chairman and Members of the Subcommittee, for your time and the opportunity to appear before you today to discuss the National Nuclear Security Administration's [NNSA] nonproliferation program. It is especially nice to brief you, Mr. Chairman. We can talk about something besides corn, wheat, and Cornhuskers. I went to graduate school in Lincoln, so it is a big day when Nebraska plays football, and I am sure you feel the same way.

Why do our programs exist? Our programs exist to reduce the risk to the United States' national security caused by the proliferation of weapons of mass destruction. We do this by protecting under-secured nuclear material in the former Soviet Union by providing technical and policy support to international nonproliferation efforts, through programs to prevent the adverse migration of Russian nuclear scientists and engineers to rogue states and terrorist organizations, and through other measures to reduce proliferation risks.

The need to pursue such programs became clear with the fall of the Soviet Union in 1991, which left hundreds of metric tons of nuclear materials in Russia undersecured and was given additional impetus on September 11, 2001. September 11th made it clear that enemies would stop at nothing to harm this country and the United States could not allow terrorists and rogue states to get their hands on nuclear and radiological materials. Imagine what September 11th would have been like if the criminals that committed these crimes had nuclear devices aboard those airplanes at the World Trade Center. Most of lower Manhattan would have been gone.

The Bush Administration's December 2002, National Strategy To Combat Weapons of Mass Destruction cited strengthening non-proliferation as a top priority.

Who and what are the nonproliferation programs involved in NNSA? NNSA programs draw upon the technical expertise from our national laboratories, the oversight and implementation function provided by Washington, and, of course, the NNSA men and women in the field who carry out these programs daily. These people are the real heroes of DOE. They often work 16 hours a day, sometimes in extremely adverse conditions in remote areas of Russia, often with no heat in their rooms, no hot water, to implement U.S. nonproliferation initiatives.

Our initiatives are not assistance programs. They are cooperative threat reduction efforts carried out in close coordination with the National Security Council, the Department of State, Department of Defense, and our international partners. They have fixed timetables and are conditioned on partners and their contractors meeting specific requirements before receiving payment. They also deliver technologies and expertise that address specific threats to the security of this country.

What have we done in the last 12 years? DOE's program is just under 12 years' old. We started out with \$15 million. Today, our budget in nonproliferation is \$1.3 billion. DOE's nonproliferation program came into their own, like I said, in 1993, the year the United States signed with Russia an agreement to purchase 500 metric tons of excess, Russian, highly enriched uranium from dismantled Russian nuclear weapons to use the material in U.S. power reactors. The Department of Energy is critical to the implementation of this program. To date, 179 metric tons have been downblended.

There have been many successes in the past. In 1994, we carried out a project called Project Sapphire, which secured 600 kgs of highly enriched uranium in Kazakhstan. Iran was trying to get this material. The United States went into Kazakhstan in the middle of the night, with DoD, packaged the material and shipped it to Oak Ridge, Tennessee for safe keeping.

We launched a new generation of nuclear detection sensors, operating from GPS satellites, in 2001. We deployed a prototype biological agent detection, in 2002, at the Winter Olympics. We deployed chemical detection systems in the DC Metro.

In March of this year, Secretary Abraham and Russian Minister Rummyantsev signed an amendment to the U.S.-Russian Plutonium Production Reactor Agreement that will lead to the shutdown of Russia's last three plutonium reactors. These reactors will be shut down and replacement fossil energy plants will be constructed to meet the energy needs of the local community.

We will soon begin construction on key facilities that will permit the elimination of 34 metric tons of surplus, weapons-grade plutonium in the United States and pave the way for a parallel program in Russia to dispose of similar quantities of surplus Russian plutonium.

We are accelerating and expanding our work in Russia to secure nuclear materials. Since 1993, we have improved the security of approximately 222 metric tons of nuclear materials, either through

rapid upgrades or comprehensive security upgrades at numerous sites. In 2004, we expect to complete upgrade security on another 24 metric tons of Russian nuclear material. We also expect to conclude this work ahead of previous schedules.

In addition to the work with Russia's Ministry of Atomic Energy, we are working with the Russian navy and the Strategic Rocket Forces to secure nuclear warheads. In fiscal year 2004, we expect to upgrade security on 1,200 Russia navy nuclear warheads at Russian storage facilities. We are reducing the number of locations in Russia that material is stored. By the end of 2003, we will have removed all weapons-usable material from 23 buildings, reducing the number down to 139. We will continue these programs.

The NNSA has worked with Kazakhstan to can 3,000 nuclear fuel assemblies containing several tons of weapons-grade plutonium stored at the BN-350 reactor, 450 miles from Iran, right on the Caspian Sea.

Secretary Abraham presided over a major international conference on the security of radiological sources, the materials that could be used for so-called "dirty bombs." Over 750 international participants from 120 countries attended this meeting in March. At the conference, Secretary Abraham announced a major initiative to improve the security of materials worldwide. The conference produced detailed recommendations on how to improve the security of radiological devices, and the NNSA will be responsible for implementing these recommendations.

We will continue our programs to funnel ex-Soviet weapons expertise to commercial projects. This program now enjoys tremendous support in the United States. Over \$75 million of venture capital has been directly applied to this program, because technology is transferred to U.S. companies, and they profit from the investments and put Russians to work on other things besides building bombs.

We have just launched a major, new program to keep nuclear materials from America's borders through a comprehensive initiative that will improve radiation-detection capabilities at major international seaports. The U.S. and Russia will soon sign an agreement to facilitate the return to Russia of Russian-origin HEU at research reactors and facilities in 14 countries, which Secretary Wolf just mentioned.

These are worthy accomplishments, but there is more to be done. What are the impediments? And I will make this short because we are running out of time. We have impediments. We need to ensure effective access to sensitive Russian facilities, work out liability questions consistent with other obligations, and, in many cases, overcome simple Russian distrust of our motives and intentions.

Much of what we are doing has never been tried before. In some areas, we are gaining access into locations where no American has ever been. Challenges and setbacks will come and will be anticipated.

I would like, Mr. Chairman, because my time is running out, to leave the rest of my testimony for the record. It goes on to explain the accomplishments. We do have people on the ground. We do have the money to do the programs and we are working very hard.

One last thing: The support we have received from Congress has been gratifying. As this hearing demonstrates, Congress understands that our national security is at stake. Terrorists will stop at nothing to get their hands on WMD material. We must do everything in our power to prevent this from happening.

I look forward to working with Congress. Thank you for this hearing, and we will continue to work as hard as we can.

[The prepared statement of Mr. Baker follows:]

PREPARED STATEMENT OF KENNETH E. BAKER, PRINCIPAL ASSISTANT DEPUTY ADMINISTRATOR FOR DEFENSE AND NONPROLIFERATION, U.S. DEPARTMENT OF ENERGY

INTRODUCTION

Thank you, Mr. Chairman and members of the sub-committees, for the opportunity to appear before you today to discuss the National Nuclear Security Administration's (NNSA) nonproliferation programs, and how these programs are helping to make the United States more secure.

WHY THESE PROGRAMS EXIST

Our programs exist to reduce the risks to United States national security caused by the proliferation of weapons of mass destruction. We do this by protecting previously under-secured nuclear material in the former Soviet Union, by providing technical and policy support to international nonproliferation efforts, through programs to prevent the adverse migration of Russia's nuclear scientists and engineers to rogue states or terrorist organizations, and through other measures that reduce proliferation risks.

For many years, the United States has pursued activities to improve the physical protection of nuclear materials. But such activities were given additional impetus by the fall of the Soviet Union in 1991, which removed the Cold War infrastructure that secured Russia's vast complex of nuclear weapons and materials and leaving such materials undersecured and vulnerable to misuse.

September 11 further made clear that, against enemies that would stop at nothing to harm this country, we could not allow terrorists and rogue states to get their hands on nuclear and radiological materials. Imagine what September 11 would have been like, if the criminals that committed these crimes had nuclear devices on those airplanes that hit the World Trade Center. Most of lower Manhattan would have been gone.

Reflecting these trends, the Bush Administration's December, 2002 *National Strategy to Combat Weapons of Mass Destruction* (WMD) listed "strengthened non-proliferation" as a central tenet of its approach.

WHO AND WHAT NNSA NONPROLIFERATION PROGRAMS INVOLVE

NNSA programs involve steps to detect, prevent, and reverse the proliferation of weapons of mass destruction, while improving nuclear safety. These efforts draw upon the technical expertise from our national laboratories, the oversight and implementation function provided by Washington, and of course, the NNSA men and women in the field who carry out the programs. These people are the real heroes—they often work sixteen-hour days, sometimes in extremely adverse conditions in remote locations of the world and away from their families for long stretches, often with no heat in their rooms and no hot water for showers, to implement U.S. non-proliferation initiatives.

We work closely with our international partners to implement our programs, but our initiatives are not assistance programs—they are cooperative threat reduction efforts carried out in close coordination with the NSC, the State and Defense Departments, and our international partners. They have fixed timetables; are conditional on partners and their contractors meeting certain requirements before receiving payment; and deliver technologies and expertise that address specific threats to the security of the United States.

Our nonproliferation activities fall into a broad spectrum of activities. Each is important, and each has had successes.

ACCOMPLISHMENTS OVER THE PAST 12 YEARS

The Department of Energy's nonproliferation program started in 1993. That year, the United States signed with Russia an agreement to purchase 500 metric tons of

excess Russian highly-enriched uranium (HEU) from dismantled Russian nuclear weapons, to use that material in U.S. power reactors. The Department of Energy is critical to the implementation of this agreement. To date, 179 metric tons have been downblended—potentially enough for thousands of nuclear weapons.

In 1994, we implemented Project Sapphire, a joint DOE–DOD project that secured 600 kg of weapons grade HEU from Kazakhstan. This material was sought by Iran, who was trying to purchase it. The United States literally went into Kazakhstan in the middle of the night, packaged the material, and shipped it away to the United States for safe keeping.

We developed and launched a new generation of nuclear detonation sensors operating on GPS satellites in January 2001. We also deployed a prototype biological agent detection system at the 2002 Winter Olympics in Salt Lake City, and a prototype chemical detection system in the D.C. Metro.

To focus on more recent accomplishments:

- In March, the Secretary and his counterpart, Minister Alexander Rumyantsev, signed an amendment to the U.S.-Russian Plutonium Production Reactor agreement that will lead to the shutdown of Russia's last three reactors that are still producing weapons-grade plutonium, and replace them with fossil fuel plants.
- We will soon begin construction of key facilities that will permit the elimination of 34 metric tons of surplus, weapons grade plutonium in the United States—and pave the way for a parallel program in Russia to dispose of similar quantities of surplus Russian plutonium.
- We're accelerating and expanding our work with Russia to secure nuclear materials there. Since 1993, we have improved the security of approximately 222 metric tons of nuclear material under either rapid or comprehensive upgrades. In FY 2004, we expect to upgrade security on 24 additional metric tons of Russia's nuclear material. We expect to conclude this work ahead of previous schedules.
- In addition to our long-standing work with Russia's Ministry of Atomic Energy, we are working with Russia's Navy and its Strategic Rocket Forces to secure nuclear warheads. In FY 2004, we expect to upgrade security on 1200 Russian navy nuclear warheads at Russian storage facilities.
- We are reducing the number of locations in Russia where this material is stored and thereby reducing its vulnerability to theft or sabotage. By the end of FY 2003, we will have removed all weapons-usable material from 23 buildings—reducing the total number of buildings with such material in the civilian and defense sectors from 162 to 139. Over time, that number will further decrease.
- NNSA worked with Kazakhstan to can 3000 nuclear fuel assemblies containing several tons of weapons grade plutonium stored at the BN-350 reactor in that country, and assisted Kazakhstan in the permanent shutdown of that reactor. This reactor was located on the Caspian Sea, just 450 miles from Iran.
- Secretary Abraham presided over a major international conference on the security of radiological sources—the materials that would be used in a so-called “dirty bomb.” The conference was attended by 750 participants from over 120 countries—far exceeding expectations. At that Conference, Secretary Abraham announced a major initiative to support efforts to improve the security of these materials worldwide. The Conference produced detailed recommendations on how to improve the security of these devices, and NNSA will be responsible for implementing these recommendations with the leadership of the Secretary.
- We're continuing our programs to funnel ex-Soviet weapons expertise to commercial projects—an effort that has resulted in a great number of industrial and medical breakthroughs. This program enjoys tremendous technical and financial support from United States industries—over \$75 million of venture capital has been directly applied to this program, because technology is transferred to U.S. companies, and they profit from the investments.
- We've just launched a major new program to keep nuclear materials away from America's borders, through a comprehensive initiative that will improve radiation detection capabilities at major international seaports.
- The U.S. and Russia should soon sign an agreement to facilitate the return to Russia of Russian-origin HEU at research reactors and facilities in 14 countries outside Russia, including many in regions of proliferation concern.

- Russia and the United States are working on programs to reduce the stockpiles of Russian HEU, beyond levels stipulated in the U.S.-Russian HEU Agreement.

These are just some of our accomplishments, but I am not satisfied. There is more to be done, and we will continue to push ahead with all of our ability.

CURRENT IMPEDIMENTS AND LESSONS LEARNED

I do not want to imply that the road is easy, the path is clear, and progress assured. As I mentioned, we do need to resolve with Russia a number of bureaucratic obstacles to success. We need to ensure effective access to sensitive Russian facilities. We need to work out liability questions consistent with all of our obligations. In some cases, we need to overcome simple Russian distrust of our motives and intentions.

The question, however, is not whether we will have setbacks, but how well we will respond when they occur. Much of what we are doing in Russia has never been tried before, much less achieved, and in some cases, we are gaining access into locations where no American has ever been before. Challenges and setbacks will come and must be anticipated. However, considering the potential security consequences of failure we must—and will—continue to act.

Among the lessons we have learned is that for these programs to succeed, the support of Congress is indispensable. We work closely with our oversight and authorization committees and we are fortunate to have such support.

Another lesson is that committed leadership is essential to success. We have top level support not only from NNSA Administrator Linton Brooks, but from Secretary Abraham as well.

The Secretary has met with his counterpart in Russia, Minister Alexander Rumyantsev, some half a dozen times now. He has worked hard to accelerate and expand our programs in Russia and to clear away bureaucratic obstacles. These are the “nitty gritty” issues that determine success or failure, and they must be dealt with along the way.

Just last month, I met with senior Russian officials from both the Ministry of Atomic Energy as well as the Ministry of Defense to reiterate our commitment to removing obstacles and accelerating programs. Secretary Abraham has requested that I work with one of my counterparts, MinAtom’s Deputy Minister Kotelnikov, to bi-annually review our bilateral cooperation and to provide the Secretary written progress reports. You can be confident that DOE will do everything it can to ensure the success of these programs—failure is just not an option.

WHERE WE ARE GOING FROM HERE

What does it mean to chart a meaningful course for the future? I suggest the following:

We need to continue to clear away bureaucratic obstacles in Russia, so we can meet anticipated dates for completion of programs and transition to self-sufficient Russian operations, further reduce stockpiles of nuclear materials, and continue the transition of Russia’s nuclear complex to one emphasizing peaceful, civilian applications.

We need to continue to expand our programs internationally, because the risks we address in Russia must also be tackled elsewhere.

We need to continue to work with our international partners such as the G-8 Global Partnership, which I will elaborate upon momentarily, while continuing to work with international organizations such as the IAEA and voluntary regimes such as the Nuclear Suppliers Group.

We need to continue our research and development efforts, which provide state of the art nuclear detection capabilities that keep us steps ahead of potential adversaries.

Finally, we need to continue to support our regional security initiatives, which give us insight into the motivations of potential proliferators and rogue actors and thereby allow us to contribute to USG efforts to plan effectively.

Meeting these and other such benchmarks will contribute to the Administration’s efforts to implement the President’s national security strategy, and thereby help to make the world a safer place.

G-8 GLOBAL PARTNERSHIP

International cooperation is essential to the success of our efforts. In June of 2002, G-8 nations agreed to support a “Global Partnership” to fight the spread of weapons of mass destruction, committing up to \$20 billion over 10 years to fund threat reduc-

tion programs in the former Soviet Union, beginning in Russia. About half of the amount pledged will come from existing or planned U.S. threat reduction programs. Among the areas of particular interest to DOE that may receive new funding from other G-8 countries are plutonium disposition and the program to shut down Russia's plutonium-producing reactors.

Equally important as the new funding is the endorsement by the G-8 leaders, including President Putin, of guidelines that should govern cooperative programs under the Global Partnership. These guidelines explicitly call for transparency, access, liability protections, tax exemption of assistance, and other measures that we regard as necessary elements for success. Since last summer, we have had several rounds of senior-level discussion among G-8 officials about the implementation of these guidelines.

The strong support expressed by the other G-8 countries for these guidelines should increase our chances for securing Russia's agreement to implementation measures that are fair, effective, and consistent with previous U.S. agreements.

FY 2004 BUDGET REQUEST

This Administration has been aggressive in its pursuit of effective non-proliferation. We have enlarged the scope of our programs, built partnerships and worked to break down bureaucratic and legal barriers that impede our work. We have looked for ways to move beyond the traditional list of concerned countries to help us address emerging threats, such as radiological dispersal devices.

These efforts require resources to be effective. NNSA's fiscal year '04 budget submission contains the largest request for non-proliferation programs in U.S. history—\$1.3 billion, a 15% increase over our '03 appropriation. This request will permit us to begin construction of facilities necessary for U.S. and Russian plutonium disposition, pursue our efforts to accelerate the pace of nuclear materials reduction, accelerate our programs to better secure nuclear materials, and take any number of steps, consistent with the priorities I have discussed with you today.

The support we have received from Congress has been gratifying—and as this hearing demonstrates, Congress understands our national security, and American lives, are at stake. Terrorists will do anything to get their hands on WMD material. We must do everything in our power to prevent this from happening.

I look forward to working with Congress as we move forward with the work planned under our '04 budget.

Thank you and I look forward to your questions.

Mr. BEREUTER Administrator Baker, thank you very much, and thanks to all of our witnesses. We will be proceeding with another hearing on this subject shortly. We will be hearing from Senator Lugar and also Senator Nunn in short order.

As I recessed the Subcommittees before, I indicated to the witnesses that I would complete this at 3:50. Well, we missed it, and in order to do that, we are going to have a concentrated effort on both sides of the aisle to collect the most important questions from Members in attendance or who have been in attendance and submit them to you. We would have liked to have had a direct engagement, but that is just not possible today because of our schedule.

Secretary Rumsfeld and General Franks are on the Floor at this moment, just arriving, so we have to conclude the hearing at this point, and I thank the Members for their interest, and you can be assured we are going to return to this subject. So, with that said, the Subcommittees stand adjourned, and thank you very much, the witnesses, for their patience.

[Whereupon, at 4:02 p.m., the Subcommittees were adjourned.]

**U.S. COOPERATIVE THREAT REDUCTION AND
NONPROLIFERATION PROGRAMS:
HOW FAR HAVE WE COME—WHERE ARE WE
HEADING?**

WEDNESDAY, MAY 14, 2003

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON EUROPE, AND
SUBCOMMITTEE ON INTERNATIONAL TERRORISM,
NONPROLIFERATION AND HUMAN RIGHTS,
COMMITTEE ON INTERNATIONAL RELATIONS,
Washington, DC.

The Subcommittees met, pursuant to call, at 12:42 p.m. in Room 2172, Rayburn House Office Building, Hon. Elton Gallegly [Chairman of the Subcommittee on International Terrorism, Nonproliferation and Human Rights] presiding.

Mr. BEREUTER. Good afternoon. The joint Subcommittees will come to order. Unfortunately, we have a series of votes coming up. So in the absence of Chairman Gallegly, I will begin the hearing, so we can go through initial statements.

Today, the Europe Subcommittee, along with the Subcommittee on International Terrorism, Nonproliferation and Human Rights, will hold the second of two hearings on the Cooperative Threat Reduction [CTR] program. Last week, we received testimony from representatives of the Bush Administration. Today, we will receive testimony regarding threat reduction and nonproliferation programs from representatives of four of the most prominent organizations in the country which address this issue.

The proliferation of weapons of mass destruction poses, in my view, the most serious threat to international security and the security of the United States that we do face. Today, the international community is confronted with thousands of nuclear weapons and tons of fissile material and chemical toxins, which, in the hands of a rogue nation or terrorist group determined to possess and use such weapons, could kill thousands and spread panic on a global basis.

I am going to ask unanimous consent to revise and extend my full statement and just conclude with this final paragraph. Is there objection?

[No response.]

Mr. BEREUTER. Hearing none, that is the way I will proceed.

As we heard last week from the Administration witnesses, preventing the spread of weapons of mass destruction and the materials and skills needed to make them is the mission of the agencies

involved in the Cooperative Threat Reduction program. Today's hearing is intended to review these extraordinarily important programs, to take stock of the accomplishments thus far, to review the problems incurred in implementing the programs, and to determine what is needed as we go forward to ensure that these programs are efficient and effective in accomplishing their goals.

I look forward to the testimony of our witnesses. They will be introduced before we proceed with their testimony, of course. I turn now to the two Ranking Members of these Subcommittees for opening statements they may have. So, Mr. Sherman, the gentleman from California, is recognized.

[The prepared statement of Mr. Bereuter follows:]

PREPARED STATEMENT OF THE HONORABLE DOUG BEREUTER, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NEBRASKA, AND CHAIRMAN, SUBCOMMITTEE ON EUROPE

Today the Europe Subcommittee, along with the Subcommittee on Terrorism, Nonproliferation and Human Rights, will hold the second of two hearings on the Cooperative Threat Reduction (CTR) program. Last week we received testimony from representatives of the Bush Administration.

Today we will receive testimony regarding threat reduction and non-proliferation programs from representatives of four of the most prominent organizations in the country which address this issue.

The proliferation of weapons of mass destruction pose, in my view, the most serious threat to international security and the security of the United States that we face. Today, the international community is confronted with thousands of nuclear weapons and tons of fissile material and chemical toxins which in the hands of a rogue nation or terrorist group determined to possess and use such weapons could kill thousands and spread panic on a global basis.

When the former Soviet Union collapsed in 1991, the new Russian government inherited the largest supply of weapons of mass destruction (WMD), material and expertise in the world.

As I said last week, while much is known about nuclear and chemical weapons, the nature and extent of Russia's massive and diverse arsenal of biological weapons has yet to be fully revealed, but from what I have learned, it constitutes one of the most terrifying threats to the survival of the planet.

Recognizing the potentially dangerous situation in 1991, the Congress responded by initiating what has become known as the Nunn-Lugar cooperative threat reduction program. Over the years, the CTR program has evolved into a billion dollar, multi-agency effort to secure and dismantle nuclear, chemical and biological stockpiles and infrastructure as well as to prevent weapons scientists and specialists from providing their expertise to the highest bidder.

Assessments we have seen suggest that over the past twelve years the CTR program has achieved a respectable level of success. Weapons systems have been de-commissioned or eliminated. The transport and storage of nuclear weapons has been made more secure. Warhead control and accounting has been improved. Security of excess plutonium and highly enriched uranium has been tightened. Some weapons grade uranium has been eliminated.

Despite these success stories, much remains to be done. Undoubtedly there could be improvements in the current programs as well as additional resources devoted to this absolutely vital effort.

Many of the large number of unemployed and under-employed weapons scientists have not been transitioned to suitable alternative research or employment. Russia has not always provided its share of the funding for these programs and that it has been less than forthcoming in providing access to nuclear sites and certainly not all biological weapons and research facilities.

As we heard last week from the Administration witnesses, preventing the spread of weapons of mass destruction and the materials and skills needed to make them is the mission of the Agencies involved in the CTR effort. Today's hearing is intended to review the exiting programs, to take stock of the accomplishments thus far, to review the problems incurred in implementing the programs, and to determine what is needed as we go forward to ensure that these programs are efficient and effective in accomplishing their goals.

I look forward to the testimony of our witnesses.

Mr. SHERMAN. Thank you. First, I would like to thank Chairman Gallegly and Bereuter and my good friend, Mr. Wexler, for holding this second of two hearings on weapons of mass destruction from the Soviet Union.

As these two Subcommittees saw last week, the U.S. has an effective program. The programs have been effective at the level that we have conducted them, but the fact remains there are thousands of unaccounted-for nuclear weapons in the former Soviet Union, and the scale of our action does not match the scale of the threat. I believe that the United States Government needs to focus more attention and more funding on what have been effective programs.

As I know one of our witnesses, Jon Wolfsthal, says in his written testimony, we need to compare our efforts with regard to the Soviet Union's nuclear weapons to our efforts to disarm Iraq. The cost of the Iraqi war, I am sure, will exceed the \$80 billion in the supplemental appropriations bill, and, of course, we lost 150 of America's finest, yet we have spent only $\frac{1}{10}$ of that amount over a decade to deal with the Soviet nuclear arsenal.

In Russia today, nuclear weapons exist. They are unaccounted for. There are tons of plutonium and uranium in weapons-grade form, enough to make thousands and thousands of weapons. There are thousands of people who have made their living as scientists and engineers in the nuclear arena who are now tempted to sell weapons material or know-how to either rogue states or terrorist organizations.

Since September 11th, America has awakened to the threats that we slept through. We focused on the Taliban, we focused on Saddam, but this program, to deal with not the possibility of one nuclear weapon being developed but thousands of unaccounted-for nuclear weapons that could be in the wrong hands, seems to have gone on without a significant increase in scale or scope. It is time that we view this program with the same urgency that we viewed Saddam and the Taliban.

I believe that the Administration needs to appoint a high-profile coordinator for these policies to work within the three departments to develop a strategy at a larger scale, viewing this as a more important problem than we have in the past. We could call that person an Ambassador-at-Large or coordinator, whatever the Administration likes.

And as our President goes to St. Petersburg, we have got to be prepared to make concessions on issues, such as Chechnya, post-war Iraq, U.S. nuclear policy, including the Star Wars alleged defense, in order to secure far greater Russian cooperation with these programs. What value is it to go eyeball to eyeball with Putin on whether we should have a great missile-defense program when just one smuggled nuclear weapon, smuggled inside a bale of marijuana, could destroy any of our districts?

I yield back, and I regret I wasn't able to truncate my statement as much as you were, Mr. Chairman.

Mr. BEREUTER. Mr. Wexler, you have your choice of 2 minutes of an opening statement; otherwise, we will come back to you after we return from our voting. Which do you prefer?

Mr. WEXLER. I think you would prefer I do it now, so I will do it now.

Mr. BEREUTER. You may proceed. The gentleman from Florida.

Mr. WEXLER. And I will, Mr. Chairman, submit my full statement for the record, and, suffice it to say, I would just respectfully ask of the panel if they might consider addressing two issues that I have particular concern with, and I echo the comments of both Mr. Bereuter and Mr. Sherman: One, if the panel would share with us their views on the viability of expanding the Nunn-Lugar program beyond Russia and beyond the former Soviet Union; what implications, both positive and negative, you would conclude would follow if we were to take such a course.

And, two, if you could specifically analyze, in the context of the relationship between Russia and Iran, the role that Nunn-Lugar should play. And it would seem to me that while we did what we did in Iraq, as I understand the new analysis coming out of Moscow, with Secretary Powell's trip there, that our insistence in not allowing the U.N. inspection teams into Iraq is one of the significant factors in Russia not being willing to cooperate with the United States in terms of their relationship with Iran relative to Iran's newfound nuclear capacity. And I was hoping that you might offer some observations in terms of how does our overall policy with respect to the role of the U.N. in Iraq affect, if, in your opinion, it does, the ability of Nunn-Lugar to effectively reduce the level of threat as it relates to Russia and Russia's relationship with Iran. Thank you, Mr. Chairman.

Mr. BEREUTER. Thank you, Mr. Wexler. Your entire statement, without objection, will be made a part of the record. We will recess and attempt to reconvene at 1:10 p.m., and Mr. Gallegly, the Chairman of one of the Subcommittees, will proceed at that point. So the Subcommittees do stand in recess until 1:10 p.m.

[Whereupon, at 12:51 p.m., a recess was taken.]

Mr. BEREUTER. The joint meeting of the Subcommittees will come to order. I will begin, although I expected Chairman Gallegly to take over at this point.

I would like to introduce our distinguished panel of witnesses. Our first witness will be Ken Luongo—is that right, Luongo?—

Mr. LUONGO. That is correct, Mr. Chairman.

Mr. BEREUTER [continuing]. Thank you—who is Executive Director of the Russian-American Nuclear Security Advisory Council, otherwise known as "RANSAC." He is also a visiting research collaborator with Princeton University's Program on Science and Global Security.

Prior to these positions, Mr. Luongo served as Senior Adviser to the Secretary of Energy for Nonproliferation Policy and Director of the Office of Arms Control and Nonproliferation at the U.S. Department of Energy. He has also worked in the House Armed Services Committee as a Professional Staff Member.

Next, Ms. Laura Holgate is the Vice President for Russia/NIS programs at the Nuclear Threat Initiative. She has held this position since February 2001. Prior to joining NTI, Ms. Holgate directed the Department of Energy's Office of Fissile Materials Disposition from August '98 to January 2001, where she was responsible for consolidating and disposing of excess weapons plutonium and highly enriched uranium in the U.S. and Russia. From '95 to

'98, she served as Special Coordinator for Cooperative Threat Reduction at the Department of Defense.

Next, Dr. James Clay Moltz, who is an Associate Director and Research Professor at the Center for Nonproliferation Studies at the Monterey Institute of International Studies. Dr. Moltz was the founding editor of the *Nonproliferation Review*, a Web-based publication dealing with North Korean issues. He is the author and editor of numerous books, articles, and journals dealing with arms control and national security issues.

Our final witness will be Mr. Jon Wolfsthal, who is currently the Deputy Director of the Non-Proliferation Project at the Carnegie Endowment for International Peace. He is also the co-author of *Deadly Arsenals: Tracking Weapons of Mass Destruction* and has provided his expertise on the proliferation of weapons of mass destruction on numerous TV and radio programs.

Gentlemen and lady, your entire statements will be part of the record. Without further advice from my Co-Chairman, I am going to say we will give each of you 8 minutes to proceed. Ten minutes? All right. Promised 10 minutes, and you will get 10 minutes. You are important. We are here to listen to you. And so we will start with you, Mr. Luongo, you may proceed as you wish.

**STATEMENT OF KENNETH M. LUONGO, EXECUTIVE DIRECTOR,
RUSSIAN-AMERICAN NUCLEAR SECURITY ADVISORY COUNCIL**

Mr. LUONGO. Thank you very much, Mr. Chairman, for the invitation to testify at this hearing. I am very happy that the Subcommittees are holding this joint hearing. The proliferation of weapons of mass destruction are a significant and central threat to U.S. national security, and this effort requires high-level political attention that the Subcommittee is providing today and has in the past.

I would like to begin by speaking a little bit about threat reduction's achievements to date. We are about 12 years into this process, beginning with the passing of the Nunn-Lugar legislation, and we have a very significant list of accomplishments, including the removal of 7,000 nuclear warheads from deployment; the destruction of more than 400 missile silos; the elimination of 1,400 ballistic missiles, cruise missiles, submarines, and strategic bombers; the elimination of 150 metric tons of weapon-grade uranium; and a variety of other achievements. All of these are very, very significant and quantifiable and they are all the more remarkable, Mr. Chairman, I believe, because we are cooperating with ministries and with people that were all part of the old Soviet system and were for 40 years essentially enemies of the United States. So it is quite a divide that we have overcome.

Beyond the quantifiable and measurable achievements of this agenda, I think there are a variety of other rewards that we have derived from this agenda, including a much better appreciation of the importance of nonproliferation in Russia; the development of deeper levels of trust between U.S. and Russian officials, military officers, and scientists; and the creation of new political linkages that were not possible during the Cold War. All of these are intangible. They are hard to measure in reports, but they are very, very

important, and they are the lubricant that makes this process work.

Let me talk a little bit about the challenges to threat reduction. This agenda is very important, but it is facing a number of problems that have developed during the last several years, say, 4 or 5 years.

The first major problem is political attention. Because of the sensitive nature of this cooperation, it requires a lot of high-level, political interaction, most of which has been missing for the last several years, not just in this Administration but from the last Administration as well. The Russians themselves also have not demonstrated a lot of overt political commitment to this agenda at high levels. In particular, it is very difficult to get high levels of the Russian government to intercede on these issues. The result is that we have funding limitations, restrictions, bureaucratic bottlenecks, and delayed implementation of various sorts.

The new kid on the block is the G-8 Global Partnership, which is up to \$20 billion over 10 years from all of the G-8 nations. Of this amount about \$10 billion is assumed to come from the U.S. and the rest from the other G-8 partners. I just came back from a meeting last week in Rome on this very subject, and while I think that the process of committing money and the process of identifying projects is moving along, I do think that a lot of the implementation problems that the U.S. is facing are being replicated in the G-8 process.

The second major problem that this agenda faces is transparency and access to facilities. I won't say much about this, but there is a new GAO report on this subject that outlines some of the problems. This access problem is impeding the ability to spend money, and this implementation problem could be solved by high-level, political involvement.

A third problem that we face is strategy and coordination. We heard in the introductory comments that some kind of coordinator is needed. There was a time when this agenda benefitted, I think, from less coordination so new programs could develop, but now I think it needs more coordination, and somebody in the White House, or somebody appointed by the White House, with real power, would be very essential.

Part of what we were asked to talk about today was where do we think this effort needs to go. One of the issues I would like to highlight briefly is excess weapons scientists. As we move into the second decade of this agenda, it is obvious that the blowing up of silos and elimination of missiles and things like that will continue, but it will become less prominent as the work is completed. More prominent in the future will be things like downsizing the weapons complex infrastructure in Russia, and that throws off a lot of excess scientists, and we don't have a very good set of programs, or tools, at this point for dealing with the creation of sustainable non-weapons jobs for these programs. We need a change in careers that is sustainable, not just temporary but sustainable.

Finally, in terms of challenges to threat reduction, let me talk a little bit about funding. A report that was commissioned by the Department of Energy that has become known as the "Baker-Cutler Report" called for \$30 billion to be spent over 10 years just on nu-

clear issues. We have spent so far about \$7 billion on nuclear, chemical, biological combined. Part of the problem is that we have these implementation problems which impede the ability to spend money and which require political solutions. So I think that there is an impediment there that needs to be solved, but if you could solve that, then more money would certainly be welcome.

Picking up on threat-reduction expansion, over the last few years, there has been some discussion about how threat reduction could be expanded. One way that it has been expanded is to include new partners through the G-8 Global Partnership.

Another way that it could be expanded is to expand it to other countries or regions. There are a lot of ideas floating around out there on this subject, but let me just mention a few. We did have threat-reduction cooperation with China at one time, before the Wen Ho Lee spying situation. We worked with them to talk about how to better secure their nuclear material because their material basically was guarded in the old Soviet style. So that is one thing that could be considered again.

Another is, as Senator Lugar has suggested, responding to weapons-of-mass-destruction emergency circumstances.

A third issue that we might want to think about is what to do with Iraq's remaining scientists. It is not clear whether or not their weapons-of-mass-destruction expertise is really being corralled in the current circumstances or whether they need something like a science center like we have in Russia.

And then, finally, there is North Korea. Should there be a breakthrough, you might be able to use threat reduction or its principles in that country.

I think that this year is a critical year for threat reduction. As I said, we have been at this for a dozen years, and the G-8 Global Partnership provided us with an opportunity to, in a sense, think freshly about this agenda. I am a little concerned that next year we are going to be in the midst of a political campaign, and issues are going to become politicized. So I think this is really an essential year, if the Congress were so willing, to take action on a reform agenda for threat reduction. Let me briefly run through the items that we have been recommending.

The first is we think that threat reduction ought to be incorporated into the homeland security concept, not into the Homeland Security Department, but certainly it should be recognized as a front line of defense in the war on terrorism and their possible possession of weapons of mass destruction. It should not be considered only as foreign aid.

Second, we think that there has to be more encouragement of the Russians to create an environment for threat reduction that is more conducive to progress. There are problems, as I mentioned: Access, legal protections, et cetera. This really requires a high-level, political dialogue.

We also are supporting amending current law to give the President the authority to waive the certifications to the Cooperative Threat Reduction Act. This has been requested by the President in the Iraq War supplemental. It was rejected. We think it should be recreated.

As I mentioned, the scientists programs need to be expanded and refocused. There also is a new initiative, and I commend the Committee because it is in their bill, called the Global Cleanout. Other people at the table have been more involved in the details of this concept than we have, but this is an effort to clean up all of the orphaned, highly enriched uranium around the world, similar to projects conducted in Georgia, Kazakhstan, and Serbia.

And then just two other things. One, I think we need a bi-annual, performance-based, high-level meeting with the Russians. This is a permutation on something that used to happen. There is no substitute for having program managers and high-level, political people in a room because it makes it a lot more difficult to point fingers at each other.

In conclusion, Mr. Chairman, I would say the dangers are still acute. As President Bush has stated, the gravest danger our nation faces lies at the crossroads of radicalism and technology, and history will judge harshly those who saw the danger coming but failed to act. I would say that if terrorists or hostile regimes gain access to the world's largest exposed weapons-of-mass-destruction stockpiles because of inertia, distraction, or risk aversion on the part of our leaders, our security will suffer despite our many other victories in the war on terrorism, and the judgment may, indeed, be harsh. Thank you.

[The prepared statement of Mr. Luongo follows:]

PREPARED STATEMENT OF KENNETH M. LUONGO, EXECUTIVE DIRECTOR, RUSSIAN-AMERICAN NUCLEAR SECURITY ADVISORY COUNCIL

Mr. Chairmen and members of the Subcommittees, thank you for your invitation to testify today before this joint hearing of the House International Relations Committee's Subcommittee on Europe and Subcommittee on International Terrorism, Nonproliferation and Human Rights. I am pleased to offer my testimony on the status and future of weapons of mass destruction (WMD) threat reduction efforts.

I am currently Executive Director of the Russian-American Nuclear Security Advisory Council, RANSAC, which is a non-profit research organization dedicated to supporting cooperative nonproliferation and threat reduction efforts with Russia and the former Soviet states. RANSAC works closely with many governments, particularly the U.S., Russia, and in Europe, to develop interest in new WMD security initiatives and to ensure the timely and effective implementation of existing threat reduction programs.

I applaud the Subcommittees for holding this joint hearing. The proliferation of weapons of mass destruction remains a significant, central threat to U.S. national security. The global effort to stem this threat and secure and destroy existing weapons and materials requires the high-level political attention that the Subcommittees are providing today.

Mr. Chairmen, I will summarize my formal statement, and ask that the full text of my testimony be included in the official record of the hearing.

THREAT REDUCTION'S ACHIEVEMENTS

The cooperative threat reduction agenda created by Senators Sam Nunn and Richard Lugar and related efforts are now over a decade old and during this time they have been a critical defense against the proliferation of nuclear, chemical and biological weapons, materials, and knowledge from Russia and the former Soviet states. Threat reduction programs have produced significant results including: the removal of roughly 7,000 nuclear warheads from deployment; the destruction of more than 400 missile silos; elimination of more than 1,400 ballistic missiles, cruise missiles, submarines, and strategic bombers; enhancement of storage and transportation of nuclear material and weapons; elimination of 150 metric tons of weapon-grade uranium; elimination of a major biological weapons production plant, and the support of approximately 50,000 chemical, biological, nuclear and missile scientists in peaceful research work. With construction of the first wing of the Mayak Fissile

Material Storage Facility, the nuclear components from more than 12,500 dismantled nuclear weapons will be safely stored in coming years.

These significant and quantifiable accomplishments are all the more remarkable since they have been achieved under often difficult circumstances through cooperation with Russian ministries and institutes that for over forty years were our enemy.

But, beyond the concrete measurable rewards, these cooperative programs also have created equally important but less tangible benefits. These include: a better appreciation in Russia of the importance of nonproliferation; the development of deeper levels of trust between U.S. and Russian officials, military officers, and scientists; and the creation of important new political linkages and relationships not thought possible during the Cold War. These intangible benefits are hard to quantify in official reports, but they are a unique result of this work.

The recent G-8 pledge to provide up to \$20 billion over the next decade, under the Global Partnership Against the Spread of Weapons and Materials of Mass Destruction, has provided an opportunity to further catalyze and accelerate progress on this nonproliferation agenda and to bring in new allies to share the threat reduction burden.

REMAINING THREAT REDUCTION CHALLENGES

While there are impressive threat reduction results, much of this agenda remains to be completed. Roughly two-thirds of Russia's weapons-grade material remains inadequately secure, the destruction of chemical weapons is just starting, and much remains unknown about the size and scope of Russia's past biological weapons activities.

These problems are exacerbated by many implementation problems that have developed during the past decade. But, these problems are not technical for the most part. They are political and they can be resolved if there is the demonstrated political will to do so. Let me outline some of these key challenges.

Political Attention

Because of its sensitive nature and the need for cooperation by all parties, the threat reduction agenda requires sustained political attention and the expenditure of political capital by the U.S., Russia, and other nations. However, truly robust political support for threat reduction is very rarely demonstrated, and often is more rhetorical than real.

For example, the Russian government has not often demonstrated its overt political commitment to this agenda at high levels and has rarely spearheaded efforts to eliminate the internal security and bureaucratic problems that plague implementation in Russia. In the U.S., insufficient political support and attention has resulted in funding limitations and restrictions, bureaucratic battles, and delayed program implementation.

The G-8 Global Partnership initiative is less than a year old and progress is being made in shaping its contributions and actions. But, I have just returned from a meeting in Rome on the Global Partnership that included government officials and nongovernmental organizations. I came away with the impression that a number of issues affecting U.S. threat reduction cooperation are being replicated in the G-8 process. Insufficient facility access, difficulties in negotiating agreements, and the lack of requisite legal protections are all problems that the Global Partnership is facing. And, so far, these problems are not being addressed consistently at high political levels in any of the G-8 countries.

It is largely up to the Russian government to resolve the major impediments, but increased and high-level political intervention could eliminate a number of these problems. In my opinion, it is within the power of the U.S., Russia, and other G-8 governments to break down the real barriers to cooperation that have hamstrung the programs and to create the conditions for concrete and rapid progress if they chose to do so.

Access and Transparency

Perhaps the most pervasive impediment to progress at present is the lack of access to Russian facilities and transparency of information. Major parts of the Russian national security bureaucracy are still wary of the West and its interest in Russia's defense materials and facilities. Requests for access and transparency create suspicion on the Russian side and the rejection of these requests fuels resentment and hard-line attitudes on the U.S. side.

In a recent study, the U.S. General Accounting Office (GAO) confirmed the seriousness of the issue, noting that the lack of access provided by Russia to some of its WMD-related facilities has resulted in slow progress for several Department of

Defense (DOD) and Department of Energy (DOE) threat reduction efforts. In particular, the report noted that access and information transparency challenges have delayed essential security upgrades for Russian nuclear warheads, weapons-usable nuclear materials, and biological pathogens.

The disputes over access are frustrating, and ultimately it may require changes in Russian law for the matter to be completely solved. But these problems can be better managed if there was a regular and focused dialogue between high-level political leaders in both countries. Such a process does not now exist.

Strategy and Coordination

One consequence of political inattention is the lack of any integrated or comprehensive strategy for the panoply of threat reduction programs. As a result, the review and coordination of the goals and objectives of bilateral and multilateral threat reduction programs remains inadequate and overall direction and prioritization are lacking. Bipartisan and insistent calls for a dedicated threat reduction coordinator in the White House have been rejected by Democratic and Republican administrations. Creation of a coordinator position and the development of an integrated strategy could substantially improve threat reduction's effectiveness and more quickly reduce proliferation risks. Without improvement in management and oversight, threat reduction activities will remain vulnerable to attack as delays continue to grow.

The need for strong coordination will become more essential in the future as threat reduction's results become less tangible. To date the most popular elements of threat reduction activities have centered on highly observable developments (such as the elimination of missiles, aircraft, and submarines). Activity in these areas will continue, but other issues such as weapon scientist re-direction and weapon complex infrastructure downsizing will become more prominent in the coming decade if the roots of the proliferation danger are to be addressed. However, these issues have an uneven track record of political support, and require longer timelines for implementation and achievement of their goals.

Excess WMD Scientists

A fundamental source of instability within the former Soviet WMD complexes is economic in nature. Therefore, addressing the economic dimensions of threat reduction is essential. The downsizing of WMD production plants and related infrastructure will displace thousands of scientists and workers skilled in the details of weapon design, manufacture, and maintenance.

However, the re-employment programs currently in place for weapons scientists, while essential, are not providing many career-changing opportunities in any of the WMD complexes in Russia and the FSU. The two main strategies for the redirection of the scientists that have been pursued by governments—science research contracting and technology-driven commercialization and business development—are inadequate. New approaches and new attitudes are required to meet this challenge.

The science contracting approach has been, and remains, an essential lifeline for many weapons scientists. But the duration of most projects does not exceed three years, and many of these scientists still maintain their weapons-related employment during this time. Indeed, a recent analysis done by the International Science and Technology Center (ISTC) has shown that this multilateral program, in 2001, paid about 23,000 WMD scientists to work on its projects, but that only about 600 of this total were spending more than 200 days of the year on ISTC project related work. This shows that the scientists' skills are really not being converted completely from weapons work, but instead they mostly are being detoured temporarily. Also many of these science projects do not have relevance to clear global scientific challenges, as measured by the general lack of interest in their results, though this is changing to some degree.

At the other end of the re-employment spectrum, the efforts to create commercial enterprises for weapons scientists have had some successes. But government investments have yielded little real results often because the projects have not adequately conformed to market needs. Creating successful commercial enterprises is difficult enough in Russia because of the systemic barriers to business creation. When the additional layer of impediments that is unique to the Russian weapons complex are added, it becomes a daunting challenge.

Western governments must be willing to accept these realities and lower their expectations that commercialization in the WMD complexes will completely solve the problem of excess scientists. But, Russia must also curtail its unrealistic economic expectations and recognize that systemic problems in that country impede commercial progress.

One issue that is becoming increasingly important is to distinguish between the redirection needs of the scientists and engineers in these complexes, and the need to identify suitable non-weapons work for the production workers displaced by the complex downsizing process. A recent analysis has estimated that excess weapons production workers from Russia's fissile material production and warhead R&D and production nuclear cities account for about 20–25,000, of a total of about 35,000 projected excess employees in the Russian nuclear complex. These workers have knowledge of the physical, chemical and metallurgical properties of the various weapons materials and components, and that makes them a proliferation risk.

Therefore, a more cohesive, comprehensive, integrated, and effective strategy for addressing the re-employment of scientists across the WMD spectrum needs to urgently be developed and implemented. Harnessing the experience and knowledge of the excess weapons scientists to real world problems, like environmental remediation, energy technology development, life sciences, and nonproliferation would provide global benefits as well as a path to sustainable career change for these scientists and eliminate the proliferation threat they pose.

Funding

Funding for threat reduction has been considered the litmus test of support. And, indeed, robust funding for this agenda is necessary. But, some key programs are now experiencing funding backlogs because the implementation difficulties are holding back progress. The implementation problems, in turn, are festering because of the lack of political attention to solving them. If these problems could be solved, then substantially more funding could be spent in an effort to accelerate the completion of threat reduction's goals.

While more than \$1 billion per year is being made available for international threat reduction programs by the U.S. and other nations, there are a number of efforts that could accelerate progress if additional funding was made available to them. These include re-directing weapons scientists, eliminating additional quantities of highly enriched uranium, implementing plutonium disposition, ending the production of weapon-grade plutonium, converting research reactors that currently use highly-enriched uranium (HEU), and improving border, export, and customs control.

THREAT REDUCTION EXPANSION

While threat reduction is facing some very difficult challenges, its unquestioned successes have made it a candidate for expansion. During the past two years, there has been more attention focused on multilateralizing the threat reduction effort, expanding its scope beyond Russia and the FSU, and assessing its applicability to new arms control and security agreements.

The G-8 Global Partnership

Threat reduction has always been more than just a U.S.-Russian effort, and many other countries have contributed to various objectives, such as chemical weapon destruction and scientists' redirection. But the creation of the G-8 Global Partnership was a major step forward in the multilateralization of WMD threat reduction efforts. Under this initiative, the G-8 nations committed to provide up to \$20 billion to support cooperative non-proliferation projects, initially in Russia. This constitutes a major funding increase from the non-U.S. G-8 nations.

The assumption is that the U.S. would bear the cost of about half the \$20 billion since it is currently spending about \$1 billion per year on threat reduction activities in Russia and the FSU. Another roughly \$8.5 billion has been publicly pledged by the other G-8 nations, the European Union, and a few non-G-8 nations to date. About 8% of this \$8.5 billion amount has been committed to specific projects.

The major interests of the G-8 nations are in chemical weapons destruction, submarine dismantlement, plutonium disposition, and re-employment of weapons scientists. Additional areas of work will include Soviet-designed nuclear reactor safety projects and environmental remediation efforts. These are all areas that are well within the scope of the current threat reduction portfolio.

But, the substantial increase in funding and commitment to threat reduction from countries other than the U.S. has provided a framework for thinking concretely about the future and expansion of this agenda.

Regional Expansion

In the past year and a half, attention in the policy community has turned to whether and how U.S. threat reduction assistance can be extended to other countries outside of Russia and the other former Soviet republics which possess weapons

of mass destruction and/or potentially vulnerable material stockpiles and weapons expertise.

Several studies on this subject have been published and a variety of ideas have been put forward as to how the United States could engage countries such as China, India, Iraq, Pakistan, and possibly even North Korea in threat reduction-type activities.

Some useful forms of nonproliferation cooperation with other countries that could be explored more intensively by the United States include:

- Rapid response to WMD emergency circumstances.
- Undertaking a program to develop alternative employment opportunities for scientists and workers previously engaged in Saddam Hussein's WMD programs, in addition to accounting for and securing weapons of mass destruction and any related materials in post-war Iraq.
- Providing export control development and nuclear material protection, control and accounting (MPC&A) assistance to India and Pakistan.
- Resuming a dialogue on MPC&A cooperation with China, and expanding cooperative U.S.-Sino WMD interdiction and anti-smuggling efforts.
- Assisting India in its commitment to eliminate its chemical weapons arsenal.
- Extending personnel reliability systems to Pakistan and India to effectively screen guard forces with access to warheads and sensitive materials.
- Contingency planning to assist dismantlement of North Korean nuclear weapons and disposal of related materials, should a dramatic breakthrough in the current crisis on the Korean peninsula occur.

However, a number of complications and barriers exist which could prevent effective U.S.-led activities in these nations. These include the nuclear Non-Proliferation Treaty which limits cooperation between nuclear and non-nuclear weapons states, U.S. laws and export controls, suspicions in the host country about possible assistance motives and intentions, and domestic policy attitudes which oppose any foreign assistance that is perceived as contributing to operational readiness or offensive capabilities of foreign military forces. Clearly, substantial political will must be summoned to establish meaningful threat reduction cooperation with other countries of concern.

Moreover, congressional opposition has, to date, prevailed over most proposals to extend threat reduction to other corners of the world, at least when it comes to utilizing resources of the Department of Defense's Cooperative Threat Reduction (CTR) program.

Twice in the past year, proposals to allow use of un-obligated Cooperative Threat Reduction program funds for nonproliferation activities outside of the former Soviet Union have been defeated in the Congress. At present, CTR is limited under existing law to cooperation with states of the former Soviet Union.

Proposals for the expansion of threat reduction beyond Russia and the FSU have been put forth by Senator Lugar, in 2002, and as part of President Bush's wartime supplemental funding request to Congress earlier this year. Senator Lugar's effort resulted in a compromise that requested a Department of Defense study on the authorities currently available to the U.S. government, as well as limitations, in responding to any emergency WMD proliferation threat around the world. The President's request for threat reduction expansion was rejected as part of the final Iraq war supplemental appropriation bill, though this bill did provide \$15 million to the Energy Department's nonproliferation programs expressly for threat reduction assistance to non-FSU countries.

Applicability to New Arms Control Agreements

Threat reduction may also have a role to play in facilitating current and future arms control agreements. The implementation of the START I treaty has provided an essential rationale for a major portion of threat reduction activities, but other agreements like the Chemical Weapons Convention (CWC) and Biological Weapons Convention (BWC), have had the opposite effect. In particular, concerns about Russian declarations under CWC and BWC have led to prohibitions on spending U.S. funds for chemical weapons destruction and hiatuses in contracting for new activities in many WMD areas.

There is a need to clarify and harmonize the relationship between relevant arms control agreements and flagship threat reduction programs. Other agreements such as the Treaty of Moscow, the Comprehensive Test Ban Treaty (CTBT), and regional nuclear weapons-free zones currently have little or no relation to threat reduction, but threat reduction could be instrumental in facilitating the implementation of

these treaties. These linkages should be explored, as threat reduction cooperation between the U.S. and Russia moves through its second decade.

A THREAT REDUCTION REFORM AGENDA

Many of threat reduction's key problems can be solved if the Congress and Administration take decisive steps to expedite, reform, and expand this agenda this year. The dangers posed by insecure nuclear, chemical, and biological stockpiles remain high, and the coming presidential election could preclude the opportunity for change next year.

A threat reduction reform agenda, however, should not focus on additional expenditure restrictions and more onerous reporting requirements as a means of assuring accountability. Fiscal prudence is necessary, but these methods have produced limited results to date and reliance upon them places risk aversion over threat elimination.

Taking action on the following key policy, financial, and procedural issues this year could break the threat reduction logjam.

- Integrate cooperative threat reduction activities into the concept of homeland defense and the war on terrorism. These programs are a first line of defense against WMD threats to the U.S. and its allies and they should be considered a high national security priority, not foreign aid. This could also provide a basis for the expansion of threat reduction beyond Russia and the former Soviet states.
- Encourage Russia to improve the environment for threat reduction activities by accounting for past WMD program activities, providing access to facilities where security improvements are required, offering financial transparency, and approving the legal protections that are needed to move this agenda forward. The rapid resolution of these problems would benefit from a much more intense political dialogue between the White House and Kremlin than currently exists. However, if Russia is to be an equal partner in this process it must be primarily responsible for addressing these key issues.
- Support amending current law, to give permanent authority to the President to waive the annual certifications required for Cooperative Threat Reduction programs and Freedom Support Act nonproliferation programs. The President requested this action in the FY 2004 budget request to the Congress.
- Expand and refocus efforts designed to peacefully employ excess weapons scientists and specialists and irreversibly eliminate WMD complex infrastructure. Excess weapons scientists and workers are a major root cause of the proliferation threat given their expertise and access to weapons and materials. These efforts need more funding, greater flexibility, and new strategies in order to provide the career-changing opportunities that can further reduce, if not eliminate, the threat these scientists and their facilities pose.
- Support robust funding for key programs. The Baker-Cutler task force report, *A Report Card on the Department of Energy's Nonproliferation Programs with Russia*, recommended that \$30 billion be spent on nuclear security alone in Russia and the former Soviet states. To date, we have spent a total of only about \$7 billion on all nuclear, chemical, and biological weapon threat reduction activities. Critical threat reduction programs were cut in the fiscal year (FY) 2002 budget submission, and without congressional action, those cuts would not have been reversed and additional funding to accelerate the security of WMD materials in the wake of the September 11 terrorist attacks would not have been made available. The FY 2004 budget request again cuts some essential nuclear material security programs though they are designed to pay for new and important initiatives. While some of the programs targeted for reduction have funding backlogs, if implementation problems are resolved those backlogged funds could be spent rapidly.
- Create a new global initiative that would eliminate weapon-grade uranium from vulnerable facilities worldwide (similar to projects conducted in Georgia, Kazakhstan, and Serbia). The authority to undertake this effort needs to be clarified and the funding for it provided.
- Encourage the establishment of a senior coordinator or focused coordination team in the U.S. that can prioritize, oversee, and expedite threat reduction activities. Currently the multiple threat reduction programs are run without a well-developed or coordinated strategy. This person or group must be more powerful than current interagency working groups and must have unfettered access to the President and his senior advisors.

- Support the creation of bi-annual, performance-focused meetings between high-level U.S. and Russian political officials to comprehensively evaluate threat reduction progress, receive reports from program managers on advances and impediments in each program, and negotiate solutions to implementation obstacles. There is no substitute for having both sides in the same room reporting to senior political officials on programmatic progress and problems.
- Stress the importance of the G-8 nations meeting their financial obligations under the Global Partnership initiative and focusing their funding on priority proliferation issues. Also, encourage the further involvement of non-G-8 nations and consider supporting an increase in the total funding commitment above \$20 billion.
- Continue to hold comprehensive hearings on threat reduction activities and include expert, non-governmental witnesses who can speak broadly but authoritatively on the progress and problems facing the Nunn-Lugar programs, including how threat reduction concepts and authorities can be expanded to include new nations.

Conclusion

Cooperative threat reduction is a vital effort that is essential to reducing 21st Century WMD threats. It needs to be updated, reformed, and expanded. The Congress and the Administration need to work together along with Russia and our other G-8 partners to make this reform a reality.

The dangers are acute. As President Bush has stated, "The gravest danger our Nation faces lies at the crossroads of radicalism and technology. Our enemies have openly declared that they are seeking weapons of mass destruction, and evidence indicates that they are doing so with determination. The United States will not allow these efforts to succeed. . . . We cannot defend America and our friends by hoping for the best. . . . History will judge harshly those who saw this coming danger but failed to act. In the new world we have entered, the only path to peace and security is the path of action."

If terrorists or hostile regimes should gain access to the world's largest exposed WMD stockpiles because of inertia, distraction, or risk aversion on the part of our leaders, our security will suffer despite other victories in the war on terrorism, and the judgment of history may indeed be harsh.

Mr. BEREUTER. Thank you very much. You finished almost exactly on the money.

Next, we will hear from Ms. Laura S.H. Holgate, Vice President for Russia/NIS programs at the Nuclear Threat Initiative. You may proceed as you wish.

STATEMENT OF LAURA S.H. HOLGATE, VICE PRESIDENT FOR RUSSIA/NEW INDEPENDENT STATES [NIS] PROGRAMS, NUCLEAR THREAT INITIATIVE

Ms. HOLGATE. Mr. Chairman and Members of the Subcommittees, I appreciate the opportunity to share my thoughts and concerns about the gravest dangers facing our world today. I appear before you as an officer of the Nuclear Threat Initiative, a charitable organization committed to helping make the world safer from the threats of nuclear, biological, and chemical weapons.

You asked us today to address how far the U.S. has come in reducing the threat from nuclear, biological, and chemical weapons and where we are heading. I would add a third key question: Are we getting there fast enough? In brief, I would answer that we have come fairly far, that we are headed mostly in the right direction, but we are not moving nearly as fast as we can or as fast as we must.

Mr. Chairman, I would like to recall the words President Bush used to introduce the latest version of the United States National Security Strategy.

“The gravest danger our nation faces lies at the crossroads of radicalism and technology. Our enemies have openly declared that they are seeking weapons of mass destruction, and evidence indicates they are doing so with determination.”

I have been encouraged to hear these and other presidential statements confirm this correct assessment of the dangers we face and the need for international cooperation to mount an effective defense, but our actions as yet are falling far short of our words. If keeping weapons of mass destruction out of the hands of our enemies is our number-one security threat, who is in charge of this important mission? Who is accountable? What is our plan? What, in fact, “new” is being done to deny those who intend us harm access to these weapons, weapons materials, and know-how? I am increasingly concerned that the President’s “bureaucratic troops” do not yet display the planning, coordination, and degree or urgency that this mission requires.

This is not to say that we do not have competent individuals who approach their jobs in this field with enormous determination and creativity. They deserve your praise and the praise of the American people, but they also deserve our objectivity. Every day these individuals make a positive difference in reducing the threats that face all nations, but we must do much more. We must quicken the pace and expand the scope of what we seek to accomplish, for, in spite of the President’s words, keeping the world’s most dangerous weapons out of the hands of the world’s most dangerous people is not yet a diplomatic or budget priority.

In the year and a half since September 11th, threat-reduction programs at the Department of Defense, Department of Energy, and Department of State are proceeding, at best, on a “status quo plus” basis, unguided by any sense or urgency.

I will outline seven, high-priority actions that must be taken by the U.S. Government, including the Congress, by Russia, and by other nations around the world to protect us from the risks of terrorist use of nuclear, biological, and chemical weapons.

First of all, we need to secure Russia’s weapons and materials. Russia’s weapons and weapons materials are still dangerously insecure. By the Energy Department’s own account, security upgrades work has not even begun on more than 120 tons of plutonium and highly enriched uranium. Less than a quarter of Russia’s fissile material stockpile has received comprehensive upgrades, and DOE’s plan expects a near 6 percent of additional fissile material to be adequately protected by the end of the year. Moreover, we still have huge factors of uncertainty over how many nonstrategic nuclear weapons they have and how secure they are. Unsecured nuclear bomb material anywhere is a threat to everyone everywhere, and the approach and pace of these programs is as yet inadequate to the threat.

This point comes across clearly in a report recently published by a team at Harvard University entitled “Controlling Nuclear Warheads and Materials.” While the focus of this report is on nuclear weapons and materials, the same can be said about biological and chemical weapons.

Second point: Pass the permanent waiver authority for Cooperative Threat Reduction programs. For reasons having more to do

with political science than political foresight, we stalled out the Nunn-Lugar Cooperative Threat Reduction program for almost a full fiscal year while Congress deliberated providing the Executive Branch permanent waiver authority, both for the overall program and for specific chemical weapons-related conditions so that this vital work can continue without interruption. A gap in program implementation opens an opportunity for terrorist and creates a gap in our own security. I encourage this Congress to speak and act decisively on this issue in this session. The day after an attack by terrorists with weapons obtained from unsecured stocks from the former Soviet Union, the American people will be unforgiving toward those who interrupted or weakened programs designed to prevent it.

Third point: Create a dedicated, Global Cleanout program commensurate with the threat posed by highly enriched uranium distributed worldwide. Our near-term security focus must go beyond the former Soviet Union and regard the 20 additional tons of highly enriched uranium distributed over 130 civilian reactors and other facilities in 40 countries, much inadequately guarded. We have to get our hands around this problem and clean out this material at risk.

We at NTI are pleased to have had a role in addressing the most serious of these circumstances, in Serbia last year. The State Department, Energy Department, and Russia's Ministry of Atomic Energy deserve high marks for their cooperation in operating this effort, which removed two and a half bombs' worth of highly enriched uranium from a research reactor near Belgrade to a secure location where it will be blended down so it cannot be used in nuclear weapons. At the same time, the State Department identified at least two dozen more sites requiring our immediate attention, yet not a single kilogram of material has yet been removed. This failure is explained by a combination of inadequate authority, limited resources, fractured leadership, and a lack of vision.

A Global Clean-Out program worthy of the name and tailored to today's threats would break apart the stovepipes that imprison the current hodge-podge of programs and create a tiger team of talented individuals with demonstrated experience in moving quickly and creatively to eliminate bureaucratic roadblocks and remove excuses that prevent action. Congress can, and should, direct the creation of such a team and empower it with authorities and resources so that NTI doesn't have to bail the government out of the cracks between its programs, cracks it doesn't even admit exist.

Fourth point: Develop a prioritized, risk-based plan for the threat reduction. We must begin with an objective, comprehensive, national security estimate that assesses each risk, ranks each threat, computes every cost, and confronts the full range of dangers. From this analysis can be structured a measured defense, one that would allow us to direct the most resources to prevent threats that are the most immediate and the most potentially devastating. The congressionally mandated "Section 1205" report lacks any sense of priorities, either in budget allocation or in diplomatic emphasis. As a result, our programs are more constrained by opportunity than by budget. Without constant and targeted effort at all levels of government to expand the opportunities for cooperation on our highest-

priority threats, we will never get our spending and our program priorities right.

Fifth point: Create a true U.S.-Russia partnership on threat reduction. Truly cooperative threat reduction requires the trust of the recipients. Several trends have converged to complicate this trust relationship with Russia. Project areas have moved from very specific and measurable to diffuse. Projects with clear prior commitment have been joined by projects with only grudging acceptance.

Russian attitudes toward the U.S. have swung from romanticism to annoyance to fatigue to suspicion. Security officials have reasserted themselves, both in the U.S. [after the Los Alamos spy imbroglio] and in Russia [after the election of a former KGB leader]. Ever-increasing U.S. demands for accountability and access to sensitive facilities reinforce Russian suspicions of their security officials and cancellation of site visits slows down programs.

Efforts to condition nonproliferation cooperation on changing undesirable Russian behavior are typically ineffective because many Russians would prefer that these programs, and the burden of U.S. cooperation, simply go away. Yet terminating these programs would imperil our national security. We urgently need to transform our relationship with Russia from one of patronage to a true partnership based on reestablished trust, in which Russia meets its commitments and where the U.S. and Russia work together to address proliferation threats outside their borders that threaten both nations.

Sixth point: Expand the geography of cooperative threat reduction. We have to make sure that every nation with nuclear, biological, or chemical weapons materials or know-how accounts for what it has, secures what it has, and pledges that no other nation or group will be allowed access. It is, therefore, imperative that we expand the scope of successful, threat-reduction programs in several U.S. agencies.

Taking the Nunn-Lugar Cooperative Threat Reduction vision global by extending its programmatic reach to other nations and to the world's regional "hot spots" is a key step that Congress can take to deny terrorists access to weapons of mass destruction and to reduce the potential that these weapons may ever be used by states or nonstate actors.

Seventh and final point: Recruit other threat-reduction donors by making the G-8 Global Partnership real. Catastrophic terrorism has the capacity to stagger societies and destroy lives oceans away from ground zero, and it is a brand of terrorism with the best chance to arouse a cohesive global opposition, and here again, we are taking important steps but not yet the giant strides required.

Last summer, in Canada, G-8 leaders declared a Global Partnership Against the Spread of Weapons of Mass Destruction. To implement the partnership, they pledged \$20 billion over 10 years and established a six-element program to guide their work. We now have to invest the diplomatic energy and make the Global Partnership real, both in the execution of effective, threat-reduction projects and in the broadening of its membership to nations all over the globe. NTI is working with the Center for Strategic and International Studies and 19 other nongovernment organizations in

North America, Russia, Europe, and Japan to build the intellectual and political support required to strengthen the partnership.

President Bush has an historic opportunity to dramatically reduce the threat from weapons of mass destruction within the next 2 years of his Administration. For this to happen, the President must make crystal clear that what he has called his number-one security priority, keeping the world's most destructive weapons out of the hands of the world's most dangerous people, is, not only in words but in practice, the number-one policy of his Administration.

I thank you for this opportunity to testify, and I look forward to your questions.

[The prepared statement of Ms. Holgate follows:]

PREPARED STATEMENT OF LAURA S.H. HOLGATE, VICE PRESIDENT FOR RUSSIA/NEW INDEPENDENT STATES [NIS] PROGRAMS, NUCLEAR THREAT INITIATIVE

Mr. Chairman, members of the Committee, I appreciate the opportunity to share my thoughts and concerns about the gravest danger facing our world today. I appear before you as an officer of the Nuclear Threat Initiative (NTI)—a charitable organization committed to helping make the world safer from the threats of nuclear, biological and chemical weapons. Former Senator Sam Nunn and Ted Turner co-chair NTI and we are proud of the contributions we have been able to make in our two years of existence in the realms of analysis, advocacy, and indeed, action.

You asked us today to address how far we have come in reducing the threat from nuclear, biological and chemical weapons, and where we are heading. I would add a third key question: are we getting there fast enough? In brief, I would answer that we have come fairly far, and that we are heading mostly in the right direction, but that we're not moving nearly as fast as we can or as fast as we must.

Mr. Chairman, I would like to recall the words President Bush used to introduce the latest version of the U.S. National Security Strategy:

"The gravest danger our Nation faces lies at the crossroads of radicalism and technology. Our enemies have openly declared that they are seeking weapons of mass destruction, and evidence indicates that they are doing so with determination. The United States will not allow these efforts to succeed . . . We will cooperate with other nations to deny, contain, and curtail our enemies' efforts to acquire dangerous technologies."

I have been encouraged to hear these and other Presidential statements confirm this correct assessment of the dangers we face and the need for international cooperation to mount an effective defense. The U.S. government has now enshrined those words in a six-page document entitled, "National Security Strategy to Combat Weapons of Mass Destruction." But our actions, as yet, are falling far short of our words. If keeping weapons of mass destruction out of the hands of our enemies is our number one security threat—who is in charge of this important mission? Who's accountable? What is our plan? What, *in fact*, "new" is being done to deny those who intend us harm access to these weapons, weapons materials and know-how? Information is scant, but, I regret to say, I am increasingly concerned that the President's "bureaucratic troops" do not yet display the planning, coordination, and degree of urgency this mission requires.

This is not to say that we do not have competent individuals who approach their jobs in this field with enormous determination and creativity. I know and respect many of them. They deserve your praise and the praise of the American people. But they also deserve our objectivity. Every day these individuals make a positive difference in reducing the threats that face all nations. Three former Soviet states renounced and returned the thousands of nuclear weapons on their territories, hundreds of missiles and launchers have been destroyed, tons of nuclear material has been secured or destroyed, tens of thousands of weapons scientists have been peacefully employed. But we must do much more. We must quicken the pace and expand the scope of what we seek to accomplish. For, in spite of the President's words, keeping the world's most dangerous weapons out of the hands of the world's most dangerous people is not yet a budget priority. There is still a dangerous lag between the President's words and our expenditures. Programs at the Department of Defense, the Department of Energy and the Department of State focused on securing vulnerable weapons and materials in Russia and states of the former Soviet Union where much of the risk resides are proceeding, at best, on a "status quo plus" basis.

Russia's nuclear weapons and weapons materials are still dangerously insecure. By the Energy Department's own account, security upgrades work has not even begun on more than 120 metric tons of plutonium and highly enriched uranium. Less than a quarter of Russia's fissile material stockpile has received comprehensive upgrades, and DOE's own plan expects a mere 6% of additional fissile material to be adequately protected by the end of the year. As we all know, it takes mere pounds to make a nuclear device with the devastating effect of the bomb exploded over Hiroshima. Moreover, we have no accounting for Russia's non-strategic weapons and still have huge factors of uncertainty over how many they have, and how secure they are. And for reasons having to do more with political science than political foresight, we stalled out the Nunn-Lugar Cooperative Threat Reduction program for almost a full fiscal year, while Congress considered different versions of a waiver authority for the executive branch.

Unfortunately, the House of Representatives has fought against providing the executive branch permanent waiver authority so that this vital work can continue without interruption. If the President concludes such a waiver serves our national security interest, he must be able to exercise that judgment in a manner that ensures the programmatic integrity of Nunn-Lugar. A gap in program administration opens an opportunity for terrorists and creates a gap in our own security. To again recall the President's words, "Our enemies have openly declared they are seeking weapons of mass destruction and evidence indicates they are doing so with determination." I encourage this Congress to speak and act decisively on this issue—*this session*. Should we ever suffer attack by terrorists with weapons obtained from unsecured stores of weapons and materials from the former Soviet Union, the American people will be unforgiving to learn that programs designed to prevent this occurrence were interrupted or weakened because the President was constrained in this ability to act in the best security interest of the United States.

At a fundamental level, we must ask ourselves whether conditions on security assistance to Russia and other former Soviet states—some of which were put in place almost a decade ago—remain relevant in light of the changed nature of the threats we face after September 11th. I don't believe so. But at the very least, I believe the President must have unqualified authority to waive those conditions in the interest of national security as circumstances demand. The Nunn-Lugar program and its counterparts at the Departments of Energy and State served the security interest of this country well in the post-Cold War period. In the post 9–11 era, Nunn-Lugar and its counterparts are needed "now more than ever."

At the same time, we do well to remember that unsecured nuclear, biological and chemical weapons and materials reside outside the territory of the former Soviet Union. Our near-term security focus should look beyond these borders. Twenty metric tons of highly enriched uranium were distributed to over 130 civilian reactors and other facilities in 40 countries around the world in the last 50 years, under the "Atoms for Peace" program. Much of the material remains broadly distributed throughout the globe at inadequately guarded sites. We have to get our hands around this problem and clean out the material at risk. We know of at least two dozen circumstances requiring our *immediate* attention.

We at NTI are pleased to have had a role in addressing the most serious of these circumstances in Belgrade, Yugoslavia, last year. The U.S. State Department, the Department of Energy and Russia's Minatom deserve high marks for this operation, which removed two and a half bombs worth of highly enriched uranium from a research reactor near Belgrade to a secure location where it will be blended down so it cannot be used in nuclear weapons. Yet we have only just begun to do what needs to be done to secure and eliminate these small but potentially very attractive stashes of nuclear bomb material, owing to inadequate authority, resources, leadership and vision. A "Global Cleanout" program worthy of the name and tailored to today's threats would break apart the stovepipes that imprison the current hodge-podge of programs, and create a tiger team of talented individuals with demonstrated experience in moving quickly and creatively to eliminate bureaucratic roadblocks and remove excuses that prevent action. Congress can, and should, direct the creation of such a team, and empower it with authorities and resources so that NTI doesn't have to bail the government out of the cracks between their programs, cracks it doesn't even admit exist.

Unsecured nuclear bomb material anywhere is a threat to everyone, everywhere and the approach and pace of these programs is inadequate to the threat. This point comes across clearly in a report published recently by a team at Harvard University entitled "Controlling Nuclear Warheads and Materials." This report, which was commissioned by NTI, focuses attention on the requirements for sustained Presidential leadership on these issues and on the need for an integrated, prioritized plan for blocking the terrorist pathway to the bomb. While the focus of this report is on nu-

clear weapons and materials, the same can be said about biological and chemical weapons.

We must fix our priorities so the greatest dangers draw our greatest investments. Admittedly, designing an effective defense against the full range of risks is a formidable challenge. To succeed, we must begin with an objective, comprehensive national security estimate that assesses each risk, ranks each threat, computes every cost, and confronts the full range of dangers. From this analysis can be constructed a broad-based, common ground strategy and measured defense—one that would allow us to direct the most resources to prevent threats that are the most immediate, the most likely, and the most potentially devastating. In the absence of an infinite budget, relative risk analysis must be the beginning point in shaping our strategy and allocating our resources—to defend our citizens at home and abroad. If such an assessment exists, we have not seen it. Without it, I suggest it will be extremely difficult for the President or the Congress to get our spending and program priorities right. This is the main flaw in the recently presented “Section 1205” report, purporting to be such a plan. Instead, lacking a risk-based understanding of priorities, it resembles more of a catalog of current and intended action, with no apparent linkage of programmatic activity to the post-9/11 threats we now know we face.

President Bush has an historic opportunity to dramatically reduce the threat from weapons of mass destruction within the next two years of his Administration. The good news is that he is served by a number of highly dedicated and competent appointed and career officials. They are taking important steps in reducing the dangers from weapons of mass destruction. But we need giant strides and, as I noted earlier, a much greater high-level focus and coordination of this urgent mission. For this to happen, the President must make crystal clear that what he has called his number one security priority—“keeping the world’s most destructive weapons out of the hands of the world’s most dangerous people”—is, in words *and practice*, the number one priority of his Administration. If this is done, programmatic priorities will become Presidential priorities, and the money will follow.

And getting our programmatic and spending priorities right is but one piece of a larger mosaic. To counter the threat from catastrophic terrorism, we will need an unprecedented level of international security cooperation. This will require getting our diplomatic priorities right. And here, too, I am concerned that we are trying to do too many things simultaneously without sufficient focus on the closest snakes.

Threat reduction activities require the participation of the recipients to be effective. Several trends have converged to complicate relationships with recipient nations. Project areas have moved from very specific and measurable (e.g., remove all 1,400 strategic nuclear weapons from Kazakhstan) to diffuse (e.g., prevent Russian bioscientists from aiding proliferators). Projects with clear prior commitment (e.g., eliminate Russian nuclear weapons to achieve START I levels) have been joined by projects with only grudging acceptance (e.g., permanently dispose of 34 tons of weapons plutonium). Projects with built-in reciprocity (e.g., bilateral verification of START eliminations) have led to projects with unilateral inspection rights (e.g., U.S. monitoring of the Mayak Fissile Material Storage Facility).

National attitudes towards the U.S. on the part of the recipients have swung from euphoric openness to annoyance to fatigue to suspicion. Security officials have reasserted themselves both in the U.S. (after the Los Alamos spy imbroglio) and in Russia (after the election of an ex-KGB president). Ever-increasing U.S. demands for accountability and access to sensitive facilities reinforce suspicions of Russian security officials, and the cancellation of site visits slows down programs. Congressional limitations on U.S. support to Russia’s top priorities (retiring officer housing, elimination of general purpose submarines, conversion of military cities and populations) make it harder to achieve U.S. priorities, which the Russians do not take as seriously (fissile material control and disposition, closure of biological weapons institutes). Efforts to condition nonproliferation cooperation on changing undesirable Russian behavior (e.g., Iranian nuclear cooperation) are ineffective, because many Russians would prefer that these programs, and the burden of U.S. cooperation, simply go away. Yet, terminating these programs would be devastating to our national security. We urgently need to transform our relationship with Russia from one of patronage to a true partnership, in which Russia meets its commitments, and where the US and Russia work together to address proliferation threats outside their borders that threaten both nations.

To extend this point, we have to make sure that every nation with nuclear, biological, or chemical weapons, materials or know-how accounts for what it has, secures what it has, and pledges that no other nation or group will be allowed access. That straightforwardly stated objective must be our number one diplomatic priority. As such, it is imperative that we expand the scope of successful programs such as

DOD's Cooperative Threat Reduction, the Department of Energy's Material Protection, Control and Accounting Program, and the Department of State's science center, export control and border security activities as well as the Nonproliferation and Disarmament Fund. I am confident that the lessons we have learned during the last decade in working with the Russians and other states in a cooperative effort to reduce threats can be applied in other regions of the world that face instability and the prospect of open conflict. Making the threat reduction concept global and extending its programmatic reach to other nations and to the world's regional "hot spots" is a key step the Congress can take to deny terrorists access to weapons of mass destruction and to reduce the potential that these weapons may ever be used by states or non-state actors. I strongly endorse the efforts to extend Nunn-Lugar and related programs globally beyond the Russian Federation and other states of the former Soviet Union.

As we talk with our allies and with all nations, we must underscore the importance of working closely together to meet the threat posed by catastrophic terrorism—the kind of terrorism that has the capacity to stagger societies and destroy lives oceans away from ground zero. It is the brand of terrorism that truly threatens everyone, and so it is the brand of terrorism with the best chance to arouse a cohesive global opposition. And here again, we are taking important steps, but not yet the giant strides required.

Last summer, G8 leaders met in Canada and took a particularly important step. At that meeting, the leaders declared (and I quote): "we commit ourselves to prevent terrorists, or those that harbor them, from acquiring or developing nuclear, chemical, radiological and biological weapons; missiles; and related materials, equipment and technology." To implement these principles, they established the "G8 Global Partnership Against the Spread of Weapons and Materials of Mass Destruction," committed \$20 billion over ten years, and established a six-element program to guide their work.

The establishment of the G8 Global Partnership and the leadership pledges achieved in Kananaskis are welcome and important developments. One should recognize, however, that the G8 makes many commitments at its annual meetings. We now have to invest the diplomatic energy to make the Global Partnership real. NTI is working with the Center for Strategic and International Studies and 20 non-governmental organizations in North America, Russia, Europe and Japan to build the intellectual and political support required to strengthen the Partnership.

We need to *press* the G8 governments to turn those principles into a clear set of priorities, to establish a timeline to guide their work, and make sure they devote adequate resources to the work.

And we need to *press* the G8 governments to make the Global Partnership truly global—to include every nation with something to safeguard or that can make a contribution to safeguarding it. Today, this G8 agreement is all but invisible—to the press, to Congress and to nations around the world. For this coalition to extend itself from eight nations to all nations, the President of the United States is going to have to promote it with the full authority of his office.

To achieve a global coalition, we will have to make this a diplomatic priority—something that leads the set of talking points whenever the President or an American diplomat of any rank up to the Secretary of State sits down to talk with officials of other nations. And why should it not be? The final section of the National Security Strategy released by the White House in September says: "The United States must and will maintain the capability to defeat any attempt by an enemy—whether a state or non-state actor—to impose its will on the United States, our allies, or our friends." That promise cannot be fulfilled without denying terrorists weapons of mass destruction, and that cannot be achieved without the very kind of international cooperation envisioned in a full scope global partnership.

Mr. Chairman, in these remarks I have tried to outline briefly a set of domestic and international initiatives for how we should go about dealing with the threats from weapons of mass destruction. I thank you, and look forward to your questions.

Mr. GALLEGLY. Thank you very much, Ms. Holgate.

Our next witness is Dr. James Clay Moltz. He is an Associate Director and Research Professor at the Center for Nonproliferation Studies at the Monterey Institute of International Studies. Dr. Moltz was the founding editor of the *Nonproliferation Review* and the Web-based publication dealing with North Korea issues. He is the author and editor of numerous books, articles, and journals dealing with arms control and national security issues.

We welcome you today, Dr. Moltz, and we look forward to your comments.

STATEMENT OF JAMES CLAY MOLTZ, Ph.D., RESEARCH PROFESSOR AND DIRECTOR, NEWLY INDEPENDENT STATES NONPROLIFERATION PROGRAM, CENTER FOR NONPROLIFERATION STUDIES, MONTEREY INSTITUTE OF INTERNATIONAL STUDIES

Mr. MOLTZ. Thank you, Mr. Chairman. Any serious evaluation of U.S. Cooperative Threat Reduction programs in the NIS must begin with two basic, but important, points. First, these programs have made demonstrable contributions to U.S. national security, which would have been impossible in their absence; and, second, they have done so on the cheap. Total U.S. spending on DoD, DOE, and State Department programs since 1991 has been less than 2 percent of the total U.S. defense budget just this year. This is a remarkable bargain and far more effective than trying to combat these problems through military means once materials and technologies have proliferated to countries of concern.

Now, this is not to say that CTR and related programs have been completely without problems. Members of this body have correctly pointed out the waste in certain programs that have not worked, such as the Krasnoyarsk heptyl elimination plant and the Votkinsk solid-rocket elimination facility, but we have to keep the broader context in mind, which is the overall success of these programs and the fact that working in the former Soviet Union is very difficult.

It is also worth noting that U.S. defense programs don't always succeed. Sometimes weapons programs fail, and we cancel them. But we don't stop trying to develop better weapons.

In my written testimony, I have outlined some of the characteristics that are shared by some of the successful U.S.-Russia programs to date: First, clear coincidence of high-level U.S. and Russian security objectives; second, engagement of local and regional officials where the project is actually going to take place; third, stable personnel on project teams on the two sides; and, fourth, reliable funding support.

It is important to note that many of these programs are not popular with the Russian defense complex. They view CTR as a self-interested, U.S. effort to disarm Russia. At some level, maybe it is. But President Putin has backed these activities because he realizes that they are the best means he has of reducing the Russian military to a level where his own economy can support them safely.

One of the key questions you have asked us to address is how to improve U.S. programs. Let me make a few points. On the U.S. side, first, I would point to the need to expand the purview of DOE's Nuclear Cities Initiative. The current guidelines governing the program unwisely limit it to just three cities: Sarov, Snezhinsk, and Zheleznogorsk. While it may have made sense in the early years of this program to focus on these cities, it is now clear that they have already received considerable attention and that there are other needs at such closed cities as Ozersk and Novouralsk.

There is tremendous nuclear know-how, rising crime, and also unemployment in these cities, leading to desperate people. DOE needs to be given a green light to extend the NCI program to these

cities. I believe that modest funding could go a very long way to prevent possible diversions of material and technology in these cities.

A second area deserving more attention is the area of nonproliferation education in the former Soviet Union. Congress is rightly concerned with metrics and concrete measures of progress, but such concerns have led U.S. threat-reduction programs to lean toward technical fixes while neglecting the human factor. Technology, such as in the MPC&A area, is clearly very important, but, to paraphrase the commercial, getting nuclear workers in Russia to actually turn it on is priceless.

Training more workers and managers in nonproliferation policy would help them understand why proliferation is a threat to Russian national security and give them a reason to support nonproliferation efforts. It would also help build sustainability into our nonproliferation programs so that they will last after we leave Russia.

Just giving you one example, for less than \$30,000, our center, with DOE support, trained and subsequently worked with a professor from the Tomsk Polytechnic University to start a course in nonproliferation studies for nuclear physics students there. This is a critical feeder institute into the Minatom system. Thanks to the efforts of this one professor, who truly believes now in nonproliferation, he convinced the university to make this a required course for all students going through this curriculum. In my view, this is how you achieve real sustainability, and I am encouraged that Linton Brooks of the NNSA and DOE supports these concepts, but he also needs your support.

On the Russian side, I think we need to work on two particular areas within the category of ongoing programs. The current goal of the plutonium reactor conversion project now is actually to shut down the two plutonium-producing reactors by 2008. This is good. But while these reactors are needed currently in their local areas to produce electricity and heat during the winter, they also produce 120 bombs' worth of plutonium every year. In my view, we should alter this program and at least shut down these reactors in the summer, thereby reducing the proliferation threat they will continue to represent.

In general, we also need to work to continue to wean the Russian military and Minatom, which continues to produce civilian plutonium, off of its plutonium addiction. This is why, in my written testimony, I have talked about the risks as well as the costs of the MOX fuel option for plutonium disposition. In my view, they are too great. I think Russia and the United States should revisit the option of storing unprocessed plutonium as nuclear waste and removing it from the nuclear fuel cycle altogether.

Finally, Mr. Chairman, you have asked us to discuss emerging proliferation risks that are not covered by existing U.S. programs. I would point to four items on my list of urgent tasks. The first relates to Russia's plans to begin exporting highly enriched uranium-powered floating nuclear reactors and nuclear submarines. The United States has not yet engaged Russia on this issue, and I believe it needs to. Floating reactors are not only dangerous; they are a very tempting target for terrorists, particularly because one of

the countries that Russia is courting to buy these is Indonesia. Russia is also engaged in a plan to lease two nuclear attack submarines to India, a move that would very likely further stimulate the arms race in South Asia and probably East Asia as well.

The U.S. needs to join with its G-7 allies in condemning these plans. Moreover, I think we should work with our allies to ensure that any future contracts for attack submarine dismantlement, which is something that Russia wants and is an area where Japan, Norway, and the United Kingdom are now entering, should not be given to any shipyard exporting floating reactors or nuclear submarines.

A second priority is addressing Russia's still-secret biological weapons facilities. A U.S. policy of urging transparency unfortunately has not succeeded to date. With President Putin and members of the Global Partnership, I think we should launch a high-level initiative to bring commercial conversion projects to these biological weapons facilities. We know that scientists within them are interested. This would allow us to engage scientists in non-weapons work, increase transparency, and improve stability in the impoverished cities that surround them, using the incentives of the scientists themselves to break down these walls.

A third area for U.S. attention is that of Russian tactical nuclear weapons. There are clear problems with Russia's fulfillment of its 1991-1992 pledges to withdraw these to central storage. The current U.S. policy of simply complaining about these problems has so far not worked. A Russian parliamentarian has said that these sites are literally overflowing with nuclear weapons in their forward storage areas. Therefore, I think we should engage the Ministry of Defense in discussions aimed at improving security at these sites, and U.S. assistance should be provided in return for greater transparency regarding numbers and progress toward dismantling these unneeded and at-risk weapons.

My last point relates to the problem of orphaned and poorly guarded, radioactive source material. There are tens of thousands of high-risk sources around the world, but most of them are located in the former Soviet Union. They need to be identified, consolidated, and put under safe storage. Fortunately, a joint Russian, U.S., and IAEA project is underway, but it requires \$19 million in more support. Given the dirty bomb threat, I think this funding cannot wait.

In general, I would recommend a study to your attention called "Commercial Radioactive Sources" that a colleague of mine at our institute has recently written, and we have copies here in the hearing room.

It is encouraging that Norway is already completing a related program of converting a number of lighthouses that run on radioisotope thermal generators to conventional power sources, including solar power. This program needs to be joined by other nations, and a similar effort needs to be enacted in the Far East, perhaps led by Japan and Canada, with U.S. help.

The Global Partnership, I believe, can work, but the U.S. can help it become more successful by taking a more active role in putting together new projects for allies with less experience working in the region.

In conclusion, I would like to emphasize that while I recognize the frustration of some Members of this body with the Cooperative Threat Reduction program, I think we need to stay the course. I would recall the many hurdles, trials, and tribulations that Robert Oppenheimer and General Groves had in building the atomic bomb. We will need to show at least as much patience and ingenuity in eventually dismantling nuclear weapons and other weapons of mass destruction worldwide.

Thank you for your attention, and I welcome any questions.
[The prepared statement of Mr. Moltz follows:]

PREPARED STATEMENT OF JAMES CLAY MOLTZ, PH.D., RESEARCH PROFESSOR AND DIRECTOR, NEWLY INDEPENDENT STATES NONPROLIFERATION PROGRAM, CENTER FOR NONPROLIFERATION STUDIES, MONTEREY INSTITUTE OF INTERNATIONAL STUDIES

I thank the subcommittee chairmen, other members of this committee, and the professional staff for the opportunity to present my views on this important subject. The Center for Nonproliferation Studies (CNS) has worked on questions related to U.S. nonproliferation assistance programs in the Newly Independent States (NIS) of the former Soviet Union since the inception of these efforts in 1991. CNS has conducted two in-depth assessments of these programs (in 1994–95 and 1999–2000), which are available in published form. We continue to maintain a high interest in ensuring the effectiveness of U.S. programs and thereby halting potential weapons of mass destruction (WMD) proliferation problems at their source.

U.S. THREAT REDUCTION PROGRAMS IN HISTORICAL CONTEXT

The once revolutionary concept of working with governments in the former Soviet Union to reduce the spread of WMD from facilities located within their territories has—over the past 12 years—become widely accepted as a substantively effective and cost-efficient means of reducing threats to the United States. We owe a debt of thanks to late Representative Les Aspin, former Senator Sam Nunn, Senator Richard Lugar, and Senator Pete Domenici for their forward-thinking efforts in developing these programs and to the U.S. Congress more generally for the bipartisan support that has sustained them.

Over time, these activities have expanded—appropriately—from a narrow focus on weapons dismantlement to a broader focus on nonproliferation aims, as the extent of safety and security problems in the former Soviet WMD sector have been revealed. Since 9/11, these programs have been adapted to the challenge of preventing terrorist access to WMD materials, technology, and know-how. Yet, despite significant accomplishments and a marked reduction in the threats faced by the United States in regards to NIS-origin problems, there is still much work to be done.

In the nuclear sector, civilian and weapons-grade plutonium continue to be produced in Russia. Tactical nuclear weapons remain in at-risk forward-storage areas. No comprehensive inventories exist of fissile material stockpiles within the Russian nuclear complex. In the chemical and biological weapons areas, considerable amounts of material need to be destroyed and large pathogen cultures need to be placed under heightened controls or eliminated.

Since 9/11, there have been calls to expand participation on the donor side to countries beyond the few currently supporting NIS nonproliferation projects. The major announcements last summer of the G-8 “10 plus 10 over 10” and of the associated Global Partnership offer promising avenues for greater international commitment to what has largely been a U.S.-led proliferation prevention effort to date.

There has also been increasing discussion about applying Nunn-Lugar programs to proliferation problems outside the NIS. It is undeniable that other regions of the world harbor similar (if less extensive) security problems to those in the NIS, providing tempting targets for terrorists or states of concern seeking to acquire sensitive materials for the production of WMD or dirty bombs. Thus, it makes sense to expand proliferation prevention to encompass these non-NIS facilities. Of special note are the more than 100 research reactors still operating on highly enriched uranium (HEU) fuel and thousands of sites with poorly secured commercial radioactive source material. These threats require international attention, and it would be foolhardy if we were to ignore them simply because they lie outside the NIS or the existing mandates of Department of Defense (DOD), Department of Energy (DOE), and State Department programs.

Indeed, certain U.S. training programs in the export control/customs field and in border security have already been applied successfully outside the NIS and could be extended to still other states. Material protection, control, and accounting (MPC&A) upgrades and other cooperative efforts could also prove fruitful and bring near-term safety and security improvements at modest cost, while building ties among governments sharing a common interest in preventing proliferation threats.

Overall, the rationale for existing proliferation efforts and new cooperation with the Global Partnership is convincing in terms of U.S. national security interests: dealing with proliferation threats at their sources in a pro-active manner. The alternative is being forced to react later on after they have already created actual military threats-requiring responses through more complicated, less reliable, and ultimately more expensive U.S. or coalition military means.

In the rest of my remarks, I would like first to outline some of the parameters for successful programs drawn from our experience in the NIS countries, while also examining reasons for the failure of certain efforts there. Next, I will highlight areas where improvements can be made in the implementation of existing programs to make them more effective. Finally, I will focus attention on neglected areas of proliferation concern where new programs or attention is required (both in the NIS and globally) in order to plug troubling gaps in current proliferation prevention efforts. My testimony concludes with a list of specific policy initiatives for your consideration.

ASSESSING U.S. NONPROLIFERATION ASSISTANCE PROGRAMS IN THE NIS

Although Nunn-Lugar programs faced considerable criticism in their early years, with the benefit of 12 years of hindsight, it is clear that they have reaped tangible benefits in improving U.S. security. Thousands of strategic nuclear weapons have been disassembled, hundreds of missiles eliminated, dozens of nuclear submarines cut up, and tons of fissile material put into safe storage. All of this has been accomplished with an expenditure that has totaled, over all these years, less than 2 percent of the 2003 defense budget alone. This is a remarkable bargain, as well as a tribute to the hard work of many devoted personnel in DOD, DOE, the State Department, and other agencies of the U.S. government. In addition, we should not discount the major efforts made by officials on the Russian and NIS side to facilitate these programs in truly "cooperative" threat reduction, overcoming at times considerable bureaucratic, military, and even public opposition. The fact that these programs have lasted well over a decade now is attributable to the many important personal relationships, expanding mutual trust, and underlying security interests that have enabled these efforts to succeed.

In identifying the keys to success of specific initiatives, there have been several shared characteristics: 1) high-level "buy in" on both sides, which has been required to overcome bureaucratic hurdles; 2) attentiveness to experts and officials on the ground to ensure that local or regional obstacles are not thrown up to block federal programs that are sometimes poorly understood in the regions; 3) devoted project teams on both sides willing to stay with the projects through their completion, rather than leaving for more lucrative or career-enhancing opportunities in mid-stream; 4) reliable support from the funding organization—the U.S. Congress—and an ability of program managers to exercise flexibility in dealing with the inevitable problems that arise in any complex defense- and security-related operation of this sort being conducted in a foreign country; and 5) a clear coincidence of security interests on both the U.S. and NIS sides, thus providing a higher joint goal to guide the project through difficult times. Some of the programs where—through my own observations and research—I have personally witnessed these factors in abundance include DOD's submarine dismantlement effort in Russia, DOE's naval MPC&A program, and the State Department's work on the international science centers. But there are many other examples.

By contrast, the smaller number of programs in which we have seen serious difficulties have tended to share a number of common problems: 1) a disconnect between U.S. and NIS goals for the project due to inadequate mutual understanding or acceptance of goals; 2) a failure to consult important local or regional authorities in a position to block or impede project implementation on environmental or safety grounds; 3) a failure to ensure incentives (such as reliable payment of salaries) for NIS personnel actually conducting the work; and 4) a failure to synchronize adequately in joint projects respective U.S. and Russian components. Critics of Nunn-Lugar programs have rightly pointed out individual cases where projects have not achieved their objectives (such as the Krasnoyarsk heptyl neutralization plant and the planned Votkinsk solid-rocket engine elimination facility) or have not achieved them in a timely manner (the shutdown of Russia's remaining plutonium-producing

reactors). However, it is important that we learn from these mistakes and not throw the baby out with the bath water. Why?

Nunn-Lugar efforts are being pursued out of U.S. *security* interests, not as aid programs. Just as we sometimes see a U.S. weapons system canceled because it fails to meet exacting technical requirements after a series of tests, so too are there going to be occasional Nunn-Lugar programs that fail due to human or technical factors. While these cases must be minimized, their existence does not mean that the whole effort is tainted. To the contrary, the fact that most have succeeded shows that U.S. program managers developed important skills that allowed them to meet their objectives despite the highly challenging legal, political, and economic environment presented in the NIS.

MEASURES TO IMPROVE IMPLEMENTATION OF EXISTING NUNN-LUGAR PROGRAMS

Improvements Requiring U.S. Action

Since one of the purposes of this hearing is to improve existing programs, it is worth addressing a few issues where overcoming obstacles could be accomplished by U.S. action alone. For various reasons, it has become apparent that certain regulations, norms, or guidelines for existing programs are now outmoded or inappropriate and need to be changed. The reason is that, despite good intentions, times and conditions change and we need to refresh these principles in order to adapt current programs to current conditions, rather than clinging to past procedures simply because they were appropriate earlier in the 12-year history of our NIS proliferation prevention efforts.

One problem is the guidelines that currently limit the DOE's Nuclear Cities Initiative (NCI)—which seeks to downsize the Russian nuclear complex—to activities in only three of Russia's "closed" nuclear cities (Sarov, Snezhinsk, and Zheleznogorsk). In an attempt to focus the program and enhance its effectiveness, Congress instructed DOE to emphasize the major warhead design and production facilities and to rule out a number of other closed nuclear cities dealing with other aspects of the nuclear fuel cycle. Unfortunately, while helping to address what some believed was an overly diffuse program in its early years, an unexpected result has been the deterioration of conditions in other critical cities whose nuclear assets could create severe difficulties for U.S. security. While the three NCI cities and their laboratories have received a relative abundance of attention, other closed nuclear cities (including Ozersk, Novouralsk, and Seversk, all with at-risk nuclear enterprises) have been neglected. Without incoming external assistance, the economic situation in these cities has become dire, contributing to the rise of criminal activities, large-scale unemployment, and growing nuclear risks. Yet, DOE NCI funds cannot be expended there due to existing Congressional restrictions. These limitations need to be lifted and DOE given the flexibility it needs to determine where threats are most urgent today and where U.S. programs can be leveraged to make the most difference.

Another problem area relates to neglect of educational initiatives as a nonproliferation tool. U.S. programs (particularly in DOE) have made significant progress in providing technical training to scientists responsible for nuclear materials in Russia and the other NIS, including the provision of relevant MPC&A technologies. But, in order for the equipment and training to be effective in halting proliferation, managers must understand *why* the equipment needs to be turned on, operated effectively, and maintained. This is a critical hurdle in the pursuit of MPC&A sustainability, once U.S. programs end. By training current and future nuclear facility managers to recognize the threats posed by the proliferation of nuclear materials, comprehend the efforts being made by states of concern and terrorist to divert material, and appreciate Russia's obligations to nonproliferation treaties and regimes, the United States could begin to instill strong nonproliferation norms and practices within the Ministry of Atomic Energy (Minatom) complex. Moreover, training of this kind would build an additional barrier against the danger posed by the "insider" threat and reinforce efforts already underway in the area of MPC&A equipment training for personnel handling nuclear material. Ironically, due to pressures from Congress to provide "countable" metrics, many opportunities to conduct this kind of work are missed.

Fortunately, some funding was provided on a one-time basis through DOE in FY 2002 to improve nonproliferation education in Russia. This single effort succeeded in establishing new nonproliferation courses at technical institutes and schools in a number of closed Russian nuclear cities—including Snezhinsk, Novouralsk, Tomsk, and Zheleznogorsk, as well as at state universities in a number of sensitive Russian regions. Through these means, major strides have been achieved in efforts

to promote sustainability of nonproliferation norms within the Russian nuclear complex and build a lasting “nonproliferation culture.”

Today, there is no Congressionally mandated funding for nonproliferation education. Congress would be well served to provide modest new funding in this area, given the tremendous multiplier effect of these courses, which can help hundreds of young specialists each year to understand the importance of nonproliferation practices. Such education builds an internal “lobby” group over time for these norms within Russian facilities themselves. Moreover, the Departments of Energy and State should be tasked with the responsibility to include educational efforts in their nonproliferation programs, rather than being encouraged to promote only technical training. Small amounts of funding can go a long way in this area toward changing old, Soviet-era mindsets and creating a cadre of young specialists in Russia who share American views regarding the high priority that should be accorded to proliferation prevention efforts.

A related challenge is that posed by brain drain. One of the more successful efforts at preventing threats in this area has been the so-called “science centers” sponsored by a consortium of international countries. Over 60,000 NIS scientists have been funded to conduct civilian research projects, involving over 620 institutes. But as time passes, the rules that originally governed this program have become obsolete. That is, by requiring that more than 50 percent of participants in each project funded by the United States be made up of former weapons scientists, Congressional rules are forcing an outmoded standard (and, in some cases, a counterproductive one) on these projects. At certain at-risk facilities—including in the biological weapons area—there are few scientists left who actually worked in Soviet weapons programs, yet there is abundant know-how among remaining scientists and often highly dangerous pathogen cultures within their laboratories. By denying these scientists access to the science center research funds, these old restrictions may be encouraging them to seek support from countries of concern. Until these facilities are safeguarded from theft or diversion and greater progress made in converting them to civilian purposes, it is in U.S. interests to make science center programs accessible to these researchers.

Finally, there have been unnecessary (and undesirable) delays in the implementation of critical Nunn-Lugar programs in the past year due to the necessity of presidential certification of Russia’s full compliance with its arms control obligations and verifiable shutdown of all WMD development activities. Given questions of access in the biological weapons area, certification has been difficult to obtain. However, while in the early years of Nunn-Lugar activities the certification may have made sense due to questions related to Russian policies in a variety of areas, these concerns have now narrowed considerably. Thus, it is time for Congress to provide a permanent waiver of the certification requirement. The reason is simple: these programs serve U.S. security interests even if (indeed, especially if) we cannot verify full compliance with WMD restrictions. Indeed, without Nunn-Lugar programs, Russian compliance with its WMD commitments (particularly in the chemical weapons area) will surely decline—to the detriment of U.S. security interests. By steadily reducing Russia’s stockpile and making it less vulnerable to theft and diversion, Nunn-Lugar programs are steadily enhancing U.S. security.

Addressing these issues could be achieved quickly by Congressional review and the revision of instructions to the executive agencies in charge of fulfilling these programs. Such moves would heighten the effectiveness of these programs in meeting U.S. security objectives under current circumstances, which have evolved since many of these guidelines were developed.

Improvements Requiring Russian Action

In several areas related to proliferation prevention, improvements in the effectiveness and positive impact of programs require Russian action or combined action involving both U.S. and Russian policy shifts.

Although the United States decided recently to adopt Russia’s preferred policy on plutonium disposition (mixed-oxide [MOX] fuel production), the mounting costs of pursuing this option and the concomitant risks of creating new demands for plutonium (to power MOX-adapted reactors) make this option less attractive than it once seemed. For Russia and the United States to spend multiple billions of dollars to create MOX fuel and convert reactors to operate on it makes little sense, given the negative precedent (of creating financial incentives to generate plutonium) it sets. The United States should reopen the vitrification option with the Russian government, in which weapons-grade plutonium would be mixed with radioactive waste and stored. While not perfect, this option is far more affordable and could more rapidly remove separated plutonium from possible theft.

Another area of concern is in regards to the U.S. program to convert Russia's remaining plutonium-producing reactors. Unfortunately, due to regional needs for the heat and electricity generated by these reactors, Russia wants to continue their operation until they are finally replaced by conventional power plants later in the decade. However, in the meantime, these reactors continue to produce more than a metric ton of plutonium annually. One immediate way to reduce this build-up by 25 to 30 percent would be to shut the reactors during the summer months, when their heat output is not needed and their electrical output is in excess of local needs. The United States should try to initiate this reform as soon as possible.

Finally, another problem area requiring greater efforts is the ongoing dispute between Western assistance providers and the Russian government over issues of liability, taxation of assistance, and access, which has threatened to derail the signing of new proliferation prevention agreements, as well as the renewal of existing agreements. A recent examination of the liability question, authored by Douglas Brubaker, a U.S. lawyer based in Norway, and my CNS colleague, Leonard S. Spector, calls for a new approach to this problem. The authors suggest that progress in this vexing area could be accomplished by treating liability as a field where a "cooperative insurance" approach is needed. I would call your attention to their recent article.

NEW INITIATIVES FOR ADDRESSING EMERGING PROLIFERATION THREATS (NIS AND GLOBAL)

In order for U.S. efforts to be effective in ensuring our national security, U.S. proliferation prevention programs need to be constantly adapted to emerging threats. With this goal, let me now turn to a few areas where high-priority attention should be turned to new problems emerging both inside and outside the former Soviet Union. Working in cooperation with relevant governments, the United States could initiate moderate bilateral or multilateral efforts to prevent of the emergence of dangerous threats.

One area where high-level U.S. policy attention needs to be focused is impending Russian exports of naval nuclear reactors. The United States has made a strong case against further commercial reactor trade with Iran (particularly in light of recent revelations about its enrichment activities) and (to a lesser extent) with non-NPT member India. However, an emerging problem that has not been discussed is attempts by Russia's Minatom and the shipbuilding industry to export floating reactors and nuclear submarines. Specifically, Minatom is in the process of developing new deals for the export of small, mobile, floating reactors for use in power generation. According to Russian sources, a deal is already in the works with China and the technology is also on offer to Indonesia. These reactors are based on submarine reactors designed in Nizhniy Novgorod and will run on HEU fuel. At a time when the world is trying to reduce the proliferation of HEU and convert existing HEU research reactors to low-enriched uranium (LEU), such exports should be strongly discouraged, if not banned altogether.

Similarly, as noted, Russia's shipyards are beginning to promote the export of nuclear attack submarines, benefiting from a loophole in the Non-Proliferation Treaty (NPT), which failed to ban such exports. But besides being capable of carrying nuclear-tipped torpedoes and possible cruise missiles, Russian nuclear attack submarines carry two nuclear reactors that operate on HEU fuel. A deal is currently in the works to lease two nuclear submarines under construction (one at Severodvinsk and one at Komsomolsk-na-Amure) to India. Given India's status as an outlaw to the NPT and a country that recently refused an offer by Pakistan to engage in joint dismantlement of their nuclear weapons programs, one has to assume that India will use Russian technology to build up its own nuclear navy. Such developments are neither in U.S. security interests nor in the interests of international nonproliferation efforts.

In the context of these difficulties, another issue requiring attention is Russia's continued accumulation (as in Japan and France) of separated *civilian* plutonium, which is growing at a rate of more than one metric ton annually as a result of re-processing fuel from its VVER-440 nuclear power plants. Such material could produce as many as 120 nuclear weapons annually. As in the case of surplus weapons plutonium, a more viable and better near-term option would be for Russia to store this material, *before* it is reprocessed. Such a policy should be strongly backed by the United States. Support for this approach can be found in the December 2002 U.S. National Strategy to Combat Weapons of Mass Destruction, which declares: the United States "will continue to discourage the worldwide accumulation of separated plutonium. . . ."

As I mentioned in my introduction, biological weapons pose difficult challenges. Russia continues to block access to a number of sensitive laboratories suspected of involvement in the former Soviet biological weapons program. Indeed, scientists from these organizations are eager to work with Western firms but have been blocked from doing so by the Russian Ministry of Defense. New efforts are needed to try to engage these scientists and promote the process of the conversion of these laboratories to peaceful purposes, in part by increasing transparency at these facilities. In the absence of progress toward a verification protocol to the Biological and Toxin Weapons Convention, Nunn-Lugar efforts could assist this process. What is needed is a push by Presidents Bush and Putin, in coordination with investment plans from U.S., other Western, and Russian companies. At the same time, increasing efforts need to be made both in other former Soviet states and in Russia to improve safety and security of pathogen cultures, which are now often guarded by nothing more than wax seals on laboratory refrigerators. Such efforts are underway in Central Asia. New efforts must be made to expand programs in Russia.

Sub-strategic nuclear weapons in Russia remain a problem for at least two reasons. One, they are not subject to formal treaty reductions or elimination because they currently fall only under U.S. and Soviet/Russian unilateral presidential declarations made in 1991 and 1992, pledging to remove them from deployed status to central storage and to eliminate all but air-delivered weapons. Due to lack of funding and storage capabilities, it appears that Russia has met neither pledge. Of particular concern—according to Russian and U.S. military sources—is the fact that large numbers of these weapons remain at forward-based storage areas that are literally overflowing with warheads. However, current U.S. policy opposes providing assistance to help improve safety at these sites. Clearly, this policy is not serving its ends and must either be amended or abandoned altogether.

Moving to the global context, a common problem that faces U.S. global nonproliferation efforts is the widespread lack of understanding of nonproliferation concepts and goals. Government officials, scientists, educators, members of the media, and military personnel need to be able to identify weak links in their existing proliferation prevention efforts and understand the consequences (for their own security) if they do not. A first step in trying to inculcate a culture of nonproliferation in regions of concern in these countries is training. The establishment of courses in the national language in nonproliferation studies and the development of course materials would help create domestic impetus behind such policies, leading over time to an increasing percentage of officials and relevant parties responsible for nuclear materials having had such critical training. Such efforts need to be begun in the Middle East, South Asia, Northeast Asia, and other regions. The fostering of indigenous non-governmental organizations to conduct this work (possibly drawing on local university faculty) could promote the development of civil societies within these countries and provide other sources of information besides official government channels.

Going back as far as 1978, with the establishment of the Reduced Enrichment for Research and Test Reactor (RERTR) program, the United States has been concerned about the presence of large numbers of research reactors across the globe that operate on HEU fuel. While conversions of a number of reactors to more proliferation-resistant LEU fuel have been made, over 100 HEU reactors still remain in a variety of countries. U.S. and multilateral efforts to continue to convert (and, where possible, shut down) these reactors should be intensified given the new threats since 9/11. At the same time, enhanced efforts to return HEU fuel from these and other locations—many of which lack adequate physical protection and technical safeguards—to the countries of origin need to be made.

An even more widespread yet very serious proliferation concern is the presence of significant amounts of commercial radioactive source material internationally. One of the key problems in seeking to combat the threat of radiation dispersal devices (or RDDs, which include so-called “dirty bombs”) is the sheer quantity of such sources, which literally number in the millions. A recent study by my CNS colleague Charles Ferguson and two co-authors (Tahseen Kazi and Judith Perera) notes that a major problem is the lack of safe storage of these materials after their use. Fortunately, the authors note that “only a small fraction of these are in the high-risk category.” Besides locating and upgrading safety at these sites, their report calls for the establishment of end-user certification requirements as a condition of export for all future sales of high-risk radioactive source material. The United States, they argue, should lead this effort and help convince other states to join them in combating this dangerous proliferation risk.

Most of these at-risk sources are located in the NIS. Unfortunately, Russia’s handling of Soviet-era radioactive source material has not been impressive. Since Russia is a likely location for such an attack, given continuing tensions with Chechen

rebels, strengthening Russia's response capability is important. One problem is that, besides medical and industrial sources, there are hundreds of radioisotope thermoelectric generators (RTGs, mostly powered by strontium-90) that are operating in unsafe conditions or whose status is simply unknown. These RTGs pose risks to unwitting NIS citizens who might find them, but they also could be stolen by criminals or terrorists for use in dirty bombs.

In June 2002, a trilateral project linking DOE, Minatom, and the International Atomic Energy Agency began to work on tracking down and securing high-risk radioactive sources in the NIS. This year, DOE is seeking an increase of \$19.7 million to get this job done. Congress should encourage this work while also ensuring that DOE addresses problems that cause radioactive material to be abandoned in the first place: a lack of adequate regulatory measures (requiring full accountancy and safe storage after use), both in the NIS and in other countries.

In a related program, Norway has nearly completed conversion—to conventional power sources—of a small number of Russian lighthouses near its coastline currently operating on RTGs. Other countries should contribute to the expansion of this effort. For example, it would be desirable for Japan to conduct a similar program in the Far East, perhaps with U.S. or Canadian assistance, within the context of the Global Partnership.

Finally, a related problem is the lack of capable response mechanisms in many countries with radioactive source materials, including in the former Soviet Union. Creating an initiative to train and integrate first responders and to build an international network of teams capable of identifying proliferation sensitive materials and enacting rapid and effective public responses could go a long way toward mitigating the possible implications of attempted assembly or use of an RDD in the future.

CONCLUSION: SUGGESTIONS FOR NEW POLICIES

In summary, much has been accomplished, yet much remains to be done. Greater cooperation is needed internationally to solve many WMD proliferation problems. Increased activities by other G-8 states and by participants in the Global Partnership (such as Norway) are already improving implementation of existing programs and helping to fill gaps in U.S. efforts. At the same time, there are domestic measures—both in the United States and in the NIS—that could improve implementation of existing programs. In several areas noted above, new programs are called for.

I would ask the members of your two House subcommittees to consider the following list of "action items," based on my testimony. Each of them, if implemented, would heighten the effectiveness of U.S. efforts to prevent WMD proliferation:

The following actions should be considered to improve implementation of existing programs:

- Expand the purview of the DOE Nuclear Cities Initiative to closed nuclear cities in Russia beyond the existing three.
- Make nonproliferation policy education in the NIS a regular part of U.S. proliferation prevention and sustainability efforts.
- Establish a new standard for "science center" civilian research grants, requiring more than 50 percent of the research team to be from "facilities of proliferation concern" rather than requiring more than 50 percent be Soviet-era weapons scientists.
- Grant the president waiver authority for nonproliferation assistance programs in order to ensure continuity in critical areas that serve U.S. security interests.
- Reopen the vitrification option for plutonium disposition, which is safer, more realizable in the near term, and more cost effective.
- Consider working with Russia to shut down its plutonium-production reactors in the summer months when their heat generation is not required, thus preventing the production of additional plutonium.
- Examine the possibility of adopting a "cooperative insurance" approach to the liability issue.

These new initiatives should be considered to address emerging proliferation threats:

- Engage the Russian government, Minatom, and Russian shipyards in discussions to prevent possible exports of HEU floating reactors and nuclear attack submarines.

- Investigate means of halting continued Russian reprocessing of civilian-generated plutonium in favor of disposal or long-term storage as radioactive waste.
- Focus attention on the need for enhanced biological weapons security through a high-level initiative at material MPC&A, transparency, and facility conversion through cooperative commercial investments.
- Urge Russia to join the United States in reaffirming the 1991 and 1992 unilateral commitments to remove tactical nuclear weapons to safe, central storage. Work with Russia to upgrade interim storage sites until central facilities are available, in return for greater transparency on the Russian side in regards to the number and status of weapons.
- Expand nonproliferation policy education programs to countries in the Middle East, South Asia, and Northeast Asia to provide the groundwork for long-term restraint in countries of concern.
- Support bilateral and multilateral efforts to fund conversion of HEU reactors worldwide to LEU and to promote repatriation of HEU fuel to their countries of origin for safe storage.
- Raise standards for U.S. exports of high-risk radioactive isotopes and require end-user certification to help reduce chances of RDD use.
- Locate, consolidate, and secure Russian and other NIS “orphaned” radioactive source material, including RTGs used in lighthouses and other abandoned or poorly protected facilities.
- Enhance Russian and other international capabilities for emergency response in cases of radiological or nuclear terrorism. Seek to build an integrated international network of first responders as a high priority.

As a final point, any review of U.S. proliferation prevention measures must take into account internal U.S. policies and their impact on global developments. Other nations look to the United States to lead by example. This means that we must begin to pay attention to how U.S. nuclear policies reflect the priority we place on our international proliferation prevention objectives. With these goals in mind, therefore, we need to continue moving in a careful yet resolute manner to reduce our nuclear arsenal, while at the same time working to ensure the safety and the deterrent orientation of our remaining deployed forces (through such measures as the de-alerting of weapons). Internationally, we must work to strengthen taboos against WMD use and expand verification mechanisms to prevent WMD development. If we make progress on these fronts, we are likely to find a receptive global audience for effective nonproliferation efforts and a ready coalition of countries to enforce them against any possible rule-breakers.

I thank the chairmen of your two subcommittees for the opportunity to share my views on these important issues. I would welcome any questions.

Mr. GALLEGLY. Thank you very much, Dr. Moltz, and before we go to the next witness, I would like to just ask the Committee for unanimous consent that my opening statement be made a part of the record of the hearing, inasmuch as a scheduling conflict prohibited me from being here at the time, and I want to take a minute and thank Mr. Bereuter for handling things, along with Mr. Sherman.

[The prepared statement of Mr. Gallegly follows:]

PREPARED STATEMENT OF THE HONORABLE ELTON GALLEGLY, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA, AND CHAIRMAN, SUBCOMMITTEE ON INTERNATIONAL TERRORISM, NONPROLIFERATION AND HUMAN RIGHTS

Today, the Subcommittee on International Terrorism, Nonproliferation and Human Rights and the Subcommittee on Europe are holding the second of two hearings on the issue of threat reduction programs in Russia and other former Soviet states.

As I discussed at the previous hearing, Congress established a program in late 1991 so that the United States could assist Russia, Ukraine, Belarus and Kazakhstan with the safe transportation and disposal of nuclear and other weapons. Congress began the program because the impending collapse of the Soviet Union and a coup in Moscow raised concerns about the security of the Soviet Union's nuclear weapons arsenal.

During the next ten years, the United States spent billions of dollars on threat reduction through the departments of Defense, Energy and State. These programs have achieved some important successes. Thousands of warheads, missiles and silos have been deactivated, storage facilities have been secured and the program has provided non-military research work for close to 50,000 Russian nuclear, chemical and biological scientists.

However, much more needs to be done, especially in securing material that could ultimately be used to produce nuclear weapons. At the current pace, the goal of eliminating much of the former Soviet Union's weapons of mass destruction by the end of this decade will not be completed. This timetable is simply not good enough considering the danger posed to the United States by these weapons.

Preventing the spread of weapons of mass destruction should be America's number one national security concern. Threat reduction programs are no longer focused just on securing and destroying Soviet-era nuclear weapons. Today, these programs have rightfully become a principal part of America's war against terrorism.

As we saw on September 11, 2001, and in other attacks against the United States, traditional concepts of deterrence do not apply to terrorists. If terrorist groups can obtain weapons of mass destruction, they will not hesitate to use them against our country. As a result, we must do everything in our power as a nation to prevent terrorists from acquiring these weapons in the first place.

I look forward to hearing our witnesses' views on the connection between threat reduction and counter-terrorism efforts and how best to prevent international terrorist groups from buying or stealing nuclear, chemical or biological weapons.

In addition, several specific questions regarding the direction of the threat reduction programs will be addressed at this hearing. For example, I look forward to the witnesses' views on legislation that would expand the programs outside the former Soviet Union. I believe this authorization could be an important tool in our threat reduction efforts. The President has asked for this authority. Congress should provide it to the President in this session.

Furthermore, today's hearing will discuss the 10+10 Over 10 Initiative. This new program has the potential to accelerate our efforts to dispose of weapons of mass destruction in the former Soviet Union. However, for this potential to be realized, two key things must happen. First, our G-8 partners must follow through on their pledge to spend at least \$10 billion over the next ten years. Second, Russia must demonstrate its commitment to the initiative by improving access to its nuclear, chemical and biological facilities.

Lastly, let me state that U.S. threat reduction and nonproliferation programs are there to protect our national security. They are not foreign aid programs. They have served our country well over the past twelve years. However, these programs must become more effective and be given greater resources and attention if they are to protect our country from the deadly combination of radical terrorist groups and weapons of mass destruction.

I look forward to hearing from our witnesses and I will now turn to Mr. Sherman, the Ranking Member on this subcommittee, for any remarks he may wish to make.

Mr. SHERMAN. Mr. Chairman, I would move that everyone's statement be added to the record.

Mr. GALLEGLY. If that is a unanimous consent request,—

Mr. SHERMAN. It is.

Mr. GALLEGLY [continuing]. And there is no objection, that will be the order.

Now, I welcome our fourth witness, Mr. Jon Wolfsthal, associate and deputy director, Non-Proliferation Project for the Carnegie Endowment for International Peace. Welcome, Mr. Wolfsthal.

STATEMENT OF JON BROOK WOLFSTHAL, ASSOCIATE AND DEPUTY DIRECTOR, NON-PROLIFERATION PROJECT, CARNEGIE ENDOWMENT FOR INTERNATIONAL PEACE

Mr. WOLFSTHAL. Thank you very much, Mr. Chairman and Members of the Committee. It is an honor to appear before you to testify on the issue of cooperative threat reduction in the former Soviet Union. I would be happy to summarize my remarks and ask that my full statement be entered into the official record. Also, as this is my first opportunity to testify before a Committee of the U.S.

Congress, I would ask your permission to make a brief personal remark.

My father, Leon Brook Wolfsthal, came to the United States after having survived almost 2 years in the Bergen-Belsen Concentration Camp and having been liberated by U.S. troops while en route to the extermination camp at Auschwitz. He came to this country in the hopes of ensuring his children never had to face the horrors and brutal persecution he and his family had suffered. Moreover, he raised his children to appreciate the freedom in which they were raised and with a desire to give something back to the land which had accepted him and given him a new life.

Although my father died in 1985, I know the pride he would have felt today, seeing his son being given the opportunity to testify before a Committee of the Congress of the United States. I consider my comments to you only a small payment on a large debt which can never be fully repaid. I believe it is a tribute to our country that in one generation our family has gone from immigrant holocaust survivor to expert witness before a congressional Committee. I want to thank you for that opportunity.

With that introduction, I can think of no subject more important to the security and future safety of our country, its citizens, and, indeed, the entire world than the one you have asked us to address today. I would also like to commend you for holding this session and including nongovernmental experts, who, from the inception of these programs, have served as their sponsors and stewards.

In a field filled with overstatements, exaggerations, and superlatives, it is impossible to overstate the dangers posed by the continued lack of security over the weapons complex of the former Soviet Union. Each day, hundreds of tons of materials and an unknown number of nuclear weapons, capable of killing millions of American citizens, are at risk for theft or diversion.

Let me be even more direct. These weapons, materials, and know-how remain at risk, 10 years after the problem was diagnosed and first addressed, because the international community, including, most prominently, the United States, has lacked the will and commitment to make the political and financial investments required to solve these problems quickly enough. Americans live in imminent danger of nuclear terror because we have simply not done enough to address the threat. For its part, the U.S. public itself has failed to understand and internalize the magnitude of the threat and demand the appropriate response from their elected leaders.

We, as a country, Republicans and Democrats alike, also have not given these programs the bipartisan support they deserve to have and made them the bilateral priority with Russia and other states they need to be to achieve faster rates of success. This is not to say that all the delays we have experienced are due to U.S. actions or inactions; they are not. Russia itself has not provided its full support for these programs, nor have our allies, who are equally threatened by the dangers that remain in the former Soviet weapons complex. But we are the country that has the most to lose and the most to gain, and it is the United States that must move more vigorously to ensure our interests and our security are protected.

As grim as this assessment is, things could have been much worse. Only through the foresight of the United States Congress and the combined leadership of Republican and Democratic Administrations has the security situation in the former Soviet Union improved. The wise expenditure of some \$7 billion has paid dividends in spades. The accomplishments have been discussed here and are well known to you. Yet despite our progress to date, much remains to be done. A recent study, "Controlling Nuclear Warheads and Materials: A Report Card and Action Plan," written by Mathew Bunn and others and funded by the Nuclear Threat Initiative reports that:

"Only 37 percent of the potentially vulnerable nuclear materials in Russia was protected by initial 'rapid' upgrades, and less than one-sixth of Russia's stockpile of highly enriched uranium has been destroyed."

Progress has been slowed for many reasons, but during my 5 years within the Department of Energy during the 1990s, one of the biggest slowing factors was a lack of personnel and the fact that existing personnel were forced to work under recurring hiring freezes. Efforts by Congress to control spending within the department as a whole led directly to cutbacks in hiring and personnel support. These problems continued into the current Administration and have only now recently shown some signs of easing. However, national security efforts within multiple departments—Energy, Defense, and State—are still being traded off against less-critical priorities within the government, and this is one reason we have not yet made the progress required.

That more money, personnel, or political support is needed is hardly news. The Secretary of Energy Advisory Board, chaired by former Senate Majority Leader and current Ambassador to Japan Howard Baker and former White House Counsel Lloyd Cutler recommended in 2001 that the Department of Energy spend \$30 billion over the next decade on nuclear security issues alone. The executive summary of that report stated the matter as clearly as possible:

"The most urgent unmet national security threat to the United States today is the danger that weapons of mass destruction or weapons-usable material in Russia could be stolen and sold to terrorists or hostile nation states and used against American troops abroad or citizens at home."

What was true before the terror attacks of September 11th is even more so today, and yet we see the DOE program budget stands at roughly the same level that existed before 9/11 and before the Baker-Cutler report was issued. While anyone who has worked in or near government understands the difficult trade-offs that must be made in budgetary matters, the level of funding for these programs simply doesn't correspond to the threat we face.

Let me offer a contrast. The risk that Saddam Hussein might develop one nuclear weapon and give it to a terrorist group was deemed a great enough threat to risk U.S. troops and to expend, at a minimum, \$80 billion, the size of the supplemental funding package approved this year by Congress. Over the past 10 years,

we have spent perhaps $\frac{1}{10}$ of that amount to secure thousands of nuclear weapons we know exist and that could even more easily end up in the hands of terror groups.

This testimony is not meant to imply that success or failure of these programs is only a matter of money spent. It is not. We have learned over a decade of threat-reduction efforts that to make progress, the United States must invest political as well as financial capital. The relationship between Presidents Bush and Putin offer both countries an opportunity to make great strides in nuclear reduction and nuclear security.

Unfortunately, by our own words and deeds, the U.S. has failed to make these issues a top priority in our relationship with Russia. In cooperating with the war on terror, we must communicate at every level, including the very top, that securing Russian weapons and eliminating Russia's potential as a source for terrorist weapons is our top mission.

Let me now lay out some concerns I have for the near- and long-term outlook for these vital programs. My comments will focus, as you requested, on both the U.S. Government organization for these efforts and the prospect for the G-8 Global Partnership.

This past year has witnessed an amazing bureaucratic shakeup within the U.S. Government. The establishment of the Department of Homeland Security was mirrored within the United States Congress by the establishment of specific Committees to oversee this department and the wide variety of programs that affect our national security. Such a move, however, has not been replicated in the field of threat reduction, to the detriment of the implementation of these programs and to their congressional oversight.

I have never had the benefit of working for the U.S. Congress, but having seen the world from the other side of town, I can assure you that the multiple layers of oversight, hearings, reporting requirements, funding, conditions, and day-to-day requests for information have exacted a negative cost on these programs. I think these programs require effective congressional oversight as a means to ensure maximum efficiency and to generate the broadest possible understanding and support for these efforts within the U.S. Congress. But this oversight needs to be as efficient and coordinated as that which we demand of the programs themselves.

Moreover, I continue to believe that a central coordinator in the White House with direct responsibility and authority for the full range of our threat-reduction programs in the former Soviet Union is a critical requirement to ensuring the future success of these programs as well as for government accountability. The current system of interagency coordination, as well as the one that preceded it, simply does not ensure the most effective use of U.S. taxpayer money or the strongest possible implementation of U.S. policy. Moreover, it does not fully protect American citizens from the threat they face.

The Global Partnership within the G-8 is a major step toward ensuring that the United States and the rest of the world shares in the burden of dealing with the Cold War's Long Shadow in the former Soviet Union. Moreover, it is a critical path forward for ensuring that Russia can move from the position of a pure recipient of assistance to a broader force for nuclear security and non-

proliferation. Russia is a vast country with tremendous assets to offer in the global effort to prevent the spread of weapons of mass destruction, and the G-8 Global Partnership is the first step in the process for Russia to resume its traditional role in nonproliferation efforts. And responding to the question put to us during the opening statements, I believe that it is also a key to expanding the traditional Nunn-Lugar programs beyond the former Soviet Union. Russia can act in ways that sometimes the United States cannot, or in partnership with the U.S. We should take advantage of their experience and contacts.

However, efforts for the G-8 summit are in danger of faltering. The Evian Summit is less than a month away, the target for pledges has not yet been met, and new programs are not yet in place. In addition, major allies are still harboring grudges over the positions taken in the buildup to the war with Iraq. The outlook is grim.

The President himself can and must change the tone and the outlook for the summit. President Bush should reach out directly to the Presidents of France and Germany, in particular, to offer them an opportunity to play a leadership role by expanding their pledges for this program and offer it as an opportunity to rebuild and repair the Atlantic Alliance that has been so badly damaged in the runup to the Iraq War.

To raise the bar on these efforts, the President, with the full support of the Congress, should challenge G-8 partners to invest more money more quickly and do so by pledging to invest three dollars for every one invested by the other G-8 states, not a one-to-one match. Moreover, President Bush should go even further and pledge to spend five new dollars for every new dollar spent by Russia itself.

In conclusion, every morning I read the headlines and am thankful that I do not see, as you are, "Nuclear Weapon Explodes in [fill in the blank]." I cannot tell you that such a terrible thing will happen if we do not do more, but I can tell you that the risk of it happening increases every day we do not do everything we can. If and when such a terrible event does occur, all of our elected officials will be asked, Why didn't we do more? Why didn't we staff our projects with thousands of people instead of a few hundred? Why did we spend less than the equivalent of $\frac{1}{25}$ of 1 percent of our annual defense budget on this obviously high priority?

We will all be affected, and we will all be responsible, but few of us who work on these issues will be surprised. This is not a sudden hijacking but a slow-moving train that may have already left the station, and we have the means to stop it if we choose to.

Thank you, and I look forward to your questions.

[The prepared statement of Mr. Wolfsthal follows:]

PREPARED STATEMENT OF JON BROOK WOLFSTHAL, ASSOCIATE AND DEPUTY DIRECTOR, NON-PROLIFERATION PROJECT, CARNEGIE ENDOWMENT FOR INTERNATIONAL PEACE

Mr. Chairman, members of the committee, it is an honor to appear before you to testify on the issue of cooperative threat reduction in the former Soviet Union. This is my first opportunity to testify before a committee of the U.S. Congress and as such, I would ask your permission to take a moment of your time for a personal remark.

My father, Leon Brook Wolfsthal, came to this country after having survived almost 2 years of Nazi enslavement in the Bergen-Belsen Concentration Camp. He was liberated by U.S. troops while en route to the extermination camp at Auschwitz and later moved to the United States. He came to this country in the hopes of ensuring his children never had to face the horrors and brutal persecution he and his family had suffered. Moreover, he raised his children to appreciate the freedom in which they were raised and with a desire to give something back to the land that had accepted him and given him a new life.

Although my father died in 1985, I know the pride he would have felt at his son being given the opportunity to testify before a Committee of the Congress of the United States. I consider my comments to you only a small payment on a large debt that can never be fully repaid. It is a tribute to our country that in one generation our family has gone from immigrant holocaust survivor to expert witness before a congressional committee. I want to thank you for that opportunity.

With that introduction, I can think of no subject more important to the security and future safety of our country, its citizens or indeed the entire world than the one you has asked us to address today. I grew up in the waning years of the cold war and the nuclear standoff that defined 50 years of superpower relations. All who lived in those times are glad that the nuclear confrontation has been left behind us, hopefully never to return. But in our rush to leave the cold war, the general public has all too quickly lost sight of the destructive power of weapons of mass destruction—particularly nuclear weapons—and the consequences the use of even one, let alone the tens of thousands that remain in existence, would bring.

My testimony on cooperative threat reduction in Russia today will cover three main areas:

- What we have accomplished to date and why it is not enough;
- Prospects for the G–8 Global Partnership; and
- What we need to do now to make faster progress.

In a field filled with overstatements, exaggerations and superlatives, it is impossible to understate the dangers posed by the continued lack of security over the weapons complex of the former Soviet Union. Each day hundreds of tons of materials and an unknown number of nuclear weapons—capable of killing millions of American citizens—are at risk of theft or diversion. More explosive power is at risk today than the amount used in all the wars in all of mankind’s recorded history.

The loss of one nuclear weapon or 20 pounds of nuclear material could change the course of human history and inflict human suffering never before seen in the United States. Yet enough weapons and material are at risk for the nightmare scenario to unfold without warning a thousand times over. This insecurity threatens not only us, but also our friends and allies around the globe.

When I am asked why the worst has not already taken place, I have only two responses: First, we’ve done a lot to try and prevent it from happening and second, we’ve been very lucky.

Our goals for efforts in Russian nuclear complex are clear. I have described these goals in a chapter contributed to the Center for Strategic and International Studies’ report, *“Protecting Against the Spread of Nuclear, Biological and Chemical Weapons: An Action Agenda for the Global Partnership.”* U.S. nuclear security efforts in Russia are designed to:

- Establish a secure nuclear complex;
- Create a sustainable security culture for nuclear materials and technology; and
- Reduce the scope of the fissile material problem.¹

We have made some progress in all three areas, but not enough.

Let me even more direct. These weapons, materials and know how remain at risk—ten years after the problem was diagnosed and first addressed—because the international community, including most prominently the United States has lacked the political will and commitment to make the investments required to solve these problems quickly enough. Americans live in imminent danger of a nuclear terror because we simply have not done enough to solve this problem. For its part, the U.S. public itself has failed to understand or internalize the magnitude of the threat and demand the appropriate responses from their elected leaders.

We as a country, Republican and Democrat alike, have not applied the resources—financial and political—commensurate with the threat and we have not made these issues the bilateral priority with Russia and other states they need to be to achieve faster rates of success. This is not to say that all delays we have experienced are due to U.S. actions or inaction. Russia has not provided its full support

for these programs, nor have our allies who are equally threatened by the dangers that remain in the former Soviet weapons complex. But we are the country that has the most to lose and the most to gain here; it is the United States that must move more vigorously to ensure our interests and security are protected.

Some of our efforts have been delayed because U.S. laws on issues such as intellectual property rights or procurement conflict with the most efficient ways to address specific problems and requesting legislative changes has been considered too hard. Others are slowed by congressional restrictions on CTR efforts or agendas in other areas. Still other efforts are delayed by bureaucratic infighting or competing bureaucratic priorities within and between departments. These delays should be unacceptable to people entrusted with the security of the United States, but used as a motive to push these programs more vigorously not curtail or constrain them as has all too often been the case.

As grim as the assessment is, things could have been much worse. Only through the foresight of the United States Congress and the combined leadership of Republican and Democratic administrations has the security situation in the Former Soviet Union improved. And it has improved. The wise expenditure of over 5 billion dollars has paid dividends in spades. The Cooperative Threat Reduction score sheet shows over 6000 weapons have been decommissioned, over 1000 missiles, submarines and bombers have been destroyed and enough uranium for 7000 nuclear weapons diluted and sold as peaceful power reactor fuel. Security over thousands of nuclear weapons and hundreds of tons of weapons-grade and usable materials has been improved and over 40,000 former nuclear, chemical and biological and missile scientists have been peacefully engaged and employed. Other programs have secured vulnerable stocks of weapons-materials in Kazakhstan and Georgia.

Yet despite our progress to date, much remains to be done. A recent study, *Controlling Nuclear Warheads and Materials: A Report Card and Action Plan*, by Mathew Bunn, Anthony Weir and John Holdren at Harvard University and funded by the Nuclear Threat Initiative reports that only "37% of the potentially vulnerable nuclear materials in Russia was protected by initial 'rapid' upgrades, and less than one-sixth of Russia's stockpile of highly enriched uranium (HEU) has been destroyed."² Progress has been slowed for many reasons, but during my five years within the Department of Energy, one of the biggest slowing factors was a lack of personnel and being forced to work under existing or recurring hiring freezes. Efforts by Congress to control spending within the department as a whole led directly to cutbacks in hiring and personnel support. These problems continued into the current administration, and have only recently shown some signs of easing. However, nuclear security efforts are still being traded off against less critical priorities within the government, and this is one reason why we have yet to make the progress needed.

That more money, personnel or political support is needed is hardly news. The Secretary of Energy Advisory Board—SEAB—chaired by former Senate Majority Leader and current Ambassador to Japan Howard Baker and former White House Counsel Lloyd Cutler—recommended in 2001 that the Department of Energy's budget for Russian security work alone should increase to \$3 billion a year for the next decade. The executive summary of the report stated the matter as clearly as possible. "The most urgent unmet national security threat to the United States today is the danger that weapons of mass destruction or weapons-usable material in Russia could be stolen and sold to terrorists or hostile nation states and used against American troops abroad or citizens at home."³

What was true before the terror attacks of September 11 is even more so today, and yet we see the DOE program budget stands at roughly the same level that existed before 9/11 and before the Baker/Cutler report was issued. While anyone who has worked in or near government understands the difficult tradeoffs that must be made in budgetary matters, the level of funding for these programs simply doesn't correspond to the threat we face. Let me offer a contrast. The risk that Saddam Hussein might develop one nuclear weapon and give it to a terrorists group was deemed a great enough threat to risk US troops and expend at least \$80 Billion (the size of the supplemental funding package approved by Congress). Over the past ten years, we have spent less than one-tenth that amount to secure thousands of nuclear weapons we know exist and that could even more easily end up in the hands of terror groups.

This testimony is not meant to imply that success or failure of these programs is only a matter of money spent. It is not. We have learned over a decade of threat reduction efforts that to make progress, the administration must invest political as well as financial capital. The relationship between Presidents Bush and Putin offers both countries an opportunity to make great strides in threat reduction and nuclear security. Unfortunately, by our words and our deeds, the United States has failed

to make these issues a top priority in our relationship with Russia. In cooperating on the war on terror, we must communicate at every level, including the very top, that securing Russian weapons and eliminating Russia's potential as a terrorist source for weapons is our top mission.

The progress we have made in Russia and the former Soviet Union to date has been directly tied to the arms control agreements signed in the 1990s followed up by sustained personal diplomacy from the top. Let us not forget that due to our combined arms control and CTR efforts, we completely removed nuclear weapons from Belarus, Kazakhstan and Ukraine. To give you a sense of the scope of this accomplishment, North Korea would need to operate all of its current and planned nuclear facility for 60 years to produce the number of weapons removed from these three countries.⁴

Russia's commitment to accept dismantlement of many weapon systems and to secure and even eliminate some of the nuclear weapons released by those agreements has been linked to the legal implementation of the START I and other arms control agreements. We should be concerned that with the Treaty of Moscow, the legal basis for Russia's implementation of some CTR programs is undermined, and at the very least promising areas for cooperation are left un-addressed. I offer the example of concerns over tactical nuclear weapons in Russia, which have been cited by Secretary of Defense Rumsfeld directly. The United States previously sought to establish a non-strategic nuclear weapon transparency regime, which would include details on how many such weapons existed. Such an effort was envisioned under the 1997 Helsinki statement but was never implemented. But whether under one name or another, a legal basis for transparency and control over sub-strategic weapons would be helpful in addressing this gaping security issue. This issue has been raised by the Bush administration in its efforts with Russia, to the detriment of progress in this important area.⁵ If progress is to be made in this field, it will require direct presidential leadership.

NEW INITIATIVES

The G-8 Global Partnership Against the Spread of Weapons and Materials of Mass Destruction launched in June 2002 is a good start to reinvigorating these programs. Since the initiative was announced in Canada, however, President Bush and Putin have failed to personally engage on this issue with any effect. Moreover, there are clear signs that the administration's displeasure with France's stand over the war with Iraq is undermining cooperative efforts with France. France chairs this year's G-8 summit and is tasked with coordinating the nuts and bolts of this initiative. Already, it is clear that the first year of the G-8 project will be a disappointment in real terms. Assistant Secretary of State John Wolf told this committee last week that over \$6 billion had been pledged from within and even outside the G-8, and this is an important step, but pledges are not programs, and accounting is not action.

Moreover, while I applaud and support the administration's success in pursuing this initiative, I am concerned by two factors. First, the 10 plus 10 over 10 (\$10 billion from the United States, \$10 billion from the other G-8 partners, spent over 10 years) has quickly developed into a ceiling for our spending goals. Baker/Cutler talked about \$3 billion for DOE efforts alone, and the current view is that the U.S. will spend less than a third of that this year in total. In addition, the language of the G-8 target spoke of *up to* \$10 billion a year coming from other states, suggesting, too, that this a top target, not a first pledge. This is not an encouraging sign for what must be a growth area. Second, the G-8 initiative set the right tone by establishing the principle that other G-8 partners would enjoy the protections and experience gained over the past ten years in the United States. I am concerned that at the working level, this is not the case. I have been personally approached by foreign governments asking my help in connecting with experts in our Defense and Energy Departments in order to evaluate or establish programs in Russia. While I am glad to help personally facilitate contacts, it is clear that even now the real experts in the field need to engage one another to ensure that the greatest efficiency can be gained from their collaboration. Beyond the top political commitments, this may be a critical issue to the initial success or failure of the G-8 initiative and thus far, progress on making these intergovernmental connections has been poor.

NEXT STEPS

In assessing that needs to be done, my views are heavily influenced by the collaborative work the Carnegie Endowment has done with the Russian American Nuclear Security Advisory Council. We had the great pleasure to work with RANSAC on a ten-month project to examine the current status and future prospects for threat

reduction efforts. Our process was to hold what amounted to a series of hearings on the full range of CTR issues. Our findings were published in November 2002 in the report “Reshaping U.S.-Russian Threat Reduction: New Approaches for the Second Decade.”⁶ The report includes 11 key findings:

- Threat reduction cooperation between the United States, Russia, and other FSU states—and the activities funded by European states and the G-8—are important in preventing the proliferation of WMD and in strengthening security and political relations among these nations, but much of the agenda remains uncompleted.
- Political support for threat reduction activities is not sufficiently deep in the United States, Russia, and Europe. High-level and consistent political support added to the expenditure of political capital are essential for real progress to be maintained on the threat reduction agenda.
- Threat reduction lacks a coordinated and understandable strategy.
- Many pressing future threat reduction programs will focus on activities with more intangible results than those of the past decade.
- Financing for some key threat reduction activities is inadequate.
- Financing is not the only impediment to progress.
- Access to facilities and transparency of information are essential.
- Economics and threat reduction are inextricably linked but not well integrated, and the connection is not well understood.
- Re-employment programs for scientists generally are not working well in any of the WMD complexes.
- The relationship between arms control agreements and threat reduction needs to be better defined.
- There is a need to expand threat reduction to include new activities. Threat reduction already covers a wide range of activities, but there are additional areas where it could be expanded: attack submarine dismantlement; warhead dismantlement; export and border control; cooperation on early warning; missile de-targeting and de-alerting; and ways to induce the United States and Russia to begin discussions of their sub-strategic nuclear weapons.

Our past efforts show that the United States can make significant and even quick progress in reducing the proliferation risk from the former Soviet Union’s weapons complex when we make a high level and sustained commitment in terms of prestige and financing. This effort must be communicated and followed up from the very highest levels, including between the presidents. Moreover, to be successful, the efforts must be clearly communicated to, understood and supported by the Congress to ensure funding, oversight and to avoid political hurdles which have routinely hampered the implementation of some security efforts.

In the near term, I am concerned about three major issues:

- 1) the United States Government is not organized for success;
 - 2) The G-8 Global Partnership cannot fail; and
 - 3) The unexpected.
- 1) This past year has witnessed an amazing bureaucratic shakeup within the United States Government. The establishment of the Department of Homeland Security was mirrored within the United States Congress by the establishment of specific committees to oversee this department and the wide variety of programs that affect our national security. Such a move, however, has not been replicated in the field of threat reduction to the detriment of the implementation of these programs and to their congressional oversight. I have never had the benefit of working for the Congress, but having seen the world from the other side of town, I can assure you that the multiple layers of oversight, hearings, reporting requirements, funding and day to day requests for information have exacted a negative cost on these programs. Let me be clear, I think these programs require effective congressional oversight as a means to ensure maximum efficiency and to generate the broadest possible understanding and support for these efforts from the U.S. Congress. But this oversight needs to be as efficient and coordinated as we demand of the programs themselves. Moreover, I continue to believe that a central coordinator in the White House with direct responsibility and authority for the full range of our threat reduction programs in the former Soviet Union is a critical requirement for ensuring the future success of these programs. The current system of interagency coordination, and the one that preceded it,

simply does not ensure the most efficient use of taxpayer money or the strongest possible implementation of U.S. policy. Moreover, it does not fully protect U.S. citizens from the threats posed by these issues.

- 2) The Global Partnership within the G-8 is a major step toward ensuring that the United States and the rest of the world shares in the burden of dealing with the cold war's overhang in the former Soviet Union. Moreover, it is a critical path forward for ensuring that Russia can move from the position of a pure recipient of assistance to a broader force for nuclear security and non-proliferation around the world. Russia is a vast country with tremendous assets to offer in the global effort to prevent the spread of weapons of mass destruction, and the G-8 initiative is the first step in a process for Russia to resume its traditional role in non-proliferation efforts. But these efforts are in serious danger of faltering. The Evian summit is less than one month away. The stated target of pledges has not yet been met, new programs are not in place and major allies are still harboring grudges over the positions taken prior to the war with Iraq. The outlook is grim. The President himself can and must change the tone and the outlook for the summit. Personal relationships matter, and for the sake of the Global Partnership and for the security for Americans that its successful implementation would bring, President Bush should reach out to his French and German counterparts and demonstrate that their commitment in this area will go a long way to repairing the rift that has opened between the long-time allies. This effort will not in itself repair the overall alliance, but taken as part of a broadly based plan to reengage with our traditional allies on mutual issues of concern, the G-8 program could make a valuable contribution. Together, the three leaders can take a personal role in ensuring that not only are financial targets met, but that every leader in every country sees the success of this initiatives as in his or her direct interest and responsibility. To raise the bar on these efforts, the President should challenge his G-8 partners to invest more money more quickly, and do so by pledging to invest three dollars for every one invested by the other states. Moreover, he should pledge to spend five for every dollar spent by Russia itself. In doing so, the President should also make the personal commitment in prestige and time to work directly with these countries and these programs to ensure they receive sustained high level attention.
- 3) Every morning, I read the headlines and am thankful that they do not read "NUCLEAR WEAPONS EXPLODES IN _____." I cannot tell you that such a terrible thing will happen if we do not do more, but I can tell you that the risks of it happening increase every day we do not do everything we can. If and when such a terrible event does occur, all of our elected officials will be asked—why didn't we do more? Why didn't we staff our projects with thousands of people, instead of a few hundred? Why did we spend less than one-quarter of one percent of our annual defense budget on this obviously high priority? We will all be affected, and we will all be responsible. But few of us who work on these issues will be shocked. This is not a surprise hijacking, but a slow moving train that may have already left the station. We have the means to stop it if we choose to.

One last point. There is the perception in Washington and particularly in the Congress that the broader public does not support these programs and see them as foreign aid or charity. I can tell you from personal and sustained experience that this is not the case. When they are given the facts, average Americans sees these programs for what they are—a critical investment in our security. Yes, they want to see our allies and even Russia itself do more, but in the end, they know we must make the investment if no one else can or will. We should all strive to see these programs in the same light, as a critical part of our national defense. Money spent in this area does not come at the expense of our defense budget or other security efforts, but are a critical part of the same. Their success is not a Republican or Democratic issue, but an American issue, which deserve our full support and continued efforts.

Thank you and I look forward to your questions.

Mr. GALLEGLY. Thank you very much, Mr. Wolfsthal. I would like to make an observation that really isn't germane to the topic today, but I think my colleagues would probably agree with me. In my 17 years here of going to hearings, I don't think I have ever had a case where we had all witnesses stay right within the time

allotment, and I am sure my colleagues would acknowledge our appreciation for that because I know that there is a lot more that everyone would like to say, and we would certainly welcome any transmittal of statements that you would like to provide us as time goes on.

Mr. Luongo, a recently released GAO report found that the Departments of Defense and Energy have made slow progress in protecting sites in Russia with weapons of mass destruction against theft and diversion from Russia, that this project is not moving nearly as rapidly as we would like, and that a large amount of the money is being used for other diversions. According to the GAO, most of DOE's expenditures in the past 2 years went to functions other than that of securing buildings. These other functions, although they may be very important, do not advance DOE's stated goal in protecting all of the buildings of weapons usable for nuclear material. How would you respond to that?

Mr. LUONGO. Well, the first thing I would say is that of all of the other activities that are going on in this agenda, securing nuclear material and warheads is by far the most immediate and most important. This is an inherently difficult job because when it began, we didn't really know what the Soviet Union had produced, and today all we have is intelligent estimates. We don't have an exchange of information on exactly how much highly enriched uranium and plutonium the Soviet Union produced. That is a yawning gap in our knowledge base, though we do have estimates. So I would say that if you had to prioritize all of the different things that were going on, this would be the most important.

The problem you raise is very complex, in the sense that, as Laura mentioned, there needs to be a partnership between the U.S. and Russia in all of these activities. The essence of this work is that we are seeking to go into the national defense crown jewels of another country, to try to make their nuclear material and facilities more secure.

I think that there has developed, in the course of the U.S.-Russian relationship over the past few years, not just in this area but generally, a greater sense of distrust. The rise of the security apparatus, in particular, in Russia has made getting access to these facilities more difficult, which has made it more difficult for the U.S. to spend money on securing these materials. There also have been some cases where money had been spent, and the kind of necessary due diligence, in a sense, wasn't done as well as it could be and this has made the U.S. more insistent about being provided access to sensitive facilities.

I would summarize by saying this: I think that this is an inherently risky business, and I think that we have to be willing to accept risks, and that means that we won't necessarily be able to account for every dollar that has been spent. But I also think that it is incumbent upon the Russians to make this job easier than it is right now. They control these facilities. They control the security services. Most of what we are hearing about access to these facilities from the Russians is that there are laws in place that limit foreign access. Those laws ultimately are going to have to be changed, or there is going to have to be some kind of directive from above to loosen up the rules for access to these facilities. But the thing

that really needs to be done is that we need to get this job done, sooner rather than later.

Mr. GALLEGLY. Well, I think we all agree that the job needs to be done, but the GAO's report specifically refers to the fact that Russia has not given us sufficient access, and perhaps in the remaining minute or so that we have, a couple of minutes, you could go just a little further on what we can do to get greater access, and if you agree that access is the problem. Also, maybe we could hear from Ms. Holgate briefly on that as well.

Mr. LUONGO. Yes. I think access is a problem, and access has grown as a problem over the years. There are two things that need to be done. One, it is incumbent upon the Russians to change the access procedures and allow further access for the U.S. side. This is an internal problem that they have got to solve, but they can be prodded, I think, in a more productive way by the United States to determine if there is some kind of a solution and focused dialogue that can be started on this question.

As I suggested, there is a mechanism that hasn't been used in a number of years, and that is to, once or twice a year, preferably twice, bring the program managers from both sides together with political officials from both sides and talk about, on a program-by-program basis, what is working and what is not working. A lot of what is happening now is that there is a lot of finger pointing—the Russians are to blame—the Americans are asking for too much—that kind of a thing. Another thing that is occurring is that the level at which this issue is being debated is too low because it is a high-level, political decision to allow American nuclear specialists into, say, a Russian warhead production plant or warhead dismantlement plant. That is something which, under Russian law, is not allowed, and it is going to require some political heft to make it happen.

Mr. GALLEGLY. Thank you, Mr. Luongo. Ms. Holgate, would you just briefly respond to the issue of access and the GAO's statement that there has not been nearly sufficient access, and as a result of that, we have put money in other areas that, while they may be important, are not nearly as important as the access to these facilities?

Ms. HOLGATE. I would certainly concur with the GAO's opinion. I think one of the challenges is that the term, "access," is shorthand for a whole series of interactions that we need to have with Russia, which has made it confusing about which type of access we are asking for at which time. U.S. personnel may need to be able to tour a facility to understand and plan the actual upgrades. There is a need to visit the facilities to make sure that what is paid for is actually accomplished as it was intended. There is a need, politically and otherwise, for VIP visits, which may be much different in character. And so we have used this one term to refer to a variety of types of U.S. presence, which has different needs at different times.

I would say the beginning point of the access problem comes back to this trust relationship and to this lack of partnership with Russia. One of the things that characterized the early days of these programs was a more joint-planning process in exactly what the overall needs of the Russian complex were in the context of secu-

riety. Now, the Energy Department builds strategic plans that have never been discussed with the Russians and don't have Russia buy-in, so you are missing that front-loaded buy-in and partnership and trust.

The second thing I would point out has to do with the direction from above, and, as Ken pointed out, the senior political leadership is crucial here, and here President Putin may actually be an asset, if he chooses to be. He has more credibility than his predecessor to be able to go to the KGB successor agencies and tell them, the default for your decision is, "yes, you will allow authorized Americans to these facilities" rather than "no." Right now, a Russian security guard is never going to get fired for saying no. He could get fired for saying yes, and that calculation at the individual level needs to be changed. Putin can change that.

The third point I would make is perhaps some consideration of greater flexibility in the U.S. needs for access and where we can think of more creative ways to confirm what needs to be done or what has been done at these facilities without requiring feet-on-the-ground presence of U.S. personnel.

And, finally, I would point out the value of reciprocity, at least symbolically, not on a tit-for-tat basis. There have been many instances in which the U.S. has gone to Russia and says, We can have this kind of penetration into your highly sensitive facilities without revealing your sensitive secrets, but we are not going to give you that same kind of penetration to us because it might reveal too much of our secrets. So the challenge of having a credible story about how access does not have to compromise legitimate national security concerns has not been made credibly by the U.S.

Mr. GALLEGLY. Thank you very much, Ms. Holgate. Not as a result of my attempt to use more time than I am allotted—the timekeeper had the thing set wrong, so I will yield to the gentleman from California, my neighbor from Sherman Oaks, California, Mr. Sherman.

Mr. SHERMAN. I commend the timekeeper, and I am sure that she will carry on the same plan.

We have got to be prepared to make concessions in St. Petersburg and to make it clear that the most important thing to us is keeping the worst weapons out of the worst hands. I would hope that the President would make that clear on Chechnya, that he would follow Ms. Holgate's comments about reciprocity, both in terms of access and in terms of scaling down our own total nuclear weapons store; that we should be looking at making concessions on Star Wars, which, in a country with porous borders, is a meaningless and expensive exercise for us; and, finally, on the issue of Iraq, we could, at one extreme, purchase from Russia all \$7 billion of its promissory notes, payable by the government of Iraq, and pay cash up front, or at the other extreme, announce that we will not withdraw from Iraq unless its government and everyone involved in it completely renounces all contracts and debts to Russia and the former Soviet Union, and I would hope that we would put that on the table as well.

For us to go simply hat in hand and do a photo op and say, "You are an important country," and have some vodka and leave might

do well for the President's popularity but would do nothing for what this panel has talked to us about here.

Dr. Moltz, I hope that for the record you explain kind of this less-important question, why Indonesia would want floating nuclear reactors strikes me as a boondoggle, and I would like the panel, or at least a couple of you, to comment on what you think are the chances that any major portion of the \$10 billion pledge by the other members of the G-7 is actually going to be forthcoming and what we can do to at least get a list of how that money breaks down because, as I understand it, those G-6 have said, well, collectively, we will come up with 10 over 10, but no one of us is necessarily committed to produce any particular amount of money at any particular time, nor have we even indicated how Norway's money or anybody else's money will or will not count toward that. So I have got six rich countries making an incredibly vague promise. I wouldn't give you 10 cents on the dollar for the whole thing. Perhaps you could tell us how we can tangibilitize [sic] this commitment.

Mr. MOLTZ. May I respond to that?

Mr. SHERMAN. Yes.

Mr. MOLTZ. In regards to the \$10 billion pledge, I think it is clear that the United States needs to work much more closely with its allies on these issues. Obviously, a number of them have felt alienated from U.S. policies in recent months, and I think we need to build those bridges back again.

Mr. SHERMAN. So does this mean we have to make concessions on Iraq or concessions on Kyoto to get them to agree to do what they have already once agreed to do?

Mr. MOLTZ. I think that we need to talk to them about a variety of issues. I don't know that any specific issue requires a concession on the U.S. part, but I think we need to take their concerns into mind, and we need to show them that there are a number of areas where we are quite willing and interested in working with them. I would note that Norway, Canada, Japan, and even Italy now are making considerable strides forward in their pledges. Particularly in the Far East, Japan has done quite a bit since the summit in January between Koizumi and Putin, and there really is significant progress in some fields where the United States has not been active.

Mr. SHERMAN. Has dollar one been paid?

Mr. MOLTZ. Yes. They are spending money. They are putting people on the ground for the first time. Japan had not previously put people on the ground; they had only hired contractors. Now, they are putting people into their consulate in Vladivostok to manage some of these projects, and so this is, I think, a big step forward. Japan really is engaged in a rapprochement with Russia right now, and Putin seems to be—

Mr. SHERMAN. By a show of hands from our panelists, how many of you think that 25 percent of the amount pledged by the other G-7 members, that 25 percent or more will ultimately be disbursed within the 10-year period? All four hands go up. Wow. We have a nonskeptical panel.

Mr. LUONGO. Mr. Sherman, if I might, I just got back from a meeting on this very subject, and the commitment so far on the \$20

billion, not including the U.S., is about \$8.5 billion. So the U.S. is supposed to pay about \$10 billion of that \$20 billion over 10 years, and then the commitments from the other G-7, including Russia and including a variety of other European countries and the European Union, is about \$8.5 billion.

Mr. SHERMAN. So already they haven't pledged 10. The press release says 10, but it is only 8.

Mr. LUONGO. It is up to \$20 billion. The communique from Kananaskis states that the pledge is up to \$20 billion over 10 years.

Mr. SHERMAN. It is supposed to be 10-Plus-10-Over-10.

Mr. LUONGO. Yes, it is supposed to be 10-Plus-10-Over-10.

Mr. SHERMAN. But it is now going to be 10-Plus-8-Over-10.

Mr. LUONGO. Well, it is 10-Plus-8.5 right now—

Mr. SHERMAN. Okay.

Mr. LUONGO [continuing]. Of which about 8 percent has been committed to specific projects.

Mr. SHERMAN. Okay. Has my time expired?

Mr. GALLEGLY. The time of the gentleman has expired, with the overage that I had violated. The gentleman from Nebraska, Mr. Bereuter.

Mr. BEREUTER. Thank you, Mr. Chairman. Thanks to all of you for your testimony. Understandably, we have great concern about nuclear proliferation, but I am concerned that we don't have enough focus on the biological and chemical weapons stock of the former Soviet Union.

We have the new Department of Energy inheriting the nuclear development and caretaker programs for our government, and they have, obviously, an expertise and an interest in the nuclear area. I don't think we have a counterpart interest in our government in the biological and chemical weapons problems. And DOE has had its problems in coming up to its potential—lots of problems there, to say the least. A little bit of a backwater when it comes to the Federal Government, unfortunately.

I know that you might protest this, but your own organizations, if you take a look at the reports, are predominantly focused on the nuclear issue. I now see your heads shaking, which I expected. But I don't think there is enough attention on the biological weapons, in particular.

We have been almost totally unsuccessful in learning anything formally about the Soviets' stock, its volume, its diversity. Senator Lugar has had the unfortunate opportunity to be exposed to just enough anthrax to frighten everybody.

I would like to have your suggestions, whereby we can have a more balanced examination of the three areas of WMD.

Ms. HOLGATE. Yes. I will just address a couple of points in defense of the Department of Defense and the Cooperative Threat Reduction program, where a billion dollars has been identified, and half of it already spent, to support chemical weapons destruction in Russia. Of course, that has been held up by a lot of action on this end of Pennsylvania Avenue, but I was very encouraged that the 2004 request from DoD had a significant increase in the resources available to destroy the weapons in that facility.

I had the good fortune—well, I am not sure “good fortune” is the word—I was happy to be able to accompany Senator Lugar last year in visiting that facility, with almost two million of these—

Mr. BEREUTER [continuing]. Artillery shells?

Ms. HOLGATE [continuing]. At Shchuch’ye. Pardon me?

Mr. BEREUTER. The artillery shells?

Ms. HOLGATE. Yes, the artillery shells. And there is nothing more chilling, of all of the strange places I have been over there, that—

Mr. BEREUTER. And apparently there are seven such sites that we know of.

Ms. HOLGATE. Not all of them have shells of that nature. Most of the other sites have bulk agent in large tanks that are much less susceptible to terrorist use or diversion. In the case of Shchuchye, these are very portable.

So I agree with you very wholeheartedly that chemical weapons are a threat, but I would say that the Department of Defense, in the same way that it is responsible for the U.S. chemical arsenal, is at least making a dent on the Russian side.

Mr. BEREUTER. Which agency is focused on biological weapons?

Ms. HOLGATE. Well, that is what I was going to turn to. When I was at the Defense Department, I launched the effort, the very small effort, on trying to deal with the biological side, and it has never been as quick or as speedy as it needs to be, or as strong. Part of that has to do with very strong concerns from the U.S. that we might be inadvertently helping Russia develop offensive capabilities under the guise of helping get access to some of their previously activities in a defensive context. There has also been, obviously, resistance on the Russian side.

I have always thought we needed to do well more than we are able to do and have been able to do there. Our organization has an entire program on biological weapons and bioterror prevention, and my colleague, Dr. Peggy Hamburg, I am sure, would be happy to testify before the Committee in more detail on this challenge.

Mr. BEREUTER. I would like to go to a couple of specific questions. I know all of you might like to say something about the questions that I have already posed.

Dr. Moltz, I had a couple of specific questions that popped out as a result of your written testimony, and I think you mentioned orally, if I understood it correctly, that two nuclear facilities, power plants, in Russia are producing the predominant amount of plutonium, approximately enough for 120 nuclear weapons each year. Is that correct? And if so, what are the prospects that the Russians could decommission those? What kind of energy problems does it create for them? What can we do about it?

Mr. MOLTZ. As you are aware, that program originally was supposed to convert the reactors from HEU to LEU. The program was eventually changed so that those reactors would be shut down by 2008. They are going to be replaced by conventionally fueled reactors. Now, it is conceivable that if these funds were accelerated, we could shut down these reactors faster. They have to put something in place in order to allow the cities that are dependent upon them for heat and electricity to generate the materials that they need.

Mr. BEREUTER. By “conventional,” you mean carbon powered.

Mr. MOLTZ. Yes, exactly. Coal powered.

Mr. BEREUTER. The other issue: You say you would be in favor of reopening the vitrification option for plutonium disposition. Why does it need to be reopened? Is it shut? The French have been vitrifying for a long time. Is it just because we have not moved in that area? Why do you say “reopen”?

Mr. MOLTZ. I am not familiar with the French vitrification program. The French have been reprocessing for a long time, unfortunately.

Mr. BEREUTER. They have also been vitrifying—I have seen the facilities—in the early eighties.

Mr. MOLTZ. That is quite possible. I am not familiar with it.

The United States has made a decision to basically follow the Russian lead in going the MOX route. I think, for a variety of reasons, we decided not to fight this issue, even though there was, I think, considerable support within certain circles in the United States to go the vitrification route. That is not an easy option either. There are technologies that need to be proven, and we are going to have to spend some money on that.

My own view, though, is that it is less risky because it doesn't create demand for plutonium in the future, and I think Russia seems to be stockpiling quite a bit of plutonium in hopes that eventually they are going to be running a lot of power plants on it, and I don't think that is in our interest.

Mr. BEREUTER. I thank you, and I think your recommendation is appropriate. Thank you, Mr. Chairman.

Mr. GALLEGLY. I thank the gentleman from Nebraska. The gentleman from Florida, Mr. Wexler.

Mr. WEXLER. Thank you, Mr. Chairman. I want to compliment both Chairmen for holding this, the second of our hearings. I find listening to all four of the witnesses somewhat chilling, chilling in two regards. One—you didn't say it in this fashion, but basically the unanimous view that while our threat-reduction programs have had problems, they have significant success, and yet they do not enjoy nearly the degree of focus or priority that they deserve and that that failure to give those programs the priority that they deserve directly relates to the ability of our citizens to remain safe in the future.

And the other part that I find potentially even more chilling is that, to a certain degree, as useful and as constructive as these programs are, undoubtedly, to a certain degree—I think, entirely—they have failed to address what is occurring right now under our feet, and that is that the world's leading state sponsor of terror, Iran, either is a nuclear power or will be a nuclear power in a matter of weeks, maybe months at the long end, and we talk about getting access to Russian sites, as urgent and as important as that is, but the bottom line is if we were a member of Hezbollah, and we were watching this hearing, I suspect, to a certain degree, we would shake our head and say, “These naive Americans are going to argue and come up with plots to get access to Russian sites, and we don't have to go to these Russia sites anymore to even plot our strategies. We have got an extraordinary opportunity in Iran, and we have, God knows, what opportunities in North Korea.”

So I would ask you, in the context of what seems to be the more immediate threat to the United States, Iran and North Korea, what should we do with our threat-reduction programs so as to engage with the most immediate threats?

Mr. WOLFSTHAL. Well, Congressman, I think you make an excellent point, and one aspect I will pull out is that no one piece of what we do can be successful if we aren't successful in all of these pieces. To overuse the expression "a chain is only as strong as its weakest link," if we do Russia well, but we don't do North Korea or Iran well, it weakens the value of what we have done in Russia.

That being said, I would disagree with your characterization that the greatest threat lies right now in North Korea and Iran. We have already, through threat reduction, taken direct actions which have prevented nuclear materials from going to terrorist organizations and countries like Iran and North Korea. That is a proven fact. There are untold number of instances where we prevented this from happening beyond what we know, and that is part of the challenge of nonproliferation: We are only successful when you don't hear about the bad things. But that being said—

Mr. WEXLER. Could I ask, specifically on that point, if I may, the things I am reading with respect to Iran is that, to a certain point, we are helpless. The things I am reading suggest that Iran has essentially developed most of the know-how within the country and that they are dependent upon their own citizens for developing this now, and what assistance the Russians are providing, which is really totally anathema to the entire supposed cooperation that they are having—the idea of the Iranians needing the nuclear plant that they are building when they have got all of these other sources of energy; it is an absurdity.

Mr. WOLFSTHAL. So, Congressman, your information is far more protected and high level than mine, having been out of government for almost 4 years.

Mr. WEXLER. Actually not. I am reading it in magazines.

Mr. WOLFSTHAL. Well, the same magazines I have read lead me to believe that, as we have found out now, although we focused on the Russian-Iranian connection for years, the concern is much greater now than Iran's know-how has come from other sources, including Pakistan and possibly North Korea and I think this illustrates the point that nonproliferation needs to be our top priority, and yet, in the case of our relationship with Pakistan, it clearly is not. CIA unclassified documents that report on transfers of nuclear exchanges never mention Pakistani-North Korean or Pakistani-Iranian connections, and every time this has happened in the past, it generally comes back to bite us.

But I would like to second the point that you made earlier that we need to get them all right, and in terms of expanding our experience and the benefits of what we have learned in Russia and trying to make that pay off in Iran and make that pay off in North Korea, I think there is an opportunity there, particularly because Russia has relationships in both countries that we don't. They can be a part of that puzzle, and right now we simply have other priorities that we have chosen to pursue in the relationship with that country.

Mr. GALLEGLY. The gentleman from Colorado, Mr. Tancredo.

Mr. TANCREDO. Thank you, Mr. Chairman. I have a statement and a rather extensive list of questions that, with your permission, I would like both entered into the record and submitted to the panel.

Mr. GALLEGLY. Without objection.

Mr. TANCREDO. But in listening to this, one is struck, I think, with several things. First of all, the possibility is that we are operating on a series of assumptions, especially with regard to Russia, that may no longer be accurate assumptions or supportable assumptions.

Let us start with one, and that is that there is a strong desire on the part of, at least, a significant portion of the Russian government to actually, number one, go through the process with us as an equal partner and achieve the goals that were originally set out in Nunn-Lugar, and that perhaps there is not enough of an incentive for Russia to secure its own facilities without our support, without our help, without our financial involvement and/or technical support. And I would like you to explore both of those because it does seem to me that the nature of our relationship with Russia has changed since the original understanding, original agreement, and that not only our relationship but internally Russian politics have changed and changed perhaps to the extent that we cannot look forward to that kind of cooperation because it is not perceived to be in their best interest, in the interest of the nation.

So there is this elaborate—maybe charade is one way to portray it—that goes on, designed to achieve one goal, and that is certainly an infusion of dollars into the Russian economy, an infusion of dollars coming through Nunn-Lugar. That is helpful. There are some things they probably want to do and will acquiesce to in terms of our desires and goals, but do you really feel as though, and what information do you have, what empirical information do you have, that would lead you to believe that they are still dedicated to the goals, and if they are not, what is the purpose of all of this, I guess, because we can't change that by "diplomacy," I don't think, or anything else? And if the problem exists until we do change it, isn't anything we do counterproductive?

And in terms of their own security, isn't it an incorrect assumption that they would not be doing everything possible to secure the sites and everything because they face a threat just as great, if not greater, than we do? They have had instances of significant terrorist activity that, it seems to me, would encourage them to do their own thing. Just, I guess, respond.

Mr. MOLTZ. Thank you, Congressman. I would just make one point—I think Jon Wolfsthal put it very well—that these programs still are very limited in scope, and when you look at, as a dollar figure, around \$7 billion seems like a lot of money. But, as you know, in this body, \$7 billion spread over about 12½ years is really not that much money. And so we are asking Russia to do a lot of things that are very sensitive in terms of their national security, and we are asking them to do this for not a lot of money. We need more investment plans. President Bush talked about the idea of really trying to use the commercial forces of the United States to do some of this work. I would encourage him to look into some of those options.

I mention in my testimony ideas in the biological weapons area. We know that these scientists want to work with U.S. biotech companies, and so we should reach out to them. We need to get President Putin's backing for them, and then we need to encourage U.S. business to go in there and to help us open up some of these facilities. I think that would—

Mr. TANCREDO. Excuse me. My point is that, how do we know? What can you show us? What can you do to make us feel better about the possibility that increasing the dollar amounts provided and/or setting up this great temptation, I suppose, for them, why would that work? Why do you think that that is the only thing that is preventing them from actually doing what we want them to do? You say, you know, that we are asking them to do something that is threatening to their security but for very little money. Well, do you really believe that increasing the money would have them say, "Okay. Let us go ahead and reduce our own security"?

Mr. MOLTZ. Congressman, in response to Congressman Wexler's point also, I would make the observation that Russia is involved in Iran for financial reasons. Russia is not terribly interested in seeing Iran with a nuclear weapon. Russia wants to sell reactors and fuel to Iran. That is the only reason why they are there. And if they had other means of making money out of these projects, they would prefer to get them from other more reliable sources, I am sure.

Mr. TANCREDO. Thank you, Mr. Chairman.

Mr. GALLEGLY. Mr. Schiff.

Mr. SCHIFF. Thank you, Mr. Chairman. I want to thank the witnesses for being here—in particular, I want to thank my old, college classmate, Clay Moltz, for coming today—and for the suggestions in your written testimony that we should definitely explore.

One of them we have already taken action on, or at least we are trying. I have introduced a bill to grant the President permanent waiver authority to avoid the kind of slowdowns that we have had at Shchuch'ye, and we are hopeful of getting broader support for that this year. We also worked to get a \$25 million increase in the authorization on the highly enriched uranium program, which was included in the State Department bill. Most recently, I introduced legislation to expand Nunn-Lugar beyond the former Soviet Union, and any suggestions you have in terms of that legislation would be welcome.

I really wanted to ask, I guess, a different variation of the question that Mr. Wexler asked, and that is that in the area of chem, bio, and nuclear weapons, it seems like with each there are different impediments to terrorist use of these weapons. In some, it is the expertise to develop the weapon or a weaponized form of the toxin or the pathogen. In others, it is the access to the material, and I think probably in the nuclear realm, it is the access to the material that is the greatest obstacle for terrorists. The technology is fairly old technology. It is over 50 years' old and probably not very hard to find or to build.

And my question really comes down to what is the most accessible nuclear material available to terrorists? If you were a terrorist, and you put yourself in their shoes, would you go after highly enriched uranium somewhere, would you go after plutonium

somewhere, and, if so, where would you go to look, and what do you think we should do about that?

Mr. WOLFSTHAL. I would defer to my colleague on this because she has obviously been working very closely with the Global Cleanout, but first a comment.

In my years at the Department of Energy, I was the manager for the program which converts research reactors around the world from fuel using highly enriched uranium to low-enriched uranium fuel, material that cannot be used directly in nuclear weapons. I was proud of the fact that with broad support, both in the Congress and from the states, we implemented a program to return to the United States over 20 metric tons of highly enriched uranium fuel that had been sold to over 40 countries around the world, back to the United States. The states of South Carolina and Idaho and California, where this material is shipped and stored, showed great leadership in taking the additional risk to their citizens in order to avoid the much greater risk that this material could end up in weapons.

But Russia clearly has a similar problem on its hands, and it hasn't shown that commitment, and there are materials all over the world at research reactors for potential use in nuclear weapons that are simply not guarded at all, and I think Laura can give you some more details about what we need to do about it.

Ms. HOLGATE. Well, in an open hearing, I am not particularly interested in giving a lot more detail about specifically where one might go, but Jon is absolutely right, and I said it is not just research reactors. There are institutes that have material that may not have a reactor or that have material that is not associated with a reactor, and here I will say, because it has already been well publicized, Ukraine and Kazakhstan are two of these. And so that is why it is important to think about the global problem from poorly secured, widely distributed, highly enriched uranium stocks. It is not simply related to research reactors but actually involves material beyond that.

So in that context, I commend the efforts to think about this in a truly global fashion because having visited the facility in Serbia, where my organization was influential in getting two and a half bombs' worth of material out of there—it was protected with one guy and a gun and a gate that looks like a toll booth—this was not the kind of place that would have repelled the kind of highly organized, well-resourced, terrorist organizations that we today know exist. That is the challenge to me: How do you reduce that number of unsecured facilities to the lowest possible number? This is doable. There is a finite number of facilities. There is a limited number of resources that you need to do the job.

Mr. SCHIFF. You bring up the case of Serbia, and in that case, but for your organization, we would not have been able to provide the incentive to go through with that cleanup. How can we address whatever legal impediments there are to providing the incentives or the full package to address situations like you found there?

Ms. HOLGATE. I think the first step is to consolidate the funding and action authorities for this whole category of truly global cleanout of dangerous weapons-usable material of all types. Right now, it is divided up into stovepipes all over the U.S. Government,

in the State Department, in the Defense Department, in the Energy Department, and elsewhere, with project managers who don't work well together and no supervision from overhead.

This incentive challenge is the one that is not so much a stovepipe problem but the gaps between the stovepipes, and it is clear that these nations or these institutes have maintained this material because they see that it has value to them, and that value may not be rational. It may be some fantasy version of a research agenda that they want to pursue with this material. It may be some sense of leverage. It may simply be a desire to play in the big game with the big guys who have this great material at their facilities, and I say, after working at the Energy Department, that tendency exists in the United States as well.

And the challenge here is to help these institutes in countries understand that they will benefit more from the removal of that material than from the maintaining of that material. A targeted, flexible authority granted by Congress to the Administration to use some of its resources to address those incentive questions associated with getting the right decision out of the institute director or the minister of science or the President of one of these countries is an absolutely crucial part of the package.

Mr. SCHIFF. Thank you.

Mr. GALLEGLY. The gentleman, Mr. Janklow.

Mr. JANKLOW. Thank you very much, Mr. Chairman. I have sat and listened to all of you. I have read your testimonies and listened to these questions folks have asked and your answers. I am struck by the fact that, as I understand it, we have separate competing Federal agencies, bureaucratic infighting, and different agencies' competing priorities. We have employed some of the scientists, a large number, in the Soviet Union, but there are large numbers we haven't employed. We have got a loophole in the nonproliferation treaty that is allowing the Soviet Union to continue to build nuclear submarines while we are destroying their nuclear submarines with them. They are continuing to build nuclear submarines and lease them or sell them.

We haven't put enough funding into this, and we quibble about how many billions it ought to be. We get into partisan, non-partisan, philosophical fights over what waiver authorities our President ought to have; meanwhile, we do nothing about anything with respect to that authority. We are not really all sure that Russia is that committed to the program in terms of their deep-seated involvement with it. France is running the G-8 portion of the group that deals with this for this year, so we are not sure if anything is going to get done on this project with the G-8 this year.

We are in disputes about liability and the taxation of assistance and access with respect to Russia. We are 12 years into this program, which is about four times the amount of time it took us to start and finish World War II. We are 12 years into this program, and we have no comprehensive inventory of the fissionable stockpiles with the Russia nuclear complex. We have security upgrades that have not yet begun on 120 metric tons of plutonium and highlight enriched uranium in Russia.

Congress, according to your testimonies and reality, has been dragging its feet. Our Atoms for Peace program has given to 130

different reactors in the world these things that we are now trying to round up and bring home or destroy in facilities in 40 different countries. The President of the United States says,

“The gravest danger our nation faces lies at the crossroads of radicalism and technologies.”

As a matter of fact, I believe it was you, Mr. Luongo, who ended your testimony on it, and you, Ms. Holgate, started your testimony with this quote:

“Our enemies have openly declared that they are seeking weapons of mass destruction, and evidence indicates they are doing so with determination.”

And then we make a bold statement:

“The United States will not allow these efforts to succeed . . .”

and then it goes on.

Frankly, you know, I am puzzled. I just don't understand the success of this program. I realize we have destroyed thousands of weapons, but I think it is the last one left that is going to kill everybody, not the first one. I don't know whether they are going to kill, and I wish I knew—is it going to be the Democrat kids or the Republican kids?—because we ought to make this clearly partisan. We really need to make this partisan. If there is a Democrat answer to this problem, I want to hear it. If there is a Republican answer to this problem, I want to hear it, too, because I am for either one of them that will solve this problem. I have got grandchildren that I don't want to live in this world like this if there is anything we can, in reality, do anything about it.

Saying that we are successful so far is like saying, you are only a little bit pregnant, not a lot. We worry about North Korea. Everybody is excited about North Korea. I don't know why they are building uranium facilities, plutonium facilities. It seems to me like they could get it almost any place on earth if they went out and looked for it. We worry about Iran's program. They can just go out and get it, go out and buy it, steal it, employ a few of the scientists, which they are all doing anyhow. We will just figure it out too late.

This all sounds to me like the doctor who says, “The operation really went pretty good on your mom. We got most of the cancer. We got most of it.” And so my question is, and I realize my time is up, but I have one brief question, Mr. Chairman, what is it other than money that Congress can do to facilitate this elimination of these materials from earth and Russia? Thank you.

Mr. GALLEGLY. Would you like to direct that to any specific—

Mr. JANKLOW. Whichever one would like to answer it. They have all given marvelous testimony, a little bit in conflict, but they are all on the same page, really.

Mr. GALLEGLY. Mr. Luongo looks like he is—

Mr. LUONGO. Yes. This is of particular interest to me. You know, I was here in 1991, when this legislation was created. I was working on the House Armed Services Committee.

The original legislation grew out of the defense bill conference committee. It wasn't in either the Senate or the House bill, and when it was brought out of the conference, it was found to not have the kind of support it needed in the House. It was withdrawn from

the bill, and then ultimately the Nunn-Lugar legislation was created later in the year.

I think that the Congress is essential in moving beyond the morass that you just described very well, sir. There is legislation, and then there is direction, and I think a firm expression of interest in moving these problems beyond where they are today by the Congress is absolutely essential. I think that the provision on the Global Cleanout that is in your Committee's version of the State Department authorization bill is an excellent example and it shows people in the Executive Branch that the Congress really is interested in these issues.

But beyond the specifics, I also think that there are findings and statements that the Congress can make that are really useful, and I certainly think that there is direction that the Congress can give to the Executive Branch. I know everyone is concerned about micromanagement, but there is, I think, direction that the Congress can give on these issues that will be taken seriously inside the Administration if it is given forcefully enough.

Mr. WOLFSTHAL. Let me also just make a very brief comment and be presumptuous in a suggestion, and I will steal something I hear from Ken a lot. Support for these programs is wide but shallow. If you ask, "Do you support securing this material?" People answer, "Yes." But if you ask them, "What are the three things we should do?" You can't get a response.

I would wager that the Members here have spent more time today than some Members spend in a year thinking about these issues, and if I can be bold enough, I would suggest that you grab one of your colleagues who doesn't think about these issues and make him or her think about them. Explain with the same passion you just did why this is important, why it is not a partisan issue, and get them thinking along the same lines because we constantly are trying to find constituencies within the Congress to provide our information or suggestions to, and we can only run to the select group that work on this day to day so often.

Mr. GALLEGLY. The time of the gentleman has expired. With the concurrence of our esteemed witnesses, there has been a request to have an abbreviated second round, and I find the witnesses exceptional here today, and the questions are timely. There is not enough time to do the things we want to do, as always the case, and I will try to make my question brief, and we will give everyone a chance to do at least one more question.

Some experts outside the government have advocated the creation of a nonproliferation czar position in the Executive Branch. My understanding is that the Administration isn't overwhelmed with this, but there is a movement out there that believes that this is an answer. They cite the expanding agenda of the CTR program, the many foreign ministries and NGOs involved in the process, and the lack of any integrated or comprehensive strategy which would coordinate objectives and goals for the CTR effort. Maybe one or more of you could respond to that with your assessment of that concept. Ms. Holgate?

Ms. HOLLGATE. I will start with that. My organization is on the record as advocating a single leader for the threat-reduction agenda. The characteristics that that leader needs to have is to be able

to create and enforce agency division of labor, allocation of resources, and decision-making; to be able to translate the President's words and hold agencies accountable for executing those words; to be able to have some vision over the budget allocation, and because of that vision over budget allocation, to be able to testify before Congress because you obviously insist upon having some access to that individual.

There has been a lot of debate about where that individual should sit, what their institutional association ought to be, and Congress has frequently, I think, as many as four times, directed the Administration to identify such a person. Typically, someone's name is put forward but who lacks these characteristics that I mentioned.

One possible model was recently raised to my attention by former Deputy Secretary of Defense John Deutsch, who pointed out that the science adviser has an interesting structure, not that you would give this role to the science adviser, but you could create a nonproliferation adviser, where they have essentially a dual hat, where they have a private-counsel relationship with the President, but then they sit atop an agency with a small staff that has access and authority over agency budgets on these issues that is able, in that context, under that second hat, to testify before Congress.

That might be a model that would break from some of the more rhetorical identifications of coordinators and leaders and so on that has been undertaken in the past. Congress, in principle, could legislate the creation of such a body and perhaps have more impact on a reluctant Administration, as the last two have been.

Mr. GALLEGLY. Mr. Luongo, same question.

Mr. LUONGO. I would say that, yes, I think a coordinator or some small coordinating Committee is essential to bring all of the threads of this agenda together. To prioritize is really the issue—to prioritize what is going on and to identify and prioritize what the problems are so we can try to attack them in some cohesive way. I think the problem inside both the Clinton Administration and the Bush Administration on why they haven't accepted this idea is not clear to me. It has never been clear to me. Even though it may have been four times that it has been suggested by the Congress, it has never been clear to me why the White House has rejected it in both Administrations.

The thing that I think is going to be difficult to grapple with is the question of control of individual agencies' budgets. When you break apart this roughly billion dollars a year that we are talking about, about 50 percent is controlled by DoD, you know, 47 percent is controlled by DOE, and the rest is controlled by the State Department, and the White House is not particularly good at controlling individual agencies' budgets. So I think that is part of the challenge, as well as gaining acceptance inside the White House that this is a good idea.

Mr. GALLEGLY. The gentleman from California, Mr. Sherman.

Mr. SHERMAN. I would like to build on the gentleman's question. He asked what we in Congress can do, and one answer we got was, well talk to each other, which is always a lot of fun. But let us say we had all 435 Members of Congress convinced that this was really important. What would we do? Does anybody have a specific plan?

We could all go down there and, you know, spend a 24-hour fast on the Floor to show how we all thought this was important. It would be easier for some of us who would come with some accumulated reserves to that fast enterprise.

It is a very important problem. What do we do to solve it?

Mr. MOLTZ. If I might just make maybe a few points, I think one thing is if you did have all Members that were really this firmly behind the program, you could make an impression on the President that this needs to be raised on his agenda, that this needs to be higher up, and that he needs to take this to the summit and talk to President Putin about it directly. They need to solve the problem of the waiver. They need to solve the problem, on the Russian side, of access because Putin could have a one- or two-time waiver for some of these specific facilities if he believes it is in his interest to do so.

I think also, if you look at my written testimony, I have given some specific ideas for streamlining some of the guidelines that Congress has given to different departments because I think in that area there needs to be some greater leeway in some of these programs to allow different programs to succeed because I think they have been hamstrung.

So those would be some of my recommendations.

Mr. SHERMAN. Does more money do any good? I keep wanting to advocate for more money, and then I am told, oh, there is so much money in the pipeline, they can't figure out how to spend it. They are doing all they can.

Mr. MOLTZ. I don't think money alone is going to solve the problem. You need to have, as Laura Holgate has mentioned, Russian buy-in, and so you need to take the time to sit down to say, what programs make sense? Congressman Tancredo asked, are the Russians really committed to do this? They are committed to do this if they believe it is in their interest to do so, and they also see some economic benefit.

I would argue that President Putin is very serious about improving the Russian economy. There has been good cooperation in the oil and gas sector, for example, with the United States recently. I think that there are other areas that U.S. industry could play a more active role.

Mr. SHERMAN. So you are hinting that the President should, in addition to using his powers of persuasion in St. Petersburg, actually offer the Russians something to be more cooperative. You are rather vague as to what that offer would be—vague statements about economic cooperation.

Mr. MOLTZ. With all due respect, Congressman, if you look at my written testimony, I do have some specific points on that issue.

Mr. SHERMAN. I am sure your written testimony will—and I see the woman to your right would like to comment on that as well.

Ms. HOLGATE. Mr. Congressman, I think there is one thing that Congress can do, and I can't say I am an expert on Russian immigration policy, but certainly the repeal of Jackson-Vanneck is a huge issue in the Russian psyche. That limits the degree of economic cooperation that can be undertaken, and that is an action that Congress can take.

Mr. SHERMAN. I would like to work with my colleagues here, and perhaps get a suggested draft from those of you on the panel, to prepare a letter to the President that would reach him, hopefully, a few days before he leaves, urging him to give control of nuclear weapons and other weapons of mass destruction and the scientists and materials that are relevant to that the very highest priority, and, beyond that, to offer to make reasonable concessions on each issue, starting with Jackson-Vanneck. And I think that you would see support on this Committee, even from those of us who are working as private citizens or in the Congress in support of Jackson-Vanneck to see it ameliorated or repealed as part of something on this because immigration from the Soviet Union is no longer the number-one concern.

I hope that if you have a suggested letter of less than two pages in length, that you would share that with my office and with the offices of the other Members in attendance.

Mr. GALLEGLY. Mr. Bereuter.

Mr. BEREUTER. Thank you, Mr. Chairman. Congressman Lantos has a bill to appeal Jackson-Vanneck, which language is in the Ways and Means Committee for, I think, the second Congress in a row.

I have three areas for which I would invite some comments in perhaps, at least for me, the final round. Senator Lugar had attempted to earmark \$50 million for the addressing of proliferation issues outside of the former Soviet Union, deleted in a conference report of the supplemental appropriations. Congressman Weldon wants to expand the CTR program beyond the former Soviet Union to such countries as India and Pakistan. I would like your comments on the appropriateness of that.

Congressman Tancredo was raising questions about Russia's commitment to nonproliferation, and, I guess, if I could distill part of what he was asking, how much of the Russian attitude or lack of coordination or cooperation on nonproliferation projects is due to the fact that they have not reconciled their public intention to destroy stockpiles and their private desire to keep some capabilities?

Third, and finally, at a recent hearing of the House Armed Services Committee, several Members criticized the expenditure of nonproliferation funds, as it was spent for a solid-rocket motor disposition facility at Votkinsk, and a liquid-propellant disposition project at Krasnoyarsk, and the latter would supposedly cost us \$200 million in important funds because of mismanagement. I think, in fact, one was started but not followed through, and there was a lack of Russian commitment perhaps in both.

I invite comments on any of these three issues.

Mr. WOLFSTHAL. Let me just maybe take the first point, sir, on the expansion of Nunn-Lugar, particularly to India and Pakistan, and I will relate to you an anecdote. In the early 1990s, the U.S. Department of Energy was approached by South African officials asking whether we would like to buy up their entire stockpile of highly enriched uranium that had previously fueled six and a half—they were working on their seventh—nuclear weapons. It took the U.S. Government 6 months to figure out if we could respond positively, and by that time the South Africans had decided they would like to hold onto that material and put it into their re-

actor, which is still running today on weapons-grade, highly enriched uranium.

I think the idea that we do not have a standing authority, standing resources, and, I think, as Laura very correctly pointed out, a tiger team ready to spring into action when these opportunities exist to be surprising. We could, and should, be pressing countries like Pakistan, where we know already nuclear technology is leaking and where we don't have any confidence that they are adequately protecting their nuclear materials to do better and be prepared to help. The United States could be engaged in a constructive, active dialogue with India, with Pakistan, with other countries without respect to what they are using those materials for and without assisting them in manufacturing nuclear weapons or modernizing nuclear weapons but to ensure that they do not end up in the wrong hands, I just think makes basic common sense.

Mr. MOLTZ. If I could just take that third question about the facilities where this \$200 million or so was wasted. Part of the problem had to do with problems of coordination. The Russians on the Krasnoyarsk facility were not really on board with that facility. We went ahead and built that facility. They used those rockets for space-launch purposes. They did not destroy them.

On the other facility, here is another case where Russian regional authorities blocked the siting plan for this facility. They did not want these toxic fuels burned in their local area, and this, again, shows why any successful program needs to engage at the local level.

Mr. BEREUTER. May I ask you a question on the first one? Was there no commitment on the part of the Russian government to, in fact, proceed with the facility at Krasnoyarsk?

Mr. MOLTZ. I can't say that there was no commitment, but it was not a strong enough commitment, and there was not enough follow-through during the course of the project to make sure that these weapons were delivered to the facility for destruction.

But I would also emphasize that, again, in the context of such a large program, these are probably the two worst cases that I think you are going to find. I think that they are not an example that we want to follow, but, on the other hand, I wouldn't throw the baby out with the bath water here.

Mr. BEREUTER. I would just say, they were cited as a reason why the waiver was not given, and we had a disconnect in the program for a period of time by the House Armed Services Committee.

Ms. HOLGATE. I will take a whack at your second question, sir, in terms of the difference between destroying versus keeping WMD stockpiles. I think part of the challenge there is the obvious point that Russia is not a monolith. There are obviously lots of entities and authorities and officials within Russia who truly are committed to doing the right thing on the WMD issue, whether it is destroying stockpiles or securing stockpiles or whatever.

The question is, are those high-level commitments able to be thwarted by clandestine or low-level or perhaps tolerated-but-not-encouraged organizations, and I think that is where the challenge really comes into play. Unfortunately, for those who use the potential for those rogue entities to exist as reasons not to pursue the commitments made at official levels, it only reinforces those who

are trying to keep these weapons. They get to keep them if we stop helping.

Furthermore, we find out more and more. The more we help, the more we engage, the more we learn about the presence of these rogue or alternative elements within the Russian government and find ways to turn those off, to shut them down. So the answer to both sides of the problem that you would say, certainly there are tensions, but the answer to both sides of the tension is greater cooperation and greater penetration and visibility into what they are doing.

Mr. GALLEGLY. Mr. Wexler.

Mr. WEXLER. Thank you, Mr. Chairman. I think I walked out of the room, Mr. Chairman, while you were talking about the idea of a czar or some aspect of this, and I would hope that one of the things we take from this hearing, to the degree that you and Mr. Bereuter agree, is that we further explore the need for such a thing and, in a bipartisan way, try to figure out how to better organize our government to manage our program.

The Governor, I think, is exactly correct when he said this is not a partisan or Democratic or Republican issue, and I don't mean to editorialize in what I am about to say because I think it is an objective evaluation, having nothing to do with whether one supports the Administration or not or whether one agrees with their policy or not, particularly with respect to Iraq, but it seems to me central throughout this entire hearing is the idea of Russian cooperation being integral to the success or nonsuccess of the program.

But I think we all must recognize that from the Russian perspective, we have ignored entirely their suggestions and position with respect to Iraq, and post the military operation in Iraq, we have thoroughly ignored and rejected their suggestions as to what should occur with U.N. inspections and so forth.

And I am not editorializing. I am just asking, in the context of what is clearly their perspective of the manner in which we have acted, how, in the short term, would you suggest we engage Russia so that this cooperation can grow rather than be set in a position today which does not seem to be conducive to cooperation?

Mr. LUONGO. I think, Congressman Wexler, that we have tried mightily for the last 12 years to delink this agenda from other political issues, with some degree of success. There are really only a couple of examples you can cite where the Russians cut back on cooperation because of something that happened in U.S. foreign policy. The war in Kosovo was one small example.

We also have heard some anecdotal evidence that cooperation in nuclear shipyards, for example, was being cut back because of the U.S. position on Iraq. I think that you have to accept that U.S. foreign policy decision will create a Russian reaction. But I do think that we should try to delink as much as possible this agenda from U.S.-Russian disputes because once you get into the issue of differences over Iraq, we have differences over Iran, and we have lots of different problems that could make this agenda essentially come to a grinding halt.

Mr. WEXLER. If I could just follow, I would agree with you entirely, it is in our interest to delink, but do they perceive it is in their interest to delink?

Mr. LUONGO. I am not sure that either side completely believes in delinkage. I think the people at this table believe in delinkage. I am not sure, in the real world of interaction between governments, that that is a reality. Again, as Laura said, and I agree completely, Russia is not a monolith, and you really, unfortunately, need to examine the individual pieces because sometimes the whole is not governed in the way that this government is.

Mr. MOLTZ. Congressman Wexler, if I could just make one quick point, I think that if you look at the history of the program, the Russians have really bent over backwards to make a lot of things work at different periods of time despite political problems. The CTR program, in particular, went forward despite almost all manner of difficulties in U.S.-Russian relations. And I think that the key issue is whether Russia really has an interest in these programs, and, again, I would emphasize the economic factor. I think that President Putin is a very pragmatic individual. He wants what is best for Russia, and if we have programs that are benefiting the Russian economy, I think he will make sure that those programs work.

At the same time, I think it is not wise for us to completely discount Russian perspectives on a variety of political issues; we need to engage them. There is no question about that, but we also are going to have differences. That is inevitable, but again, if Russia has programs that are in its economic interest to pursue and in its security interests, it will proceed with those programs in cooperation with us.

This is why the buy-in is critical at a very high level.

Mr. WOLFSTHAL. One more very brief point, if I can, because I do believe we have all talked about the need for financial support, political support, and we have all talked about the need for the President to make this a personal priority in terms of time.

This wasn't the magic bullet, but one thing that did make a difference time and time again was President Clinton and President Yeltsin engaging directly, and I can assure you, and I think a number of people here from different levels will assure you, that the Gore-Chernomyrdin Commission Process focused the mind of the Administration time and time again and enabled us to get things done that otherwise wouldn't have happened. Nothing focuses the mind of a mid-level bureaucrat like the Vice President's office calling and saying, "Why isn't it finished?"

So I think that when we look at solutions, and some have been suggested here, in terms of having a bi-annual or annual meeting where the political leaders and the bureaucrats, the technical people, are forced to get together to work out some of these differences so they can't say, "Well, the paper is late. We will get it to you next week," and that week turns into 3 years later. That is something we need to avoid.

Mr. GALLEGLY. Mr. Janklow.

Mr. JANKLOW. Thank you, Mr. Chairman. My guess is that if terrorism and technology together are the biggest threat this country faces and maybe the biggest threat the Soviet Union faces, you don't need to have much of an imagination to understand what might happen if the Chechnyan ever got a hold of weapons of mass destruction and who they would use them on.

So I think it is in everybody's interest in the civilized world to deal with this, and I can think of a recent incident where the Soviets helped bring our astronaut down right at the height of the Iraqi war, where there was obviously a delinkage, or, at least, no linking, in terms of our foreign policy or national defense policy and the Soviet Union.

I have really got two quick questions. Is there anybody that anyone knows of or organization in this country that doesn't support this program? Do you know of anybody that doesn't support it or any organization?

Mr. LUONGO. There are obviously critics. I have never heard anybody say that they don't support it outright, but they certainly make the kind of criticisms that tie its hands and its feet and make it impossible to crawl forward.

Mr. JANKLOW. And my guess is we don't know anybody that says the program is really working well. Degrees, yes, but is there anybody that says this program is just working fine?

Mr. LUONGO. I would say that there are programs that are working well. I think the Naval MPC&A program was very effective in securing fresh submarine fuel in a variety of sites.

Mr. JANKLOW. But that is an individual aspect of the bigger policy or the bigger question.

Okay. Then I am left with my last question, my friends, and that is, other than money, because we all understand the money situation, and it is crucial, I mean, it is crucial—it took \$80 billion to deal with what we are dealing with right now, at least \$80 billion—is there anything other than talk to each other and convince our colleagues? My guess is, to the extent that people hear this, they become alarmed. So is there any one thing that we can do in the government-structure sense to deal with this issue?

Mr. WOLFSTHAL. I will just give you my personal views, Congressman. I think we need more people on this job. I think the Congress should be designating specific funds for hiring within the departments. There is an incredible rate of burnout within just the nuclear materials security within the Department of Energy. People last a year or two, and they are gone. We should also have permanent teams in Moscow.

Mr. JANKLOW. Are they wore out, or is it they move on?

Mr. WOLFSTHAL. No. They are worn out.

Mr. JANKLOW. Okay.

Mr. WOLFSTHAL. Not to use George's name for the wrong reason, but George Kuzmycz died on the job in Ukraine.

Mr. JANKLOW. Okay.

Mr. WOLFSTHAL. So we need more people. We need them to have support. They shouldn't have to fight for things like office space and paper supplies. They should have red carpets rolled before them.

Mr. JANKLOW. What you are saying, that this really hasn't been given a high priority, a focused priority?

Mr. WOLFSTHAL. I think that is what we are all saying, sir.

Mr. LUONGO. Well, I would say that I think the priorities fluctuated, depending on the period of time. There was a lot more attention in the mid-1990s that waned in the late-1990s and into today.

The only suggestion I would make is we haven't identified how much this is going to cost us in a macro sense. We have identified through Baker-Cutler how much the nuclear side needs. We haven't really identified how much exactly is needed in the CW and BW area for a variety of different reasons.

If you were to show the Russians what the scope of the total funding was, then I think these economic arguments that are being made may come further into play.

Mr. JANKLOW. Really? Okay.

Mr. LUONGO. Yes. I think so.

Mr. JANKLOW. Do others agree with that?

Ms. HOLGATE. Less so. I worry about conversations that focus on money because the reality is the bulk of the actual dollars, the \$7 billion, does not actually flow to Russia. They get the benefit of not having to spend their own resources to do things that that money does, but most of that money ends up in the pockets of U.S. contractors, and so there is a limit to the degree that the financial question is really a high motivation.

I have had this argument with Russians. You give them a number. We had this in Nunn-Lugar. You gave them the \$400 million number in 1992, and they were looking for a \$400 million check to President Yeltsin. That is not the way the programs work, nor is it the way they should work.

Mr. MOLTZ. You stepped out a little bit, and we had some discussion on this issue of what the President could do and what the Congress could do, and it is in the record. I would urge you to look at it. But, again, I would also push the idea of getting the business community more involved here because, again, Russia wants to have long-term economic relations with the United States and also with our G-7 partners, and I think that is something that the Global Partnership could do quite a bit to promote.

Mr. JANKLOW. Thank you.

Mr. GALLEGLY. I want to thank the gentleman for his question, and I would just like to close with an editorial comment in follow-up to your question about who supports this or who doesn't support it. I think probably the question that comes to bear is the definition of support, because we have people all saying we support the concept, but it is a matter of priorities. And heaven forbid that it takes a catastrophic incident. That will certainly get a raised attention span, and I hope that, through hearings like today and greater awareness and more participation of Members of Congress, perhaps we can help mitigate that. I thank you all for being here today.

[Whereupon, at 3:15 p.m., the Subcommittees were adjourned.]

A P P E N D I X

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PREPARED STATEMENT OF THE HONORABLE JOSEPH R. PITTS, A REPRESENTATIVE IN
CONGRESS FROM THE STATE OF PENNSYLVANIA

MAY 8, 2003

Chairman Bereuter and Chairman Gallegly, I would like to thank you for convening this hearing today on an issue of such great national importance and national security.

In this post-September 11th world, we have become even more aware of the threats posed by the proliferation of nuclear weapons to rogue states and terrorist groups.

Even as we speak, our country is at risk. North Korea has recently confirmed that it possesses nuclear weapons and is reprocessing fuel rods. Iranian officials have reported that North Korean scientists are assisting them in their country's drive to possess these deadly weapons.

And in Russia and the former Soviet states, nuclear facilities, with their crumbling security and lack of accounting procedures, provide a potential source for terrorists seeking nuclear weapons. The possibility that nuclear materials or weapons might be lost, stolen, or sold on the black market, or that nuclear scientists and technicians might be tempted to sell their knowledge to nations seeking to develop these weapons, is very real.

As you know, Congress established the Nunn-Lugar Cooperative Threat Reduction (CTR) Program in November 1991, after a failed coup in Moscow in August of that year and the subsequent disintegration of the Soviet Union had raised concerns about the safety and security of Soviet nuclear weapons.

Congress responded by authorizing the use of \$400 million in FY1992 Department of Defense funds to assist with the safe and secure transportation, storage, and dismantlement of nuclear, chemical, and other weapons. Congress appropriated an additional \$300 to \$400 million per year for the CTR programs between FY1993 and FY1998. It added \$440.4 million in DOD funds for FY1999, \$475.5 million in FY2000, and \$443.4 million in FY2001 and \$403 million in FY2002.

Most of these funds support projects in Russia, Ukraine, Belarus and Kazakhstan—the four nations that had Soviet nuclear weapons on their territories—but Congress has also authorized their use for projects and military contacts in other former Soviet republics.

The CTR programs seek to reduce the threat to the United States from nuclear and other weapons in the former Soviet Union. Towards this end, the programs focus on four key objectives: (1) Destroy nuclear, chemical, and other weapons of mass destruction; (2) Transport, store, disable, and safeguard these weapons in connection with their destruction; (3) Establish verifiable safeguards against the proliferation of these weapons, their components, and weapons-usable materials; and (4) Prevent the diversion of scientific expertise that could contribute to weapons programs in other nations.

I welcome the opportunity today to hear testimony on the status and effectiveness of the cooperative threat reduction and non-proliferation programs administered by the various Department of the United States government, and to discuss what the future of the CRT program should be.

Thank you. I yield back my time.

PREPARED STATEMENT OF THE HONORABLE ADAM B. SCHIFF, A REPRESENTATIVE IN
CONGRESS FROM THE STATE OF CALIFORNIA

MAY 8, 2003

Mr. Chairman, thank you for the opportunity to hold this hearing today on a topic that is of utmost importance to our national security and our future as a global community. I would like to thank our distinguished witnesses for being here today to present their testimony on this very timely topic.

I would like to request unanimous consent that my full statement be entered into the record, as well as a statement prepared by the Nuclear Threat Reduction Campaign.

One area of particular concern to me is ensuring that terrorists do not have easy access to weapons of mass destruction, particularly nuclear weapons. Over a decade ago, Congress established the Nunn-Lugar Cooperative Threat Reduction (CTR) program in 1991, to ensure that the nuclear arsenal of the Soviet Union would not fall into the wrong hands as the Soviet empire was coming apart. This program authorized the use of Defense Department funds to assist with the safe and secure transportation, storage, and dismantlement of nuclear, chemical and other weapons in the former Soviet Union. In the ten years since, while much has been done to dismantle Russia's and the former Soviet Republics' nuclear weapons, the dangers persist, and in some cases have increased.

In addition to the traditional nuclear weapons proliferators such as North Korea, Pakistan, and China, countries such as Libya, Iran, Iraq, and stateless terrorist organizations headed by individuals such as Osama Bin Laden, are out there and are actively in search of their next deal on nuclear weapons technology and components. It is this latter type of threat—the unclear, mobile, and not easily identifiable source of threat—that compels us to continue and increase our efforts to secure Russia's nuclear weapons.

The Nunn-Lugar Cooperative Threat Reduction program should be credited for significant achievements in reducing threats from the former Soviet Union. The Nunn-Lugar program has successfully deactivated thousands of Warheads, ICBMs, ICBM Silos, Bombers, launchers, and other nuclear weapon system components. Ukraine, Kazakhstan and Belarus—the three former Soviet nuclear powerhouses—are nuclear weapons free, according to the Defense Threat Reduction Agency.

While significant progress has been made thus far, continuing economic and social weaknesses in Russia, coupled with an eroding early warning system, poorly secured Russian nuclear, biological and chemical weapons and materials, and poorly paid Russian weapons scientists and security personnel, increase the threat of mass destruction on an unprecedented scale, especially if they fall into the hands of terrorists or rogue nations.

Since September 11, 2001, the world has changed, and with it so to have the threats. We cannot afford to cut back on such worthwhile programs as Nunn-Lugar and other non-proliferation programs. We recognize that there is much work to be done, and we must be ever more vigilant in an ever-changing world with new threats that go far beyond nuclear weapons.

Mr. Chairman, now more than ever we must make a fundamental shift in the way we think about nuclear weapons, the spread of weapons of mass destruction, and our national security.

Advancing Nunn-Lugar

I have recently introduced a bill that would grant the President permanent waiver authority of six original Nunn-Lugar conditions and six Shchuchye chemical weapons destruction facility conditions. Current law grants a 3-year waiver of six original Nunn-Lugar conditions (PL 102-228); this waiver expires in 2005.

I will shortly be introducing legislation to expand the Nunn-Lugar program outside of the former Soviet Union, authorizing efforts to dismantle and destroy nuclear, chemical, and other weapons of mass destruction in nations such as Pakistan, India, North Korea, China, Iran, and Iraq. The goal of this program is to reduce stockpiles of nuclear (and non-nuclear) materials in both military and nonmilitary facilities that may be converted to weapons of mass destruction to prevent such highly dangerous materials from being stolen or sold to terrorist organizations.

I believe we must also work to facilitate obtaining U.S. visas for former Russian weapons scientists who are working on cooperative threat reduction activities, so that they can participate in these activities. We must assist those scientists economically, to lessen their incentive to sell their knowledge of weapons of mass destruction to the highest bidder.

The special threat of Highly-enriched uranium

All-too vulnerable supplies of highly-enriched uranium, or HEU—suitable for use in nuclear weapons—and fuel and waste from decommissioned reactors throughout Russia and the former Soviet Union pose grave threats to American security. I am pleased to have worked to ensure that the State Department reauthorization bill contains language that directs the State Department to allocate an additional \$25 million for the nonproliferation and disarmament fund (NDF), to reduce stockpiles of dangerous highly-enriched uranium (HEU). This action will reduce the direct and very real threat posed by stockpiles of HEU, a component of nuclear weapons and the fuel for over 100 research reactors worldwide in more than 40 nations, including Russia, Ukraine, Kazakhstan, Belarus, Latvia, and Uzbekistan. HEU is the most likely source material for a terrorist or outlaw group seeking a nuclear weapon, posing an urgent need to deal with the small, insecure stocks of HEU used as fuel in research reactors. Operators of these reactors often do not have the financial resources to adequately protect this dangerous fuel, and there is grave danger that it could fall into the wrong hands. I am confident that this provision will strengthen the State Department's ability to mitigate a critical weakness in our national security by proactively working to reduce the threats posed by stockpiles of nuclear material in the former Soviet Union.

I am looking forward to hearing our distinguished speakers today and especially for the opportunity to learn how we can most effectively reduce the grave threats we face as a result of weapons of mass destruction.

PREPARED STATEMENT OF AMBASSADOR KARL F. Inderfurth, Nuclear Threat Reduction Campaign

MAY 8, 2003

Chairmen Bereuter and Gallegly, Ranking Members Wexler and Sherman, Members of the Committee:

Thank you for this opportunity to submit this statement for this joint hearing on U.S. Cooperative Threat Reduction and Nonproliferation Programs. The people of the United States are fortunate to have foresighted leaders such as you examining how best to address the most pressing security concern facing the United States—preventing nuclear weapons from falling into the hands of terrorists and states that wish us deadly harm.

I serve as Senior Advisor to the Nuclear Threat Reduction Campaign (NTRC), a joint project of the Vietnam Veterans of America Foundation and The Justice Project. NTRC works to strengthen bipartisan support for programs and activities that address the threat of weapons of mass destruction. NTRC's unique approach focuses on research and education aimed at galvanizing congressional and public support to work toward pragmatic and effective measures that will steadily reduce the threats posed by nuclear, biological, and chemical weapons.

Current events have made the threat of weapons of mass destruction a leading concern for most Americans. Experts agree that the most important step that the United States can take toward addressing these threats is to encourage international cooperative efforts to account for, secure, and reduce weapons of mass destruction. For less than one percent of the U.S. defense budget, we can eliminate 95 percent of the threat. At present, the U.S. government plans to spend less than one-quarter of one percent to address what the CIA and others believe is the most urgent unmet security concern facing our country.

I would like to focus my remarks on two primary topics: first, a strongly-supported bipartisan bill (H.R. 1719) that contains a number of proposals that could measurably reduce the threat of weapons of mass destruction (WMD) and second, a proposal that will ensure that WMD threat reduction receives the sustained high-level attention that the issue demands.

H.R. 1719, the Nuclear Security Initiative Act of 2003, was introduced on April 10, by Congressman Curt Weldon (R-PA) with the strong support of 23 cosponsors from both sides of the aisle. This bill, with provisions aimed at creating and accelerating programs to reduce the possibility that terrorists or potentially hostile nations will get their hands on the materials and know how for making nuclear weapons and other weapons of mass destruction could make a tremendous difference in keeping America free from catastrophic terrorism.

Key provisions of H.R. 1719 would:

- Provide for acceleration of the Department of Energy's (DOE's) International Materials Protection and Cooperation program (MPC&A) to quickly install

basic security measures at all nuclear weapons and materials storage facilities in the former Soviet Union (FSU).

- Expand the MPC&A program beyond the FSU and provide the tools for a global cleanout of nuclear materials from highly vulnerable research reactors and other facilities around the world.
- Accelerate DOE's Russian Transition Initiative (RTI) program to end warhead production and maintenance activities at two of its four nuclear weapons plants.
- Improve the security of radiological materials in the former Soviet Union (FSU). Thus, the bill provides for an acceleration of efforts to reduce the threat posed by insecure radioactive materials in the FSU that could be used in radiological dispersal devices ("dirty bombs").
- Accelerate the new program for blending down highly enriched uranium (HEU). The National Defense Authorization Act for Fiscal Year 2003 (sec. 3157) authorized a program of accelerated disposition of Russia's HEU as a supplement to the 1993 U.S.-Russia agreement for blending-down HEU in Russia and selling the resultant fuel to nuclear power plants in the United States.
- Improve measures to track and intercept illicit transfers of weapons of mass destruction and the materials and technology for building them, including our work with international partners to install, at critical international ports, devices to detect and intercept illicit transfers.
- Enhance the RTI program efforts to create sustainable commercial jobs for weapons of mass destruction scientists, engineers, and technicians.
- Establish a "Silk Road" Initiative (SRI)—a new program of additional assistance to FSU countries that, in addition to Russia, have helped out in the war against terrorism. The SRI would provide additional assistance to these states to develop sustainable employment opportunities for scientists, engineers and technicians formerly employed in the production of weapons of mass destruction.
- Improve the NATO Science for Peace program by identifying projects that offer prospects of commercialization with U.S. companies and assist in developing future projects with commercial potential.
- Authorize an analysis of the obstacles to effective implementation of threat-reduction and nonproliferation programs in the FSU and potential means for overcoming those obstacles.
- Require a comprehensive plan for chemical and biological weapons nonproliferation programs in the states of the former Soviet Union and designation of a senior official to coordinate those programs.
- Require the U.S. to work with Russia in developing comprehensive inventories of U.S. and Russian weapon-grade nuclear materials and assembled warheads, with particular attention to tactical warheads and provide for ongoing exchanges of the resultant data.
- Establish a Nuclear Threat Reduction Working Group as an official inter-parliamentary exchange between the United States Congress and the Russian Duma.
- Encourage continued development of the Russian-American Observation Satellite (RAMOS) program and similar efforts that would strengthen U.S. national security by helping Russia to have more capable and reliable missile early-warning systems.
- Establish the Teller-Kurchatov Alliance for Peace to advance the peaceful, safe and environmentally sensitive uses of nuclear power.
- Authorize international exchange fellowships in the nuclear nonproliferation sciences to scientists employed at the Kurchatov Institute and the Lawrence Livermore National Laboratory.
- Initiate discussions between the IAEA and the OECD on nuclear and radiological security and safety. Addressing issues of nuclear weapons and materials, as well as the issue of radiological dispersal bombs, in new forums could help generate innovative mechanisms for combating the threats.

The second issue that I would like to focus on is an NTRC proposal to ensure that the threat of nuclear terrorism receives the sustained high-level attention that it deserves and that an overarching strategic plan is put in place to ensure that our efforts are functioning as efficiently and effectively as possible. NTRC's proposal is in

line with both the most important recommendation of the recent report of Harvard's Project on Managing the Atom, commissioned by the Nuclear Threat Initiative and entitled "Controlling Nuclear Warheads and Materials," and the recommendation of the Baker-Cutler Bi-Partisan Task Force. Thus, we urge that the Congress enact legislation establishing in the White House a National Office for Preventing Nuclear Terrorism (legislative proposal attached). This Office would be headed by a Director appointed by the President, by and with the advice and consent of the Senate. The Director would have the responsibility to develop a comprehensive "Nuclear Terrorism Prevention Strategy," which would encompass all of our nuclear cooperative threat-reduction and nonproliferation programs, and to provide Congress annual reports on the Strategy and its implementation.

In addition, the Director, subject to the direction and control of the President, would have the following responsibilities:

- (1) develop policies, goals, objectives, and priorities for the United States for the prevention of nuclear terrorism;
- (2) serve as the principal advisor to the President on these matters;
- (3) coordinate, oversee, and evaluate the implementation of the Nuclear Terrorism Prevention Strategy;
- (4) coordinate the development of a comprehensive annual budget for the programs and activities under the Strategy; and
- (5) certify to the President whether or not the budget is consistent with and adequate for carrying out the Strategy.

The Director would also be charged, in consultation with the Secretary of State, with providing leadership for a global coalition of nations committed to preventing nuclear terrorism.

In order to carry out these momentous responsibilities, the Director would have the authority to transfer between accounts and agencies funds appropriated for nuclear terrorism prevention and associated other resources, and to detail personnel, when the Director makes a written determination that doing so is necessary in order to—

- (A) respond to an emergent risk of proliferation;
- (B) eliminate duplication of effort; or
- (C) significantly increase programmatic efficiency.

Also, in order to promote the high-level of political attention needed on the Russian side, the President would be directed personally to request Russia's President to designate an official having authorities and responsibilities for nuclear terrorism prevention commensurate with those of the Director of the U.S. National Office and with whom the Director should coordinate with respect to activities in Russia.

By enacting the steps called for in H.R. 1719 and in NTRC's draft legislation for creating a National Office for Preventing Nuclear Terrorism, the Congress would be taking major steps forward toward making the United States much better prepared than we are today to prevent nuclear weapons from being acquired by those who would inflict catastrophic harm on the American people and our friends and allies.

PREPARED STATEMENT OF THE HONORABLE THOMAS G. TANCREDO, A
REPRESENTATIVE IN CONGRESS FROM THE STATE OF COLORADO

MAY 14, 2003

Thank you Mr. Chairman and thank you for scheduling this hearing. I am pleased to be here today and would like to share with you and with the subcommittee some of my thoughts on the practical implementation of the Cooperative Threat Reduction initiative and some of the problems the initiative has encountered.

Experience to date has demonstrated that the Cooperative Threat Reduction Initiative could achieve the purpose for which it was conceived, to assist the former Soviet republics with the safe and secure transportation and disposal of nuclear and other weapons. The importance of such an initiative is very clear, especially in light of recent and current events. I believe, however, that the United States has so far failed to establish program incentives that would effectively deter Russian activities that are inconsistent with the interests of the United States.

A good example of these practical implementation problems I speak of is the current difficulty with the Solid Rocket Motor Disposition Program (SRMD) in Russia. The approach to Solid Rocket Motor Disposition has been developed and tested in the United States. The motor is placed in a firing chamber, the end covers are re-

moved to reduce thrust, and the motor is fired. The toxic exhaust is then neutralized by dousing the motor with chemicals and running the exhaust through scrubbers.

Russia has asked for assistance in constructing a similar facility to eliminate their large inventory of overage motors (they had previously disposed of these motors in an open pit which resulted in the release of a large volume of toxic gases into the atmosphere). The Department of Defense subsequently agreed to provide assistance to Russia within the framework of the Cooperative Threat Reduction initiative. While I am heartened by the fact that Russia is becoming an active participant in the elimination of nuclear and other weapons, the construction of this facility under the framework of the Cooperative Threat Reduction initiative has posed a number of problems that seem to be in conflict with the mission of CTR.

First and foremost, Russian incentives seem to be in conflict with the goals of the United States under CTR. In this case, American participants created a system of milestones for US contractors yet failed to do so for the Russian participants even though this initiative is just as important for Russia as it is for the United States. As a result, there is no counterbalance to the natural tendency of the Russian enterprises to expand the scope of the work, to increase their monetary intake, and to provide support for their entire establishment.

Insufficient attention has also been paid to the effect of American assistance. In doing so, American dollars wind up artificially and unnecessarily supporting the existing Russian military design complex. While the stated task of CTR has been to help in the disposal of nuclear weapons and in doing so prevent Russian defense scientists from assisting rogue states, the effect has instead been to provide financial support to these research facilities thereby allowing them to potentially pursue proliferation with rogue states.

Solid Rocket Motor Disposition is also a good example of some of the unintended consequences of the Cooperative Threat Reduction initiative. It appears that in the production of this disposal facility, the Russians may also be trying to produce a facility which could be used for Solid Rocket Motor *testing* as well as disposal. This could easily be achieved by lengthening and reinforcing the Firing Chamber. If the Russians are to be successful in developing the dual use capabilities of this facility, they could effectively advance future Russian ballistic missile efforts. Clearly this would run contrary to the stated goals of the Cooperative Threat Reduction program.

Corruption with the Cooperative Threat Reduction initiative has also plagued the Solid Rocket Motors Disposition program, as it has so many other CTR initiatives. In this case, the Russian contribution to the joint project was to be a grant of the land for the site of the project. The land estrangement, however, needed for construction permits, has not been completed as a result of attempts by local Russian authorities, with the complicity of Russian project participants, to enormously inflate the value of the land.

Lastly, I fear that while well intended, the project does not reduce any overall threat. The Solid Rocket Motors that would be disposed of in these facilities are already overage and therefore do not present a viable threat. As to the other CTR goals of preventing proliferation, the Solid Rocket Motors are highly unlikely candidates for covert transfer. The recent slate of espionage trails in Russia shows that when Russian security services indent to prevent technology transfers, they are quite capable of doing so without the benefit of American funding or assistance.

Please let me stress that my apprehension and concerns about the state of current projects does not mean that I am opposed to furthering the Cooperative Threat Reduction initiative or to its goals. Instead, I believe that future CTR projects should be subject to a number of new guidelines. Specifically, a system of financial and administrative awards and penalties needs to be imposed on the Russian participants requiring them to deliver results in a timely and budgetary manner. Additionally, a critical analysis of all project participants should be performed. Specifically, the vetting of Russian participants should rely not only on the previous performance statements from American contractors affiliated with the project, but also on objective analysis conducted by an independent organization that does not stand to benefit from the future contract.

Facility development also needs to be accompanied by all necessary Russian paperwork (permits and licenses) prior to the commencement of the project (or phase of the project) to eliminate possible corruption and waste in the program. Additionally, methods to determine that project generated revenue is not used for other Russian interests such as a critical control point analysis should be developed. Lastly, the United States must insist on complete Russian compliance with all of the terms of the Cooperative Threat Reduction agreements. Without doing so, I fear that the goals of the Cooperative Threat Reduction initiative may never be reached.

Thank you and I yield back the balance of my time.

PREPARED STATEMENT OF THE HONORABLE NICK SMITH, A REPRESENTATIVE IN
CONGRESS FROM THE STATE OF MICHIGAN

MAY 14, 2003

I want to thank Chairman Bereuter and Chairman Gallegly for holding this hearing today on Cooperative Threat Reduction programs in Russia. I would also like to thank our distinguished witnesses for joining us.

In 1991, I met with the mayor of Moscow in Russia. I asked the question of how the city would cope with crime as the country adjusted to privatization. The answer was they have not had a problem with crime and they did not expect to in the future. In 1993, Senators Nunn and Lugar predicted, with great foresight, dangers of today's world. First, they understood that the countries of the former Soviet Union would struggle with corruption, a lack of government transparency, and an incomplete capacity to enforce their will within their own borders. Second, they understood that the Soviet weapons of mass destruction that had been deployed in these countries were a great danger because the governments may not control the weapons appropriately. Therefore, these Senators created the Cooperative Threat Reduction Program, better known as Nunn-Lugar, to decommission the entire process of the research, production, and deployment of nuclear, biological, and chemical weapons.

Last week, we held the first part of this hearing with government officials. These programs have seen dramatic successes and spectacular. Today, Kazakhstan is a poster-child for nuclear disarmament. On the other hand, as Under-Secretary Bronson told us, the Department of Defense is trying to understand how \$100 million of American taxpayer money was spent on a Russian rocket fuel reprocessing plant that may never be turned on. Clearly, much can be done to make this effort more effective in Russia and other countries of the former Soviet Union.

Our fundamental problems in Russia have been managing materials, information, and people. For example, there is consensus that the Russians have underreported chemical weapons stores. Abstractly, this would be troubling. But the details are much worse. They have reported to us 40,000 tons of chemical weapons. Unfortunately, most publicly available estimates are significantly higher, ranging between 70,000 and 130,000 tons. This is very alarming and not unique to chemical weapons. Here, and with the rocket fuel reprocessing plant, the Russians have a problem sharing information. Fortunately, there are hopes in another part of the supply problem. The Civilian Research and Development Foundation, funded with money from the Departments of State, Defense, Energy, and also NSF, NIST, and a number of NGOs, has been very successful at turning weapons scientists into successful, and peaceful, private-sector researchers.

Many of these lessons will need to be applied in quite different contexts in the future. The Soviet Union was a unique country with almost unthinkable numbers of weapons, all managed in a highly centralized and well-documented system. This is in sharp contrast to Iraq, with its weapons labs built into truck trailers, or Afghanistan, with its laboratories run by a shadowy terrorist organization. The good news is that if we succeed in Russia, we will have dramatically improved the safety of the world. The bad news is that the next step, managing Iraqs and Afghanistans, will be much, much harder.

Again, I would like to thank the Chairmen for holding these hearings on these important programs. We have much work to do, as we continue to implement the ideas of Senators Nunn and Lugar in our changing world.

PREPARED STATEMENT OF THE HONORABLE JOSEPH R. PITTS, A REPRESENTATIVE IN
CONGRESS FROM THE STATE OF PENNSYLVANIA

MAY 14, 2003

Chairman Bereuter and Chairman Gallegly, I would like to thank you for convening Part II of this hearing today, on an issue of such great national importance and national security.

As I have stated previously, in this post-September 11th world, we have become even more aware of the threats posed by the proliferation of nuclear weapons to rogue states and terrorist groups.

Even as we speak, our country is at risk. North Korea has recently confirmed that it possesses nuclear weapons and is reprocessing fuel rods. Iranian officials have re-

ported that North Korean scientists are assisting them in their country's drive to possess these deadly weapons.

And in Russia and the former Soviet states, nuclear facilities, with their crumbling security and lack of accounting procedures, provide a potential source for terrorists seeking nuclear weapons. The possibility that nuclear materials or weapons might be lost, stolen, or sold on the black market, or that nuclear scientists and technicians might be tempted to sell their knowledge to nations seeking to develop these weapons, is very real.

As you know, Congress established the Nunn-Lugar Cooperative Threat Reduction (CTR) Program in November 1991, after a failed coup in Moscow in August of that year and the subsequent disintegration of the Soviet Union had raised concerns about the safety and security of Soviet nuclear weapons.

Congress responded by authorizing the use of \$400 million in FY1992 Department of Defense funds to assist with the safe and secure transportation, storage, and dismantlement of nuclear, chemical, and other weapons. Congress appropriated an additional \$300 to \$400 million per year for the CTR programs between FY1993 and FY1998. It added \$440.4 million in DOD funds for FY1999, \$475.5 million in FY2000, and \$443.4 million in FY2001 and \$403 million in FY2002.

Most of these funds support projects in Russia, Ukraine, Belarus and Kazakhstan—the four nations that had Soviet nuclear weapons on their territories—but Congress has also authorized their use for projects and military contacts in other former Soviet republics.

The CTR programs seek to reduce the threat to the United States from nuclear and other weapons in the former Soviet Union. Towards this end, the programs focus on four key objectives: (1) Destroy nuclear, chemical, and other weapons of mass destruction; (2) Transport, store, disable, and safeguard these weapons in connection with their destruction; (3) Establish verifiable safeguards against the proliferation of these weapons, their components, and weapons-usable materials; and (4) Prevent the diversion of scientific expertise that could contribute to weapons programs in other nations.

I welcome the opportunity today to hear testimony on the status and effectiveness of the cooperative threat reduction and non-proliferation programs administered by the various Department of the United States government, and to discuss what the future of the CRT program should be.

Thank you. I yield back my time.

PREPARED STATEMENT OF THE HONORABLE ROBERT WEXLER, A REPRESENTATIVE IN
CONGRESS FROM THE STATE OF FLORIDA

MAY 14, 2003

Chairman Gallegly, Chairman Berueter, and Ranking Member Sherman,

I want to thank you for holding today's joint hearing. This hearing is the second meeting focusing on the Nunn-Lugar Cooperative Threat Reduction Program and I look forward to hearing from these distinguished witnesses who will shed light and provide guidance to Congress as we seek to redouble our efforts to address one of our nation's most critical security missions—to destroy, deter and prevent the proliferation of weapons of mass destruction, technology and expertise in Russia and former Soviet states.

The mission in carrying out the Nunn-Lugar Cooperative Threat Reduction Program has taken on even greater national and international priority following the events of September 11 and the all too imaginable scenario of a rogue terrorist organization like Al Qaeda seizing weapons of mass destruction and using them to cause maximum harm, death and destruction.

This very scenario was used, in part, by the current Administration to rally the American public and explain why it was necessary to forcibly disarm Saddam Hussein during Operation Enduring Freedom. I would also suggest that the same fears can be applied to the regime in North Korea, which remains the world's biggest proliferator of weapons of mass destruction and Iran, the leading state sponsor of terror, which is according to leading arms experts close to realizing its ambition of being a nuclear power. The latter example is particularly relevant to today's hearing because of the continued connection between Russia and Iran's nuclear weapons program.

Much has been accomplished between the United States and Russia as well as between the United States and several other former Soviet States since Congress established Nunn-Lugar in 1991. There has been significant success in terms of our threat reduction programs in three former Soviet states, Kazakhstan, Ukraine and

Belarus. In 1992, these nations, with the promise of Cooperative Threat Reduction assistance, agreed to return to Russia the nuclear weapons they had inherited from the Soviet Union. Through Nunn-Lugar the United States has successfully employed hundreds of out of work Russian scientists who formerly worked in the Russian nuclear weapons program.

In addition, according to a recent General Accounting Office report “the 1.8 billion obligated by DOD and DOE from 1992 to 2002, has helped improve security at dozens of sites across Russia. Portions of Russia’s weapon-usable nuclear material, nuclear warheads, dangerous biological pathogens, and chemical weapons are now more secure against the threat of theft or diversion.” However despite these significant accomplishments there remains many dangers and willing buyers who are attempting to secure weapons of mass destruction, materials, technology and expertise. The Russian Federation still remains home to the world’s largest stockpile of weapons of mass destruction.

One of our greatest challenges over the next ten years, and one in which I hope Administration officials will address, is what steps must be taken to improve security at poorly secured Russian weapon sites. It is self evident that we must move with an even greater sense of urgency to provide security at these Russian sites and gain greater cooperation from the Russian Federation in providing access to the 49 weapons sites where our two nations have collaborative programs.

I would be remiss if I did not express my deep misgivings concerning Russia’s compliance with its arms control obligations. The Russian government has time and again turned a blind eye toward Russian companies assisting nations like Iran with their nuclear weapons programs. I am increasingly concerned that Russia’s indifference to American pleas to halt this assistance is a clear signal that Moscow is not fully committed to threat reduction and non-proliferation programs. It is incumbent on the Administration and Congress to persuade Moscow that weapons of mass destruction in the wrong hands threaten not only America but Russia as well. Moscow which has battled terrorism on its own soil should not be lulled into thinking that their cities are safe from terrorists with weapons of mass destruction. According to the 2001 Baker/Cutler task force, Chechen terrorists have already threatened to spread radioactive material around Moscow.

Mr. Chairman, it is going to take a greater effort from the Bush Administration and Congress, greater cooperation from the Russians, and more funding to complete Nunn-Lugar Programs in Russia and in the former Soviet States.

I hope the witnesses here today further elaborate on how we can best address the challenges and obstacles the Nunn-Lugar face. In addition, I look forward to hearing their testimony concerning a recent GAO which assesses U.S. efforts as well as Russian obstacles to improving security at Russian weapons sites. I strongly believe that our non-proliferation policies and cooperative threat reduction programs need to be revamped and expanded in order to address the threats posed by weapons of mass destruction in the hands of rogue terrorists and rogue states. Finally, I am curious to hear the panels views on expanding the Nunn-Lugar program beyond Russia and the former Soviet Union. Thank you.

QUESTIONS SUBMITTED FOR THE RECORD TO LISA BRONSON, DEPUTY UNDER SECRETARY OF DEFENSE FOR TECHNOLOGY SECURITY POLICY AND COUNTERPROLIFERATION, U.S. DEPARTMENT OF DEFENSE, BY THE MEMBERS OF THE SUBCOMMITTEE ON EUROPE, COMMITTEE ON INTERNATIONAL RELATIONS, AND MS. BRONSON’S RESPONSES

Question:

I am calling for the Administration to attempt to reach an accord with the Russians, which at least provides for an accounting of tactical nuclear weapons on both sides. Without this, I am afraid that the most threatening aspect of the Russian arsenal already assembled and poorly secured nuclear weapons ripe for the taking may be neglected. Will this Administration attempt to reach such an accord with the Russian Federation?

Ms. Bronson’s Response:

I am not aware of any initiative currently underway to reach such an accord with the Russian Federation. However, since 2000 the Cooperative Threat Reduction program has been assisting the Russian Federation to transport both strategic and tactical nuclear weapons from their current locations to dismantlement facilities or to security-enhanced consolidated storage sites. To date, DoD has assisted with transportation of more than 3,500 warheads.

Question:

What are the roadblocks (past and present) which have prevented such an agreement?

Ms. Bronson's Response:

Both the United States and the Russian Federation recognize the importance of nuclear weapons to their security. For security reasons, both countries are reluctant to provide to any other nation the specific numbers, types and locations of warheads that they possess. A second, but equally important challenge to any kind of agreement on accounting is deciding what criteria and what measurements would be applied in order to verify that each declared warhead is actually a warhead.

Question:

It has come to my attention that we do not provide assistance to Russia to increase security for tactical nukes at forward-based facilities. Is there a sufficiently valid rationale for continuing such a policy?

Ms. Bronson's Response:

This Administration is prepared to provide security enhancements to tactical nuclear weapons located at all storage sites. Both the Department of Defense and the Department of Energy are working with the Russian Ministry of Defense to install such security enhancements, and have been doing so since 1998. Recently, the Administration developed guidelines for warhead security assistance to Russia that recognize the importance of enhancing security for all nuclear weapons storage sites. These guidelines do not provide for enhancing security of nuclear weapons outside storage sites, except in support of transportation to dismantlement facilities or to consolidate the warheads at more secure storage sites. However, Russia has stated that it is abiding by the Presidents' Nuclear Initiatives from the early 1990s, which means that all ground- and sea-launched tactical nuclear weapons should be in centralized storage locations and not at operational locations.

Question:

What type of help can we provide to the Russians which would secure these warheads without jeopardizing our interests?

Ms. Bronson's Response:

This type of assistance is described in the answer to the previous question.

Question:

There was much controversy last year over the waiver and certification process for Russian compliance with arms control commitments for the expenditure of CTR funds, which caused a delay in the expenditure of CTR funds. While there is currently a three-year waiver authority in effect for the president to utilize, Congress may address this issue again this year and will, in any event, need to address the issue when the current waiver authority expires. Does the Department have a position on how the certification process and waiver authority should be crafted going forward?

Ms. Bronson's Response:

As I stated in my testimony, we believe the President should have permanent waiver authority for the CTR conditions. As the President has repeatedly emphasized and as the Senate made clear in its ratification of the Moscow Treaty, CTR programs are very important to our overall effort to reduce and prevent the proliferation of WMD. This does not in any way lessen the importance we place on CTR recipients meeting the conditions embedded in the certification requirement. However, permanent waiver authority will enable the Administration to work with recipients toward that end without sacrificing or delaying CTR weapons reduction and nonproliferation projects. It represents an important element of flexibility that the Administration should be able to use in its management of foreign and national security interests.

QUESTION SUBMITTED FOR THE RECORD TO KENNETH E. BAKER, PRINCIPAL ASSISTANT DEPUTY ADMINISTRATOR FOR DEFENSE AND NONPROLIFERATION, U.S. DEPARTMENT OF ENERGY, BY THE MEMBERS OF THE SUBCOMMITTEE ON EUROPE, COMMITTEE ON INTERNATIONAL RELATIONS, AND MR. BAKER'S RESPONSE

NONPROLIFERATION GENERAL

Question:

In the past, most U.S. threat reduction projects that have sought to consolidate and destroy weapons and materials so that they would not leak out of the former Soviet Union. In other words, we have sought to contain material at their source—at the military bases and research facilities where WMDs are found.

Some have argued that this Administration is taking a different approach (with programs such as the WMD Proliferation Prevention Project and the program will search for radiological sources). They seem to operate on the principle that the materials have already begun to leak out and that former Soviet States should set up barriers further out to prevent these resources from leaving the territory of the former Soviet Union. Obviously, these two approaches are complimentary, providing two lines of defenses against the leakage of weapons and materials.

Would you comment on which of these two strategies should be receiving greater attention and funding?

Mr. Baker's Response:

The funding and priorities of the Administration are appropriate to support the defense in-depth approach of erecting a myriad of programs to defend the United States against the dangerous, complex threat posed by the proliferation weapons of mass destruction (WMD).

The materials security efforts, the first line of defense, continue to progress on accelerated timetables and with ample funding to complete the work. In recent years, other "lines of defense" include securing former weapons scientists and improving border security in Russia, the former Soviet Union (FSU) and the rest of the world. A number of new initiatives will address other vulnerabilities, such as securing radiological sources and equipping foreign seaports with radiation detection capabilities to prescreen containers destined for the United States. All of these efforts are fully supported by the Administration in the FY 04 budget request. The Department will continue to work with its interagency partners to lower the threat posed by WMD.

QUESTIONS SUBMITTED FOR THE RECORD TO THE HONORABLE JOHN S. WOLF, ASSISTANT SECRETARY, BUREAU OF NONPROLIFERATION, U.S. DEPARTMENT OF STATE, BY THE MEMBERS OF THE SUBCOMMITTEE ON EUROPE, COMMITTEE ON INTERNATIONAL RELATIONS

Questions:

(1) Last year, the immigration law was changed to make it easier for former weapons scientists from Russia to enter the U.S? Has this program been implemented? Is there anything else that can be done to we can do to help these former scientists to find employment so they will not be tempted to sell their services and knowledge to either terrorist organizations or rogue states?

(2) In the "10+10 over 10" initiative, our allies pledged to match our commitment of \$10 billion over 10 years.

- Is this \$10B considered a floor or a ceiling?*
- How much of the overall non-proliferation effort is dependent upon their participation?*
- What mechanisms do we have to ensure they carry out their pledges?*
- Can you outline for us what each Member of the G-8 has pledged?*

(3) Under the 10+10 Over 10 Agreement, each nation, on its own, will set the contribution level and negotiate agreement for projects with Russia. Some have expressed concerns that, as a result, the coordination between countries will not be sufficient to avoid overlap and duplication or facilitate the implementation of key projects where the U.S. cannot act.

- Would you care to respond to these concerns?*

(4) Are the projects identified for funding in G-8 statements the most urgent priorities for global nonproliferation?

(5) Senator Richard Lugar has suggested that the U.S. use up to \$50 million each year in unexpended CTR funds to address proliferation threats outside the former Soviet Union. In the Fiscal Year 2003 Supplemental Appropriations Bill, such a provision was deleted in the Conference Report. Senator Lugar has stated that he intends to introduce this authority again during consideration of the FY 2004 Defense Authorization Bill. Would you like to comment on this proposal by Senator Lugar and in which countries would the \$50 million likely be targeted?

(6) Could debt swaps be used to finance Global Partnership projects through the creation of a multilateral Russia Nonproliferation Fund?

(7) Can you explain what the CTR Umbrella Agreement is? Has Russia ratified the CTR Umbrella Agreement? Are they planning to?

Responses:

NOTE: At the time these hearings were sent to press, the Committee had received no responses from Mr. Wolf.

