## NONPROLIFERATION AND THE G-8

## **HEARING**

BEFORE THE

## SUBCOMMITTEE ON INTERNATIONAL TERRORISM AND NONPROLIFERATION

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#### NONPROLIFERATION AND THE G-8

#### THURSDAY, JUNE 30, 2005

House of Representatives,
Subcommittee on International Terrorism
AND Nonproliferation,
Committee on International Relations,
Washington, DC.

The Subcommittee met, pursuant to notice, at 2:55 p.m. in room 2255, Rayburn House Office Building, Hon. Edward R. Royce (Chairman of the Subcommittee) presiding.

Mr. ROYCE. This hearing of the Subcommittee will come to order. Our hearing today is on Nonproliferation and the G-8. Next week, the G-8 heads of state will meet in Gleneagles, Scotland, and this annual summit's focus will be on Africa, and it will be on climate change. Having chaired the Africa Subcommittee, I particularly welcome the attention to the African continent that the G-8 is going to give.

Another important issue to be addressed, one that has received less press attention, is the G-8's 3-year-old Global Partnership Against the Spread of Weapons and Materials of Mass Destruction.

Meeting in Canada back in 2002, right after 9/11, the world's leading industrial countries rightly decided to act to see that WMD material does not fall into terrorist hands. The G–8 countries pledged to spend \$20 billion collectively over the next 10 years in Russia and in the former Soviet States on "Nunn-Lugar"-type programs, and these are called Cooperative Threat Reduction programs. These are programs that the United States pioneered back in the 1990s. These programs have managed to better secure hundreds of tons of nuclear material, deactivate or eliminate thousands of nuclear weapons, and deter scientists and technicians from peddling their WMD expertise to rogue states and terrorists.

The U.S.'s pledge to all of this was \$10 billion, \$1 billion a year, which is roughly the amount we spend on those efforts. Other G–8 countries have been less supportive. To date, while some \$17 billion has been pledged, far less actually has been spent on programs. As one witness will testify, outputs have not matched inputs.

Some cooperative threat reduction programs have run into bureaucratic, legal and political roadblocks. The Russian Government has been uncooperative in some cases, calling into question its commitment to the Partnership, of which it is part. The United States and other countries, though, haven't always been attuned to Russian concerns. To my thinking, even with the problems, these programs are a demonstration of how international cooperation can improve international security. Given Cold War-era animosities

and the suspicions that naturally surround these sensitive weapons and facilities, we could have seen far less progress since the Soviet

Union's collapse.

More needs to be done, though, and with a sense of urgency. We can be all but sure that terrorists are seeking WMD capabilities. We know that WMD materials are proliferating. These programs are only one part of our efforts against proliferation, but they are an important part. Arguments that they should be conditioned on Russian cooperation in other areas have a high hurdle to jump—these efforts are critically important.

The Partnership has internationalized cooperative threat reduction, which used to be a game for only the United States and Russia. This is a good thing if the Partnership reaches its potential of bettering coordination, streamlining, dividing responsibilities, forging common views, and prodding countries to contribute to this critical effort. The Partnership should be doing much better.

It is unclear how much attention the Partnership will receive next week or, more importantly, what concrete actions will come out of the summit. The core theme of this Partnership meeting will be "Pledges Into Progress," ironing out obstacles to progress so that more programs can begin. Solving the liability issue that has frustrated plutonium disposition efforts would be a big breakthrough. As with past G–8 summits, a final statement on nonproliferation will be issued, though the host British Government reportedly resisted a statement initially, wanting to keep the summit focused on Africa and climate change. Some now wonder if the Global Partnership is losing steam.

Last week, while discussing the Africa agenda for the G-8, Bono mentioned that the European countries put great stock in G-8 summits. He called these annual meetings the "Super Bowl." I don't know about that comparison, but it is important that we do all that we can to use this opportunity to build momentum for the Partnership, which was established through U.S. leadership, and which is addressing issues critical to comparison of security.

which is addressing issues critical to our national security.

I will now turn to the Ranking Member for him to make an opening statement, Mr. Brad Sherman, from Sherman Oaks, California.

Mr. Sherman. I thank the gentleman from Fullerton,

California, for holding these hearings on the cooperative efforts of the United States and its G–8 partners to secure and dispose of nuclear and other dangerous materials and weapons in Russia, and now in some other countries even beyond the former Soviet Union.

Unfortunately, I have got two competing hearings, so I will not be here for this entire hearing. On the other hand, I am told there will be a transcript available for me to read either on the plane to California or at least by the time I am on the plane back.

The United States, as the Chairman has pointed out, spends about a billion dollars per year on the cooperative threat reduction, the so-called Nunn-Lugar program. That is generally what is requested by the Administration, despite the best efforts of some of us to actually increase that funding. Usually, what the Administration requests is all that gets funded.

According to the Congressional Research Service, the other members of the G–8 minus Russia, what we used to call the G–7, have spent a combined total of \$1 billion from 1992 to 2002. That is to

say, the other six of the G-7 combined have put in one-tenth of

what one nation, the United States, has put in, roughly.

Recognizing that our allies' efforts were woefully inadequate and in the wake of September 11, the Bush Administration wisely proposed that our friends do more; and at the June 2002 G–8 Summit, the United States secured a 10 plus 10 over 10 arrangement by which the U.S. would continue its roughly \$1 billion a year, and the rest of the G–7 would contribute collectively \$10 billion to similar efforts in the 10 years that followed. However, only \$7 billion to date has been pledged by countries in the Global Partnership other than the United States; and only a tiny fraction of that has been expended on helping Russia and other countries that deal with stockpiles of nuclear and other materials.

Also, I should point out this Global Partnership now includes 17 countries outside the G-8.

Now, in the mind of our allies, it seems that as each new country joins, there is a reason for them to decrease their financial commitment. So, as other countries come in, such countries as France and Germany and Japan don't see their contributions as additive to make the program larger, nor as part of one fixed pie that would reduce both United States and other G-7 contributions, but, somehow, those contributions are only supposed to reduce the contributions of G-7 countries other than the United States.

In a hearing by this Subcommittee in 2003, I expressed doubts that we would ever obtain the \$10 billion from the G–7 allies of the United States; and unless we redouble our efforts, my doubts will prove to be well placed.

I think we should insist that the Global Partnership contributions made by countries that are outside the G-8 not be counted against the \$10 billion goal of our six largest friends in the G-7.

Now why is involvement of these other countries so important? We need their money, and we also need to involve them because the Russian military and security officials distrust the United States above all.

While I am disappointed that we are kind of fudging on the \$10 billion goal by counting the commitments of these newer participants, obtaining the involvement of countries that were not arrayed against the Soviet Union in the Cold War's importance to involve Sweden, Switzerland and Ireland, for example, is to allow Russian security officials to deal with those who were not their adversaries during the Cold War.

Less than half of Russia's estimated 750 plus metric tons of highly-enriched uranium and plutonium has been secured. Many of Russia's storage facilities for nuclear weapons remain unsecured. We do not know how many tactical nuclear weapons they have. We know they have got tens of thousands, and this is the dream weapon of a terrorist.

We are often told that United States and Russian leaders are in agreement about the need to fully cooperate. We are told the problem is on the ground with bureaucracy. Leaving aside the problem of liability, our efforts are hampered because we don't get access to the Russian sites. As I mentioned, Russian military officials don't trust us. We have got to do everything possible to build that

trust, either with us or with technologically competent nations, per-

haps some of those that are new to this process.

I want to ask the witnesses to what extent we are involving these other countries, countries Russia may feel more comfortable showing their sites to. I also want to point out I have never used the term in this opening statement "WMD," because, frankly, I think the focus needs to be on nuclear. We have got to show our willingness to cooperate with Russia on nuclear issues and on their rights under the various limitation agreements on nuclear weapons. We should be able to show the world that we have security over our nuclear stockpiles.

And, finally, in other areas, when I see the United States take a, frankly, anti-Russian approach, such as the Makhachkala-Ceylan pipeline in which we announced to the world what we were doing so that the oil would not have to flow through Russia, I think thinking like that: Cold War Russia is an adversary, compete with Russia for geopolitical influence, that kind of thinking is extremely harmful to the security of the American people, given the fact that it only takes one terrorist with one of these tactical weapons to

pose a much greater threat to us than we could imagine.

I yield back.

Mr. ROYCE. Thank you very much, Mr. Sherman.

We have a really outstanding panel here today, and we are enthusiastic about hearing your testimony. Now we've already read your testimony, so I am going to suggest that you focus on the highlights. And you all are spared by the fact that the timer is broken today, but you will hear the gavel. So if I could ask you to summarize to the main points so we can get to questions and answers. And thank you again.

We are going to start with Ms. Michèle Flournoy. She is a Senior Advisor to the International Security Program of the Center for Strategic and International Studies. Prior to joining CSIS, she worked as a professor at the National Defense University and served as a Principal Deputy Assistant Secretary for Strategy and Threat Reduction and a Deputy Assistant Secretary for Strategy at

the Department of Defense.

We will hear next, after Michèle, from Leonard Spector. He is the Deputy Director of the Monterey Institute for International Studies' Center for Nonproliferation Studies. He is the Editor-in-Chief of the Center's publications. Prior to joining the Monterey Institute, he was an Assistant Deputy Administrator for Arms Control and Nonproliferation at the National Nuclear Security Administration, which is part of the Department of Energy. At the Department of Energy, he oversaw arms control and nonproliferation programs.

Then Mr. Baker Spring is the F.M. Kirby Research Fellow in National Security Policy at The Heritage Foundation where he specializes in defense spending and ballistic missile defense. Prior to joining Heritage, Mr. Spring worked as a Defense and Foreign Policy Analyst for two United States Senators.

Then Mr. John Wolfsthal, he is Deputy Director for Nonproliferation at the Carnegie Endowment for International Peace. Before that, he worked as a Special Policy Advisor on nonproliferation and Special Assistant to the Assistant Secretary for Nonproliferation and National Security at the Department of Energy. While at the Department of Energy, Mr. Wolfsthal oversaw programs that sought to eliminate the trade in weapons-usable nuclear materials. And he served as the onsite monitor at North Korea's nuclear complex at Yongbyon.

I thank you all for being part of this panel.

We will start with Ms. Flournoy.

# STATEMENT OF MS. MICHÈLE A. FLOURNOY, SENIOR ADVISOR, INTERNATIONAL SECURITY PROGRAM, CENTER FOR STRATEGIC AND INTERNATIONAL STUDIES

Ms. FLOURNOY. Mr. Chairman, Mr. McCaul, thank you very much for inviting me to testify today on what I think is a very important issue. This hearing today really provides a great oppor-

tunity to assess the Global Partnership at its 3-year mark.

I think overall, one has to say that the report card for the Global Partnership so far has been mixed. There have been some important success stories. For example, some of our friends and allies have committed hundreds of millions of dollars to the destruction of chemical weapons, the dismantlement of nuclear submarines—key Russian priorities—and substantial on-the-ground progress has been made in these areas. However the promise, the original intention of the Global Partnership has really not been met.

The reality is that not enough funds have been pledged, not enough pledges have been turned into actual programs, and not enough projects have really been focusing on addressing the threat that animated the original Global Partnership—that is, keeping nuclear, biological, chemical weapons and materials out of the

hands of terrorists.

Since the launch of the Global Partnership 3 years ago in Kananaskis, a number of G–8 members have expanded the quality and quantity of their threat reduction efforts. Germany, for example, has pledged up to \$1.5 billion; Italy, a billion euros; the European Union, a billion euros. These are significant sums and far beyond what they had pledged before the Global Partnership began, but performance has been very uneven, and, frankly, some of our partners have grossly underperformed. Here the example I would cite is Japan, which has one of the world's largest GDPs and yet ranks last in terms of contributions to the GP, \$200 million approximately, a very tiny fraction of Japan's overall GDP.

As you mentioned in your opening remarks, the total pledges toward the Global Partnership remain about \$3 billion short of the goal. And that goal should be considered a floor and not a ceiling, because if you want to take the Global Partnership truly global, you've got to go beyond the former Soviet Union to address other

threat reduction needs in other countries.

But, furthermore, I think my main criticism is, at this point, the pledges are promises; and we haven't made enough progress in

turning them into actual programs on the ground.

While there are some exceptions to this rule—the UK, Germany, Norway have made substantial progress, again, particularly in submarine dismantlement and chemical weapons destruction—there is plenty of room for improvement.

Two of the biggest donors, Italy and France, have made little or no progress in actual project implementation. They have had enor-

mous challenges just trying to negotiate framework agreements

with Russia, and that has held up millions of dollars of assistance. For the U.S., our record of performance is also mixed. We have committed about a billion dollars a year, but that does not represent any increase in our prior level of threat reduction funding. On the ground, in terms of actual projects, U.S.-funded projects have not accelerated since 2002. In my view, this is both surprising and alarming, particularly given President Bush's numerous statements on the nexus between international terrorism and weapons of mass destruction being the most important security threat that we face today. Given the reality and the urgency of that threat, the failure to greatly accelerate our efforts in threat reduction on the ground, I believe, could ultimately come to be seen as one of our greatest policy failures unless we take steps to address it.

So why this lack of progress? I see four main obstacles. The first is the time it takes to negotiate and ratify the legal agreements governing these activities. The combination of the Russian bureaucracy, which is anyone's nightmare in terms of trying to get these agreements through, plus the number of agreements that have to be negotiated to accommodate the range of donors and the range of areas of activity have made this a huge problem. I think it is imperative that President Putin himself become involved in breaking some of these logjams and in getting agreements that are nego-

tiated before the Duma and ratified on a priority basis.

The second obstacle has been liability disputes. As you already mentioned, this has held up work on a \$2 billion initiative on multilateral plutonium disposition and one of the most important pro-

grams in the Global Partnership.

Recent statements by senior U.S. officials suggest that this is a logiam that we may break in the next few weeks, and one hopes that is actually true. Once that happens, I would hope that the forward momentum would be used to tackle the next obstacle in this area, and that is extending our cooperative threat reduction umbrella agreement that governs all United States/Russian activities

and is set to expire next year. That is the next hurdle.

The third obstacle is access, as has already been mentioned, to sensitive work sites. Donor governments are right to insist that recipient countries grant program managers and auditors access to work sites to ensure that the funds have been appropriately spent. In a number of instances, the inability to reconcile Russian sensitivities on this issue and donor country needs have slowed progress. As a result, less than half of Russia's nuclear materials have received either rapid or comprehensive security upgrades, leaving the majority of the materials still inadequately safeguarded and vulnerable to terrorist threat or diversion, even after a decade of work on this issue. My view is that completing this work as urgently and as quickly as possible is too important to be stalled over this access issue.

The fourth, and maybe the most important, obstacle is lack of sustained leadership on this issue in both Russia and the United States, and among our G-8 partners. Much of the red tape exists because President Bush and President Putin have not cut through it. The gap between rhetoric and reality could be closed if these two leaders made threat reduction assistance and nonproliferation objectives their number one priority every time they met either in bilateral summits or multilateral contexts like the G-8 Summit upcoming.

So let me conclude with a couple of recommendations for the way forward.

First, as I already mentioned, we need to redouble our efforts to cut through the red tape, resolve some of the implementation disputes that have been slowing progress.

Second, we have to meet the \$20 billion goal. I am not ready to give up on that yet, sir. And we need to go beyond that over time to ensure that we can truly expand this program beyond just Russia to other countries where threat reduction assistance is needed.

Finally, we need to refocus our efforts on the programs that have the highest priority in terms of meeting the original intent of the Global Partnership, again, keeping these weapons and materials out of the hands of terrorists.

Four key areas: First, lock down all of the vulnerable nuclear materials worldwide. This means putting much greater emphasis on the Department of Energy's Global Threat Reduction Initiative, locking down HEU, and on completing the security upgrades in the Russian warhead and materials abilities; second, securing dangerous pathogen collections throughout Russia, the former Soviet Union, globally; third, completing chemical weapons demilitarization by accelerating those efforts; and, finally, expanding scientist redirection efforts.

The last thing I want to leave with you is a question: The day after a nuclear or chemical or biological weapons attack on U.S. soil, what will we wish we would have done to prevent it? And why aren't we doing that now?

Mr. ROYCE. And that is what we seek to answer today. Thank you, Ms. Flournoy.

[The prepared statement of Ms. Flournoy follows:]

PREPARED STATEMENT OF MS. MICHÈLE A. FLOURNOY, SENIOR ADVISOR, INTERNATIONAL SECURITY PROGRAM, CENTER FOR STRATEGIC AND INTERNATIONAL STUDIES

Good afternoon, and thank you for inviting me to testify today on the G–8's non-proliferation initiatives. I'd like to focus my comments on the G–8's Global Partnership Against the Spread of Weapons and Materials of Mass Destruction. The G–8 Gleneagles summit next week marks the three-year anniversary of the Global Partnership, which was launched at the Kananaskis summit in June 2002, with the aim of facilitating greater international efforts to prevent WMD from falling into the hands of terrorists—the number one international security threat after 9/11. Specifically, the Global Partnership sought to raise \$20 billion over 10 years for cooperative projects to secure and dismantle nuclear, biological, and chemical weapons, materials, and their associated know-how. Today's hearing provides an important opportunity to reflect on the successes and shortcomings of the Global Partnership in its first three years.

My comments today are based on the work of an ongoing project on "Strengthening the Global Partnership" that is led by CSIS, with support from former Sen. Sam Nunn's Nuclear Threat Initiative. This project has put together a consortium of 22 research organizations in 17 European, Asian and North American countries to build political and financial support for G–8 efforts to reduce the dangers from nuclear, biological and chemical weapons.

Thus far, the G-8 Global Partnership's report card has been mixed. There are some important success stories. For example, our allies and friends have committed hundreds of millions of dollars to the destruction of chemical weapons and the dismantlement of nuclear submarines—areas of high priority for Russia—and substantial on-the-ground progress has been made in these areas. However, the promise of

the Global Partnership has, to date, fallen short. The reality is that not enough funds have been pledged, not enough pledges have been converted to projects, and not enough projects have addressed the core security concern that animates the Global Partnership: preventing the spread of the world's most dangerous materials to the most dangerous people.

#### ASSESSING THE PERFORMANCE OF GLOBAL PARTNERSHIP DONORS

Since the launch of the Global Partnership three years ago, G–8 members have expanded the quantity and quality of their threat reduction efforts. As the chart below shows, several donors have made ambitious pledges that represent a genuine expansion of their efforts.

Chart 1: Global Partnership Pledges

Donor	Official 10 year GP Pledge	GP Pledge in USD <sup>1</sup>	
Canada	CAN\$1 billion	\$800 million	
European Union	€1 billion	\$1.3 billion	
France	€750 million	\$971 million	
Germany	up to \$1.5 billion	up to \$1.5 billion	
Italy	€1 billion	\$1.3 billion	
Japan	"a little more than" \$200 million	"a little more than" \$200 million	
United Kingdom	\$750 million	\$750 million	
United States	\$10 billion	\$10 billion	
Russia*	\$2 billion	\$2 billion	
Finland	€15 million	\$19 million	
Netherlands	€24.1 million	\$31 million	
Norway	€100 million	\$129 million	
Poland	\$100,000	\$100,000	
Czech Republic	\$225,000	\$225,000	
Sweden	€10 million and \$20 million	\$33 million	
Switzerland	CHF15 million	\$13 million	
New Zealand	NZ\$1.2 million	\$870,000	
Australia	A\$10 million	\$7.8 million	
TOTAL		~\$17.1 billion *~\$19.1 billion including Russia	

 $<sup>^1</sup>$ Currency conversion accurate as of May 4, 2005. For more data on the Global Partnership, see our project's website at www.sgpproject.org.

For instance, the pledges of Germany (up to \$1.5 billion), Italy ( $\leqslant$ 1 billion), and the European Union ( $\leqslant$ 1 billion) are significant sums and, for the most part, represent more ambitious commitments than their pre-Global Partnership plans. Moreover, non-G8 donors such as Norway have made substantial commitments despite much smaller financial bases.<sup>2</sup>

But pledges are only promises. The second important metric in measuring the Global Partnership's progress to date is actual programs on the ground. The good

<sup>&</sup>lt;sup>2</sup> See Chart 2 for comparisons of Global Partnership pledges as a percent of national wealth.

news is that, for a number of non-U.S. donors, project activities in Russia and the FSU have accelerated since the 2002 Kananaskis agreement. In particular, the United Kingdom, Germany, and Norway have made substantial progress towards completing major projects in the submarine dismantlement and chemical weapons destruction areas. The Canadians merit special praise: starting with an almost non-existent nonproliferation assistance program in 2002, the Canadians have in only three years completed a legal framework with Russia, stood up an internal bureaucracy, and disbursed funds in a number of project areas. This progress is an example to other donors of what is possible when national leadership and resources are harnessed to their fullest extent.

However, the performance of our G-8 friends has been uneven and, frankly, some donors have underperformed. The list of pledges in Chart 1 shows that the G-8 remains almost \$3 billion short of its \$20 billion goal. Moreover, the pledges among G-8 donors vary significantly. The Japanese, for example, have only committed a little over \$200 million to the Global Partnership. This ranks Japan last among G-8 donors, despite the substantial size of Japan's economy and Japan's status as a global leader in overseas development assistance.

Chart 2 below provides another metric for measuring the performance of donors. It measures the average annual Global Partnership contribution of individual donors against their national wealth. The results show that some donors—the United States, Italy, and Canada, for example—have comparatively high pledges as a percent of their annual gross domestic product while others such as Japan and the UK have contributed far less.

Chart 2: G-8 Global Partnership Pledges as a percent of national wealth

Donor	Official GP Pledge	GP Pledge in USD	Annual GP pledge as percent of annual GDP <sup>3</sup>
Russia	\$2 billion	\$2 billion	.0148%
United States	\$10 billion	\$10 billion	.0096%
Italy	€1 billion	\$1.3 billion	.0090%
Canada	CAN\$1 billion	\$800 million	.0087%
Germany	up to \$1.5 billion	up to \$1.5 billion	.0069%
France	€750 million	\$971 million	.0063%
United Kingdom	\$750 million	\$750 million	.0049%
Japan	"a little more than" \$200 million	"a little more than" \$200 million	.0006%

<sup>&</sup>lt;sup>3</sup> Annual GP pledge is based on to each donor's ten-year GP pledge. Annual gross domestic product figures are from 2002 and taken from the CIA World Factbook 2003. The European Union does not have a comparable measure of its "national" wealth and is therefore not included.

When it comes to turning pledges into on-the-ground projects, there is much room for improvement. Two of the largest contributors, Italy and France, have achieved almost no progress in actual project implementation. In both cases, challenges associated with establishing the legal framework for assistance to Russia have held hundreds of millions of dollars at bay. Three years after the founding of the Global Partnership, these Italy and France continue to confront the same problems: a lack of focused national leadership, sluggish negotiations with recipients, and cumbersome national ratification processes.

As for the United States, since the launch of the Global Partnership, the U.S. has spent approximately \$1 billion annually on cooperative threat reduction, comparable to spending levels since 2000.<sup>4</sup> The United States' \$10 billion commitment to the Global Partnership maintains this spending level over the full ten years. On the ground, however, U.S.-funded projects have only kept pace and, for the most part, not accelerated since 2002. This is both surprising and alarming given the fact that,

 $<sup>^4\</sup>mathrm{Prior}$  to the founding of the Global Partnership, the U.S. spent about \$7 billion from 1992–2002.

as President Bush has stated on numerous occasions, the nexus between terrorism and WMD is the greatest national security threat we face post-9/11.

Several factors have contributed to this lack of progress, as will be discussed below, but the bottom line is that the United States has been unable, and at times unwilling, to take the bold steps necessary to bring its threat reduction actions in line with its rhetoric. Given the reality and urgency of the threat of WMD terrorism on U.S. soil, the failure to greatly accelerate efforts to secure and eliminate WMD in Russia, the former Soviet Union and elsewhere may ultimately come to be seen as one of the greatest policy failures of our time.

#### OBSTACLES TO FASTER PROGRESS IN THE GLOBAL PARTNERSHIP

The biggest obstacles to faster progress in the Global Partnership can be found in the gap between money promised and money spent. For every single Global Partnership donor country, one or more of the following problems have obstructed progress: negotiating legal frameworks for cooperation, disputes over liability, and access to facilities.

1. Negotiating legal frameworks for cooperation. The Global Partnership addresses areas of extreme sensitivity for both donors and recipients. This burden of sensitivity has made the negotiation of legal frameworks for cooperation a key pacing factor. New donors and donors initiating work in new project areas must negotiate legal agreements largely from whole cloth. Even donors with prior experience, such as the United States in the nuclear security area, must renew agreements on a regular basis.

Several factors contribute to the sluggish negotiation process for legal frameworks. One important chokepoint has been the Russian interagency approval process and bureaucratic reorganization. In the last year and a half, Russia engaged in comprehensive government reorganization that complicated negotiations with foreign donors interested in Global Partnership projects. Moreover, despite the reorganization, the Russian bureaucracy continues to have difficulty securing rapid interagency approval of draft agreements. Add to this the fact that Russia is receiving assistance from over a dozen foreign governments/organizations and it is no wonder negotiating legal frameworks is often a long pole in the tent.

2. Liability disputes. A long-running dispute between the U.S. and Russia over the terms of liability for nuclear-related projects has also slowed progress in the Global Partnership to date. Though the dispute has been bilateral in nature, it has also brought work on multilateral plutonium disposition—a \$2 billion initiative—to a virtual halt. Since 2003, the U.S. and Russia have been unable to resolve a dispute over who would hold legal responsibility in the event of an accident during work on the plutonium disposition project. While the U.S. has in the past preferred complete indemnity for U.S. personnel, Russia has insisted that instances of premeditated action by a foreign government or its contractor should be an exception. European donors have largely agreed to the terms Russia prefers. Recent statements by high-level U.S. officials indicate the U.S. and Russia may be close to reaching a resolution to the dispute, perhaps even in time for next week's G-8 summit.

3. Access procedures. Another key obstacle to implementing projects has been establishing satisfactory access measures for foreign government personnel. Donor governments rightly insist that recipient countries grant program managers and auditors access to work sites for which funds have been provided. In a number of instances—American aid for securing nuclear warheads and materials; Japanese aid for dismantling submarines—inability to reconcile Russia's sensitivities and donor country needs has slowed progress.

Beyond these implementation obstacles, the Global Partnership has lacked sufficient focus on the most urgent threat areas. Russia has understandably expressed its own preferences as to where foreign assistance should be directed—so far, it has asked donors to concentrate their funds on the two Russian priority areas of chemical weapons destruction and dismantlement of general-purpose nuclear submarines. Unfortunately, focus on areas such as submarine dismantlement may be coming at the expense of cooperative work on more urgent security threats, such as securing dangerous biological pathogens and completing the effort to lock down all civilian and military stocks of weapons-useable nuclear material. While a kind of "division of labor" between American efforts in more sensitive areas of cooperation and European/Asian efforts on submarines and chemical weapons makes some sense, I believe our Global Partnership friends should be much more active in the areas that most directly contribute to the world's security: securing the most dangerous sources of materials that could be used for terrorist purposes.

RECOMMENDED ACTIONS TO IMPROVE THE PERFORMANCE OF THE GLOBAL PARTNERSHIP

Global Partnership donors and Russia must do more to resolve the implementation obstacles that have long plagued efforts to cooperatively secure and dismantle weapons of mass destruction. To accelerate the process for negotiating legal frameworks, Russia must improve its internal coordination process for securing interagency approval. Donor countries must demonstrate greater leadership in securing national ratification of the agreements once negotiations are complete, and President Putin himself must use his substantial leverage in the Russian Duma to secure ratification of Global Partnership-related agreements on a priority basis.

The long-standing dispute between Moscow and Washington over liability must also be resolved. We may hear good news on this front as soon as next week. However, this will mark only the first step. Once liability is out of the way, foreign donors who have up until now been unable to expend promised funds for plutonium disposition must move forward aggressively. Even more importantly, the U.S. and Russia themselves must harness the positive momentum generated by a resolution of the liability issue to tackle another daunting challenge: negotiations over the extension of the Cooperative Threat Reduction umbrella agreement, the bedrock of

U.S./Russia cooperation which is set to expire in June 2006.

In addition, donor countries and Russia must continue to explore methods of granting access for foreign nationals. Donor countries understandably insist that program managers be allowed access to assess, track, and verify project funds expended in Russia. Russia is understandably sensitive about the presence of these foreign nationals on extremely sensitive nuclear-related sites. However, both sides must work to develop innovative procedures to address both sides' legitimate concerns. For the U.S., especially, completing the job of securing nuclear materials and warheads—only 46% have received some sort of security upgrade—will largely depend on whether agreeable terms of access can be reached for some of the most sensitive facilities in the Russian complex.

In addition, in order for the Global Partnership to fulfill its promise of helping to secure and dismantle *all* vulnerable stocks of materials and weapons of mass destruction, donors must meet and exceed the \$20 billion goal set out at Kananaskis. The current tally—a little over \$17 billion—is insufficient, and \$20 billion should be considered a floor, not a ceiling. Funds beyond the \$20 billion level will be necessary to complete the jobs in the FSU alone. Furthermore, G–8 members must do more to make the Global Partnership truly global. The focus of the Global Partnership has initially and appropriately bear in Purgic and the former Societ Union. ship has initially, and appropriately, been in Russia and the former Soviet Union. However, as recent U.S. projects in Libya, Iraq, and Albania have illustrated, the threat of vulnerable weapons and materials of mass destruction is truly global. The Global Partnership must continue expanding its donor base and recipient pool to ac-

commodate areas that need assistance wherever they arise.
Finally, the United States and its G-8 partners need to refocus their threat reduction efforts on addressing the areas of greatest threat. Specifically:

- Lock-down all vulnerable nuclear materials worldwide. Our top priority must be to secure all vulnerable stocks of weapons-useable nuclear material on a global basis. We should expand DOE's Global Threat Reduction Initiative to include participation by our European partners and accelerate its pace of materials repatriation. We should also take steps to resolve outstanding access issues with our Russian partners to clear the way for completion of security upgrades at all Russian warhead and materials facilities.
- Secure dangerous biological pathogens. Our second most urgent priority must be to identify and secure all vulnerable sources of biological pathogens that could be used in a bioterror attack. Our efforts with Russia to date have barely scratched the surface, and we along with our G–8 partners must continue to urge Russia and the other former Soviet states to accept cooperative security upgrades at civilian and military facilities storing these dangerous biological agents.
- 3. Complete chemical demilitarization. We and our G-8 partners must work quickly to complete chemical weapons destruction facilities in Russia. In particular, donors who have played a leadership role so far-Germany, UK, and the United States—should organize international support for construction of additional destruction facilities.
- 4. Expand scientist redirection efforts. The United States and its G-8 partners should redouble their financial support for scientist redirection efforts both in the former Soviet Union and globally. The U.S. has taken important steps to globalize its scientist redirection efforts in the last two years, funding projects in both Iraq and Libya. However, the United States must be careful

that resource constraints do not force a trade off between its FSU programs and new initiatives in other regions of the world. We need to expand the donor base and the recipient base for these critical programs.

I'd like to leave you with the following thought: The day after a nuclear, chemical or biological attack on United States, what will we wish we would have done to prevent it? And why aren't we doing those things now?

Strengthening the Global Partnership in the ways that I have outlined can go a long way to preventing our worst nightmare from occurring. But we need to do more, and faster.

Thank you again for the opportunity to appear before today's session. I welcome any questions you may have.

Mr. ROYCE. Mr. Spector.

#### STATEMENT OF MR. LEONARD S. SPECTOR, DEPUTY DIREC-TOR, CENTER FOR NONPROLIFERATION STUDIES, MON-TEREY INSTITUTE OF INTERNATIONAL STUDIES

Mr. Spector. Thank you very much, Mr. Chairman. It is a privilege to appear before the Subcommittee this afternoon.

My colleagues at the Monterey Institute Center for Nonproliferation Studies and I have been tracking the progress of the Global Partnership. I think, like you and others on the dais and all of us

sitting at the witness table here, the record has been mixed.

What we have observed is a little bit of a loss of momentum at the very highest level in terms of the level of priority this is receiving. As you commented, it is not the leading issue at this particular summit. Perhaps there is some anxiety on the part of Mr. Blair to keep this a little bit out of the limelight. But even the final statement, as I understand, is going to be rather bland in terms of what is going to be said by the whole group, based on its early versions that I have heard about.

And, also, progress is not anticipated on some of the very topics that Great Britain itself said it was going to make the leading issues during a time of its presidency, such as progress on restricting transfers of equipment that could be used to support uranium enrichment and spent fuel reprocessing, technologies that are needed to manufacture nuclear weapons.

A similar, if not more pronounced, loss of momentum also appears in the area of implementation. The pledges, as we have all been saying, have not met the mark, that we are not up to the \$20 billion level, and the actual expenditures have been relatively mod-

est, with the exception of the United States.

Moreover—and, again, this is the very point that I will reiterate that was just made—a lot of these funds are being spent on what I would consider to be secondary areas, such as the dismantling of nonstrategic submarines. This is an environmental issue. It is not an issue that really attempts to reduce the threat of terrorism, although part of the program is to secure the nuclear fuel that comes out of these subs and to put them into secure storage. So that part is to the good.

Also, as Michèle Flournoy and I emphasize, the Plutonium Disposition Program, which was one of the big magnets for a lot of the funds that were pledged, has been completely stalled because of the liability issue.

I would just add as an additional point that, although we have offered the Russians, in effect, the position they want on this liability question, and we are told that there is agreement at the high levels—I am assuming that is at the Secretary of State, foreign minister level—this does not translate down into the actual negotiations. And that is where the problem lies at the moment.

There is still some hope that the roadblock will be taken care of by the time of the Gleneagles Summit. But at least one individual I spoke with in the Administration is hopeful, but not confident,

that this might be resolved.

And I should just add that even if the Russians do assume most of the liability under this program and other programs, it really doesn't answer the question of what do you do if there is a catastrophic accident of \$1 billion or \$2 billion or \$3 billion worth of injury? Will the Russian Government really be in a position to pay this? And will it do so? Where do you aggregate claims?

We address this in the area of civilian nuclear energy. We have special arrangements for that. And the liability discussions that we are seeing on the Plutonium Disposition Program and elsewhere really don't go to this catastrophic danger on how victims would get

compensated.

I should also point out that even as we are trying to get the Plutonium Disposition Program launched, which will take two tons of plutonium each year from Russia and put it into spent fuel where it will be irradiated and made more secure. The Russians have another program which is taking almost as much plutonium out of spent fuel and making it less secure; and that is in their civilian sector.

We need to get our hands around this so that at least we aren't seeing the problem get worse as we try to launch the Plutonium Disposition Program. And here I think the Global Partnership could help by providing spent fuel storage for the civilian side in Russia where you would not need the plutonium extraction process.

In a separate area—again, this is a point that Michèle Flournoy mentioned toward the end of her remarks, but I would like to give it some greater emphasis—and that is the need to secure biological

weapons and biological pathogens.

My colleague, Dr. William Potter, who is the Director of our Institute, spoke about this at some length about a year ago, listing in some detail how little is being spent by the other countries in the Global Partnership on this particular problem. And I understand the situation has little change today.

Unfortunately, for a variety of reasons, the United States itself is pulling back from the biosecurity mission in Russia. This is a mission that is managed by the U.S. Department of Defense, and there is unhappiness with Russian behavior. So we are actually slowing down our efforts and may withdraw before the job is done. That remains a very important area; and perhaps there is a need for a second U.S. organization, like the Department of Energy, to get involved and try to carry this along.

Finally, another area that we feel deserves a good deal of attention that has not really been addressed by the Partnership is non-proliferation education. That is a term that we use a lot at the Monterey Institute because we are an educational institution. But everybody in the field talks about sustainability. How do we make

sure that after we finish the job and after we leave, the Russians continue to secure these locations and do the right thing?

We believe the way you do this is to train them as they are coming through their technical institutes and their universities and get them inculcated in the idea that this is a global responsibility that they have for managing their WMD assets effectively.

So we would very much like to see the Global Partnership pick up on this and devote resources to the education side as we move

forward.

I thank you, Mr. Chairman, for the opportunity to testify. [The prepared statement of Mr. Spector follows:]

PREPARED STATEMENT OF Mr. LEONARD S. SPECTOR, DEPUTY DIRECTOR, CENTER FOR NONPROLIFERATION STUDIES, MONTEREY INSTITUTE OF INTERNATIONAL STUDIES

It is a great privilege to testify before the Subcommittee this afternoon. My colleagues at the Monterey Institute Center for Nonproliferation Studies and I have been closely watching the evolution of the G-8 Global Partner Against Weapons and Materials of Mass Destruction. Today, I would like to highlight a number of the initiative's achievements, as well as a number of concerns that we have regarding its

High-level attention. The G-8 Global Partnership contributes to U.S. nonproliferation goals at multiple levels. Perhaps the most basic is that it annually focuses the attention of the leaders of the world's most important economic powers on the dangers of WMD proliferation and terrorism. Indeed, even if it accomplished no more than this, we could consider the Global Partnership something of a success. The expansion of the Global Partnership's members to include, for example, Australia, Belgium, the Czech Republic, Denmark, Ireland, the Republic of Korea, and New Zealand; the expansion of its focus, with such measures as the G-8 Action Plan for Securing Radioactive Sources; and the slow but steady enlargement of member state nonproliferation activities in Russia are all positive developments.

It appears, however, that within the G-8 Summit environment, the degree of

high-level political interest WMD proliferation and terrorism issues may be diminishing. At Gleneagles, the British have given pride of place to addressing African poverty and climate change, while proliferation will be addressed only under the heading of "other issues." Advance drafts of the of the G-8 summit statement on proliferation suggest that the final declaration will contain the right words, but will

offer little that is new.

Progress is not anticipated, for example, on a key issue identified by the U.K. as one it hoped to advance during its presidency of the G-8, the question of restricting transfers of equipment that could support uranium enrichment and spent fuel reprocessing—the technologies needed to produce materials usable for nuclear weap-

Implementation. A similar, if not more pronounced, loss of momentum appears to be afflicting implementation of the Global Partnership. Pledges of funds to fulfill the commitment made at Kananaskis in 2002, to provide \$20 billion over 10 years to support nonproliferation programs in Russia, have yet to reach this goal, and actual expenditures by Global Partnership members other than the United States have

been relatively limited.

Moreover, a not insignificant proportion of funds pledged and/or expended are being used to underwrite activities that are not central to what I consider to be the core goal of the Partnership, which is to reduce the danger of WMD proliferation and terrorism by securing Russian WMD assets and know-how. Programs to dismantle non-strategic nuclear powered submarines, for example, do little to advance this mission, although providing secure storage for spent fuel from these subs is desirable, since a portion of this fuel may contain highly enriched uranium potentially usable for nuclear arms.

Adding to these challenges is that another major program, the "Plutonium Disposition Program," which would render tens of tons of weapons plutonium unsuitable for use in nuclear arms, has been stalled for at least two years because of a dispute over who would be liable in the event that an incident occurred during the implementation of the program that caused injury to workers or the public. Recently, the United States agreed to accept the version of a liability arrangement preferred by the Russians, a version that has been used in a number of Russian non-

proliferation agreements with European states.

One would imagine that this would have solved the impasse, but I was very recently informed that the Russian negotiators are still refusing to conclude an agreement with us on this matter. It is possible that the problem may be solved before the Gleneagles Summit, but my contacts in the Administration were less than confident about this outcome. Meanwhile, hundreds of millions of dollars in Global Partnership pledges for this program remain untapped. (I should add that neither the Russian nor the U.S. approach to liability would ensure adequate and timely compensation for victims in the event of a catastrophic accident.) 1

I should also point out while the purpose of this program is to place separated military-origin plutonium into highly radioactive spent nuclear fuel, at a rate of about two tons of plutonium per year, Russia continues its domestic program to take civilian-sector plutonium out of spent nuclear fuel, at nearly the same rate. The Global Partnership has no program to address this anomaly, for example, by offering to build a spent fuel storage capability as an alternative to Russia's civilian plu-

tonium separation activities.2

In a separate area, my colleagues and I are also deeply concerned that the G-8 Global Partnership appears to be doing so little to help secure dangerous biological pathogens. In April of 2004, Dr. William Potter, Director of the Monterey Institute Center for Nonproliferation Studies, spoke at a conference in Moscow describing the situation at that time:

Although the G-8 pronouncement at the Kananaskis Summit in June 2002 pledged to raise and expend \$20 billion 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, very little work has been accomplished in the biological weapons (BW) area. Indeed, as best I can discern, practically nothing is being done on biological security issues except by the United States. France is making a very modest contribution while Canada, the United Kingdom, and Sweden are providing or have pledged small amounts to the International Science and Technology Center (and the Science and Technology Center-Ukraine) for work that may include biosecurity issues.

To be more specific, of the 750 million Euros pledged to the Global Partnership, France has committed 5 million Euros for work on biological issues (cryptically identified in the public accounts I could find as funds for "security renovations at highly sensitive Russian laboratories"). According to the 2003 First Annual Report by the United Kingdom on the G-8 Global Partnership, the UK hald expended 20,000 pounds in 2002–2003 for preparation of its first BW project proposal involving a plant health institute in Georgia, and projected expenditures for another 200,000 pounds for the project in 2003–2004. I have been told by a colleague at CSIS that this money subsequently has been redirected to the ISTC. For its part, Sweden has committed 950,000 Swedish Kroner (or about \$130,000) to bio-safety and bio-security projects out of a total Global Partnership pledge of 10 million Euros, while Canada has pledged 18 million Canadian dollars/year for five years to the ISTC, some portion of which is likely to be directed to BW projects. Finally, of its ten-year \$10 billion pledge to the Global Partnership, the United States has committed approximately \$55 million

scale plant to separate plutonium from its protective barrier of radioactivity in spent fuel. In effect, while endorsing the concept that plutonium is safer in spent fuel in Russia, they are creating new dangers elsewhere by taking plutonium out of this protective environment.

<sup>&</sup>lt;sup>1</sup> For a detailed discussion of this issue, see R. Douglas Brubaker and Leonard S. Spector, "Liability and Western Nonproliferation Assistance to Russia: Time for a Fresh Look?" Nonproliferation Review (Spring 2003) http://cns.miis.edu/pubs/npr/vol10/101/101brub.pdf . The liability issue is most urgent in the case of the Plutonium Disposition Program, where an understanding on liability is a precondition for program activities to commence in Russia. Unfortunately, the issue will also be central to the renegotiation of the Department of Defense "Umstanding on liability is a precondition for program activities to commence in Russia. Unfortunately, the issue will also be central to the renegotiation of the Department of Defense "Umbrella" Cooperative Threat Reduction Agreement with Russia, which is the basis for some dozen U.S. nonproliferation programs in that country. That agreement must be renewed next year. The United States had hoped to resolve the potential liability impasse in the Umbrella Agreement along the same lines as those proposed for the Plutonium Disposition Agreement, but Russia's apparent reluctance to conclude the latter agreement has thrown this plan into doubt—placing at risk a wide range of critically important U.S. Department of Defense Cooperative Threat Reduction efforts and related programs at the U.S. Department of Energy.

2 The U.K. and France, it may be noted, are also separating plutonium from spent fuel at home, even as they are pledging hundreds of millions of dollars through the Global Partnership to put Russian military plutonium back into spent fuel. Similarly, Japan, which has also pledged substantial amounts to support the Russian effort. is about to begin operating its own large-scale plant to separate plutonium from its protective barrier of radioactivity in spent fuel. In

to enhance the protection of biological facilities in the former Soviet Union, and an additional \$10 million to redirect former BW scientists.

Unfortunately, for a variety of reasons, the United States, itself-specifically the Department of Defense through its Cooperative Threat Reduction Program, which is the only U.S. agency authorized to do this work—is ending its bio-security activities in Russia well before the job is completed. Canada is planning to step in to take over some of these responsibilities, but it is likely that momentum will be lost and further delays will ensue.

The U.K. had listed this as another one of the issues it had planned to highlight over the past year, but my sources indicate that little new has been accomplished. Under the circumstances, it may be wise to authorize a second U.S. agency, such as the Department of Energy, to take on this work, as the Department of Defense

It is also important to ensure that dangerous pathogens are consolidated and secured in the former Soviet republics outside of Russia. My colleagues Sonia Ben Ouaghram, Raymond Zilinskas, and Alexander Melikishvili have completed an extensive study on one element of this challenge, the former Soviet Anti-Plague System, whose component institutes dot Central Asia, the Caucasus, and other regions. Nearly all of these facilities have collections of some of the world's most dangerous pathogens, which are held under highly insecure conditions. My colleagues recently presented their findings regarding the state of the Anti-Plague Institutes at the annual conference of the American Society for Microbiology, and we will shortly be publishing an Occasional Paper on this subject.

Nonproliferation Education. Finally, let me highlight an issue to which we at the Center for Nonproliferation Studies attach very great importance: nonproliferation education. We believe education in this area is the key to inculcating sustained commitments by former WMD scientists, technicians, and managers in Russia and other

post-Soviet states not to engage in such activities in the future.

Our Director, Dr. William Potter, who has championed this issue, addressed it in his Moscow presentation, and I would like to quote his principal points on this subject:

On November 22, 2002, the United Nations General Assembly adopted without a vote Resolution 57/60 entitled "United Nations Study on Disarmament and Non-Proliferation Education," and conveyed the recommendations of the study for implementation, as appropriate, by member states and other entities. A key principle underlying the UN study was that education is an underutilized tool for promoting both disarmament and nonproliferation. Although a number of Global Partnership states including Japan and Sweden were key proponents of the UN study and helped to draft its recommendations, and despite the fact that all Global Partnership members supported the recommendations of the UN study, a nonproliferation education and training initiative has yet to be launched under the auspices of the Global Partnership.

While one can imagine numerous ways in which nonproliferation education could be employed to promote the objectives of the Global Partnership, a good starting point for such an initiative might be to provide nonproliferation training to former BW scientists, researchers working with pathogens, generally, and epidemiologists in Central Asia and the Caucasus. The Anti-Plague Institutes and the field stations in the region are in various states of disrepair and insolvency, but the staffs of these facilities include scientists and technicians who are knowledgeable about some of the world's deadliest pathogens and possess unique collections of pathogenic bacterial, fungal, and viral strains. Accordingly, today the anti-plague systems in the post-Soviet states have the potential for spawning both harmful and beneficial applications. A Global Partnership nonproliferation education initiative might make the difference in steering this potential in a positive direction.

Conclusions. Mr. Chairman, that concludes my remarks this afternoon. I would be pleased to answer any questions that the Subcommittee may have.

Mr. ROYCE. Mr. Spector, thank you. We are going to Mr. Spring.

<sup>&</sup>lt;sup>3</sup> "Prospects for International Cooperation on Bio-Security," Remarks of Dr. William C. Potter, PIR Center Conference, Moscow, April 2004, available at http://cns.miis.edu/research/globpart/ pottertalk.htm

## STATEMENT OF MR. BAKER SPRING, F.M. KIRBY RESEARCH FELLOW IN NATIONAL SECURITY POLICY, THE HERITAGE FOUNDATION

Mr. Spring. Thank you, Mr. Chairman, for allowing me to testify before this distinguished Committee on obviously what is a very

important topic.

I think that there is consensus among the witnesses here that you are going to find that, as it relates to the Global Partnership and other G-8 efforts on nonproliferation policy, it is a mixed outcome and we are going to have to redouble efforts in some areas to improve the capabilities of what the G-8 is doing. In others, we are more in a mode of having to sustain what has been achieved. But it is not a complete report card either, in my judgment. In the end, I would say that, as you might imagine, for a 10-year effort at this particular point in time, the grade, in my mind, would be an "I," an incomplete.

So there is time still within that 10-year time frame, in my judgment, to right the things that are wrong and to continue to do the

things that are going right.

In my judgment, though, the major shortcoming of the G-8's efforts, and most particularly in the Global Partnership, is what I call a lack of context. That is that there is a rather narrow focus on security, dismantlement, taking care of the question of scientists who otherwise may be made available to aggressive states or states that support terrorism. All of that is well and good. Those are activities that the G-8 and the United States should continue. But as the G-8 moves to strengthen its nonproliferation agenda, it needs to recognize that the effort still needs an over-arching concept for protecting national security in today's environment.

At the heart of this over-arching concept, in my mind, should be a damage limitation strategy. Specifically, the tools of deterrence, defenses. All types of military capabilities and arms control should be used in concert with one another to achieve essential outcomes; and I would define these as follows: (1) reducing the incentives for others to obtain weapons of mass destruction; (2) reducing the likelihood that those weapons will be used in acts of aggression; (3) limiting the scope of any attacks that may occur using such weapons; and, (4) limiting the damage that such attacks may inflict and

thus help expedite recovery.

The G-8 can use the opportunity presented by the Gleneagles Summit to recognize more fully the defense and the military tools necessary to accompany the policies they have already adopted, including the Global Partnership, and I have the following recommendations, essentially, to help achieve that outcome.

One is, I think they need to adopt a statement that endorses the damage limitation strategy that I just referred to and make that

a part of their overall effort.

Two, I think that they should amend the G–8 Global Partnership principles that were adopted in Canada in 2002 to include a principle that will explicitly reserve military options for deterring the acquisition, threatened and actual use of weapons of mass destruction by aggressive powers. Specifically, this principle should state that nuclear deterrence remains an essential element of international security, and at the same time it should recognize that the

requirements of nuclear deterrence are different from those of the Cold War.

My third recommendation is to adopt a statement that recognizes that a mix of offensive and defensive capabilities on the military side is the best approach for addressing the proliferation danger; that is, that we can't continue the Cold War policy of relying, in an overwhelming fashion, on offensive deterrence alone.

My fourth recommendation is to obtain an agreement among the G-8 leaders to conduct simulations that assume a proliferated setting. This agreement would commit G-8 leaders to direct in their governments—both individually and, where appropriate, among themselves—to undertake simulations and other exercises that assume a proliferated environment.

If G-8 leaders truly want to discourage proliferation, particularly by those bent on aggression, they must demonstrate that they are

prepared to address realized proliferation threats.

My final recommendation is to move to adopt standards for measuring the outcomes of the programs under the Global Partnership. Specifically, I think that Mr. Spector has spoken to that issue eloquently. We address these things in terms of inputs. We address them in terms of tons of fissile materials that may be secured or what weapons are being dismantled or what we are doing with regard to biological pathogens. But it hasn't, in my judgment, been tied to specific national security outcomes, specifically in terms of how we have reduced the likelihood that terrorists will attain those weapons and how much—by what percentages we have reduced the likelihood of an attack.

Measuring those outcomes in this sort of qualitative fashion—as opposed to the, in my judgment, intellectually easier judgment—of looking at inputs or looking at specific quantifiable outputs, is a

greater challenge but in my judgment more important.

Mr. Chairman, the key agenda of the G-8 on nonproliferation has made a material contribution toward addressing spread of weapons of mass destruction and their means of delivery. The Global Partnership Against the Spread of Weapons and Materials of Mass Destruction will serve to dismantle many dangerous weapons and secure dangerous materials starting in Russia and then moving on to other states.

Having said that, however, the G-8 process has been too narrowly focused on arms control and cooperative threat reduction. Relevant military and defense tools must be brought to the fore in G-8 deliberations on matters related to proliferation.

Thank you, Mr. Chairman, for the opportunity to testify; and I look forward to any questions from the panel.

Mr. ROYCE. Thank you, Mr. Spring.

[The prepared statement of Mr. Spring follows:]

PREPARED STATEMENT OF MR. BAKER SPRING, F.M. KIRBY RESEARCH FELLOW IN NATIONAL SECURITY POLICY, THE HERITAGE FOUNDATION

Mr. Chairman, it is an honor to have the opportunity to testify before this distinguished subcommittee on the efforts of the G-8 to combat the proliferation of weapons of mass destruction.

#### THE G-8 NONPROLIFERATION EFFORT

Mr. Chairman, Starting at the Kananaskis Summit in Canada in 2002, the G-8 nations, the United States, Canada, France, Germany, Italy, Japan, Russia and the United Kingdom, have paid special attention to the issue of preventing the proliferation of nuclear, biological, and chemical weapons and the means to deliver them, as well as reducing the likelihood that such destructive weapons could be diverted to terrorist groups. These efforts been focused on programs to destroy, secure, or otherwise control dangerous weapons material, the weapons themselves, and their delivery systems, starting in now-independent states of the former Soviet Union, and Russia in particular. More recently, however, the G-8 nations have moved to expand international participation in this mission by including other donor and recipient nations. The steps the G-8 have taken in this area include the following:

- 1. The Kananaskis Summit of 2002. At the Kananaskis Summit, G-8 leaders established the Global Partnership Against the Spread of Weapons and Materials of Mass Destruction. Under this program, the G-8 set a goal of raising \$20 billion to be spent over ten years for nonproliferation, disarmament, counter-terrorism, and nuclear safety projects in the states of the former Soviet Union. This commitment attempts to prevent terrorists or states that support them from acquiring or developing weapons of mass destruction, missiles, and related materials, equipment, and technology. It does so pursuant to a set of principles on preventing the spread of weapons of mass destruction adopted at this summit.
- 2. The Evian Summit of 2003. The 2003 G-8 Summit at Evian marked the initial progress toward implementing the destruction and securing of weapons and materials under the Global Partnership, particularly in Russia. It encouraged the addition of donor states to the programs, as well as the inclusion of additional recipient states. The G-8 leaders also adopted a statement on securing the sources of radioactive material.
- 3. The Sea Island Summit of 2004. At the June 2004 G-8 Summit at Sea Island, the participating states adopted an action plan on nonproliferation. Among other things, the action plan reaffirmed the commitment to the Global Partnership. It committed the members to limiting the transfer of enrichment and reprocessing equipment and technologies so that G-8 countries would refrain from selling such equipment and technologies to additional states on an interim basis. It endorsed the Proliferation Security Initiative, which supports operations for interdicting the shipments of dangerous materials and weapons. The action plan also commended the United Nations Security Council for adopting a resolution on April 28, 2004, requiring all states to criminalize proliferation, enact strict export controls, and secure all sensitive materials within their borders. This G-8 action plan also urged all states to ratify and implement the Additional Protocol, which allows more effective safeguards against diversion of nuclear materials, as soon as possible and said that the Additional Protocol "must become an essential new standard in the field of nuclear supply arrangements."2

Looking ahead to the upcoming Gleneagles Summit, which takes place next week, nonproliferation will continue to be on the G-8 agenda. First, the leaders may agree to establish an approach for limiting the spread of enrichment and reprocessing equipment and technologies on a permanent basis. However, the better approach for now may to be to extend the existing policy of interim restraint agreed to at the Sea Island Summit. Second, it is expected that the G-8 will explore means for increasing preparedness for responding to the outbreak of disease and defending against biological attacks by terrorists. Third, the G-8 leaders are likely to assess the success of specific weapons and materials destruction and security measures funded under the Global Partnership. Finally, recent news account indicate that the Bush Administration is undertaking a targeted plan for freezing the U.S.-based assets of those engaged in business with foreign companies involved in the proliferation of weapons of mass destruction and their delivery systems and will brief the G-8 partners on this plan.

 $<sup>^1{\</sup>rm The}$  European Union is also represented at G–8 summits.  $^2{\rm U.S.}$  Department of State, "G–8 Action Plan on NonProliferation," June 9, 2004, at http://www.state.gove/e/eb/rls/fs/33378.htm (June 23, 2005).

#### MEASURING THE SUCCESS OF THE G-8 NONPROLIFERATION AGENDA

The G–8's nonproliferation agenda is very much a work in progress. This is particularly the case with the Global Partnership, which is the most resource intensive and programmatically based element of the G–8 strategy. On the other hand, the diplomatic elements of the strategy have shown more rapid progress. On the diplomatic front, the United States and its G–8 partners can point to a number of significant accomplishments. These include:

- The 2004 adoption of United Nations Security Council Resolution 1540 requiring states to criminalize proliferation activities, adopt export controls, and secure sensitive materials;
- The 2003 adoption of the Proliferation Security Initiative to organize interdictions of the trans-shipments of weapons, weapons materials, and delivery systems and actions since that time to broaden participation and support for the initiative;
- Broadening participation in the Global Partnership to include additional donor and recipient states; and
- Significant progress in obtaining access to important facilities in Russia and other now-independent states of the former Soviet Union—particularly in the area of waiving taxes and fees on those performing services in the areas of weapons dismantlement and security. An agreement with Russia regarding li-ability for any accidents that occur in the disposal of plutonium seems close at hand.

On the programmatic side, there is room for progress. Although there have been significant successes with implementation of Libya's disarmament pledge and the breakup of the A.Q. Khan nuclear supply network, there is a need to shift focus regarding the Global Partnership to implementation steps. To date, the G-8 states have pledged between \$17 billion and \$18 billion toward the \$20 billion goal for Global Partnership activities. While specific actions on the ground in Russia and other recipient countries are underway, there remains much to be done in terms of both dismantlement and security activities. Nevertheless, it is possible to point to some progress on the programmatic side of the Global Partnership. Implementation steps have taken place in the following areas:

- The destruction of chemical weapons, particularly in Russia;
- The dismantlement of nuclear submarines in Russia;
- · Securing nuclear materials;
- Providing for better security of Russian nuclear warheads;
- · Securing dangerous biological agents; and
- Redirecting former weapons scientists to civilian research projects.

On the other hand, activities under the Global Partnership have encountered a number of significant hurdles. These include an acknowledgement that there are institutions within the Russian government that are suspicious of these programs and move to slow implementation efforts. Further, Russia continues modernize its nuclear force at the same time that it is receiving billions of dollars from U.S. taxpayers for the purpose of reducing the threat. Russian tactical nuclear weapons remain virtually untouched by Global Partnership programs. At a minimum, it is plausible that the Russian government continues to obscure the scope of its biological weapons program. The most recalcitrant proliferating states, Iran and North Korea, are not likely to join the Global Partnership as recipient states anytime soon. As a result of these hurdles, the temptation exists among the supporters of the Global Partnership programs to focus on the input side of ledger—particularly on the financial resources that are made available—and less on the outcomes that lead to qualitative improvements in security.

As a result, it is best to assess the value of the G-8 nonproliferation agenda generally and the Global Partnership in particular from a balanced perspective. A balanced perspective requires acknowledging that the G-8 agenda is narrowly focused on dismantlement, securing dangerous materials and weapons, and finding alternative endeavors for weapons scientists. Generally, it has failed to establish a clear connection between arms control programs and military and defense programs. The exception to this has been G-8 support for the Proliferation Security Initiative. Consequently, the G-8 effort, as valuable as it is, only fills a niche in the Bush Administration's December 2002 National Strategy to Combat Weapons of Mass Destruction.

The G-8 needs to recognize, as the Bush Administration clearly does, that it must support the tools of deterrence, defenses, and offensive military capabilities, as well as arms control, in combating proliferation. As such, the weakness of the G-8 agenda is found in the lack of context that would otherwise define its contributing role in improving security.

THE G-8 NONPROLIFERATION AGENDA IN CONTEXT—A DAMAGE LIMITATION STRATEGY

The G-8 nonproliferation agenda will benefit from an effort by the leadership to propose an overarching concept for protecting national security in today's environment, in which the risks of weapons of mass destruction falling into the wrong hands are quite severe. It needs to adopt an overarching concept that builds on the Bush Administration's National Strategy to Combat Weapons of Mass Destruction, which defines the contributions of deterrence, defenses, offensive military capabilities (including preemption), and arms control in confronting the proliferation danger.

At the heart of this overarching concept should be a damage limitation strategy. Specifically, the tools of deterrence, defenses, offensive military capabilities, and arms control should be used in concert with one another to:

- reduce the incentives for others to obtain weapons of mass destruction;
- reduce the likelihood that such weapons will be used in acts of aggression;
- limit the scope of any attacks that may occur using such weapons; and
- limit the damage such attacks may inflict, and thus help expedite recovery.

Specifically, the G–8 leadership should issue a statement adopting the damage limitation strategy as their collective approach to addressing the proliferation problem. Although there is too little time before next week's Gleneagles Summit to expect such a statement in Scotland, the leaders can make sure that it is on the agenda for next year's summit.

The G-8 leaders, however, need to recognize three inherent features of the damage limitation strategy. They are:

- 1. Arms control and military instruments have a symbiotic relationship. Strong military capabilities can create incentives for would-be proliferators to abandon their pursuits and allow arms control to succeed. Evidence suggests that the Libyan government learned the right lesson from the allied intervention in Iraq, which helped facilitate the recent success in dismantling Libyan weapons of mass destruction infrastructure. Likewise, successful arms control can and should serve to drive the weapons programs of aggressive states in a direction where U.S. and allied military and defensive capabilities can most easily address the threat.
- 2. Military forces must mix offensive and defensive capabilities. During the Cold War, offensive capabilities dominated U.S. strategic forces. This imbalance in favor of offense over defense leads to a military posture that is too inflexible for an age in which emerging threats are unpredictable and develop very rapidly. As a result, U.S. and allied military forces should balance offensive and defensive capabilities in service to the damage limitation strategy.
- 3. The U.S. and its allies must be prepared to operate in a proliferated setting. The is no guarantee that arms control will prove successful in stopping—much less reversing—proliferation. As a result, the U.S. and its allies must be prepared to learn how to operate diplomatically and militarily in a proliferated setting. This is a complex undertaking and the lessons of the Cold War provide only limited insights. Learning these lessons should not be seen as accepting as inevitable the proliferation of weapons of mass destruction and their means of delivery; quite the opposite. Learning these lessons should be seen in the context of signaling would-be aggressors that the U.S. and its allies have options should proliferation take place. The failure to learn these lessons will send the opposite signal, which is that the possession of weapons of mass destruction represents a trump card. If weapons of mass destruction are seen as a trump card, their proliferation will become inevitable.

#### RECOMMENDATIONS FOR STRENGTHENING THE G–8 NONPROLIFERATION AGENDA

G-8 leaders can strengthen their nonproliferation agenda by broadening it. What they have done to date is useful, but too narrowly focused on arms control, dismantlement, and security. The G-8 can use the opportunity presented by the Gleneagles Summit to put in place the defensive and military tools necessary to accompany the policies they have already adopted. These recommendations include:

Recommendation #1: Adopt a statement endorsing a damage limitation strategy for addressing the proliferation danger. This overarching strategy should direct how the tools of deterrence, defenses, offensive military capabilities, and arms control should be used in concert with one another to reduce the incentives for others to obtain weapons of mass destruction; reduce the likelihood that such weapons will be used in acts of aggression; limit the scope of any attacks that may occur using such weapon; and limit the damage such attacks may inflict—thus expediting recovery.

on; and limit the damage such attacks may inflict—thus expediting recovery. Recommendation #2: Amend the G-8 Global Partnership principles to include a principle that explicitly reserves military options for deterring the acquisition, threatened use of, and actual use of weapons of mass destruction by aggressive powers. Specifically, this principle should state that nuclear deterrence remains an essential element of international security. At the same time, it should recognize that the requirements for nuclear deterrence are different from those of the Cold War. Second, the principle should state that G-8 states recognize that all states that are directly threatened by weapons of mass destruction or suffer an attack using such weapons have an inherent right of individual and collective self defense under Article 51 of the United Nations Charter. Finally, the principle should state that the G-8 states, as appropriate, will build and maintain the military forces necessary to support this principle. The foundation for this principle may be found in the Bush Administration's 2002 Nuclear Posture Review.

Recommendation #3: Adopt a statement recognizing that a mix of offensive and defensive capabilities is the best military approach for addressing the proliferation danger. This statement would serve to flesh out the amendment to the Global Partnership principles described above. It would make it clear that Cold War military policies are generally not applicable to today's world. This statement should also specifically endorse greater cooperation among G–8 nations in the areas of ballistic missile defense, cruise missile defense, air defense, and the defense of space-based assets.

defense, cruise missile defense, air defense, and the defense of space-based assets. Recommendation #4: Obtain an agreement among G-8 leaders to conduct simulations that assume a proliferated setting. This agreement would commit G-8 leaders to directing their governments—both individually and, where appropriate, among themselves—to undertake simulations and other exercises that assume a proliferated environment. If G-8 leaders truly want to discourage proliferation, particularly by those bent on aggression, they must demonstrate that they are prepared to address realized proliferation threats. They cannot afford to assume that arms control will succeed, while at the same leaving themselves unschooled in how to respond if arms control fails.

Recommendation #5: Move to adopt standards for measuring the outcomes of the programs under the Global Partnership Against the Spread of Weapons and Materials of Mass Destruction. To date, G-8 leaders have been measuring the success of the Global Partnership on the basis of inputs. They have focused on expanding the number of participating states and realizing the goal of \$20 billion in funding commitments. Now is the time for the G-8 to start focusing more keenly on outcomes. Measuring successful outcomes must include qualitative assessments as well as quantitative ones. Simply measuring the tons of chemical agent destroyed in Russia or the tons of fissile material put into secure locations will be insufficient. Qualitative assessments will serve to measure progress toward meeting the requirements of the damage limitation strategy. Specifically, G-8 leaders need to explain how the Global Partnership programs have reduced the possible scopes of such attacks, have lessened the damage that might otherwise be inflicted by such attacks, and explain why programs have made a material contribution to these goals. Further, these assessments should apply to the additional principle proposed in Recommendation #2 regarding military and defensive programs.

#### CONCLUSION

Mr. Chairman, the G–8 agenda on nonproliferation has made a material contribution toward addressing the spread of weapons of mass destruction and their means of delivery. The Global Partnership Against the Spread of Weapons and Materials of Mass Destruction will serve to dismantle many dangerous weapons and secure dangerous materials, starting in Russia and then moving to other states. The Proliferation Security Initiative is serving to interdict ships of dangerous equipment for the production of weapons of mass destruction. The agenda is moving to make the instrument of arms control more relevant to today's environment. The Bush Administration deserves the support of Congress in its efforts to combat the proliferation menace through the G–8 process.

Having said that, however, the G-8 process has been too narrowly focused on arms control and cooperative threat reduction. Relevant military and defenses tools

must be brought to the fore in G–8 deliberations on matters related to proliferation. This must start with the adoption by the G–8 of an overarching concept that defines the proper roles of deterrence, defenses, offensive military capabilities, and arms control in addressing the proliferation problem. This must start with the adoption of a damage limitation strategy.

Mr. Chairman, I thank you for the opportunity to testify today. I look forward to answering any questions you or other members of the subcommittee may have.

Mr. ROYCE. Mr. Wolfsthal.

#### STATEMENT OF MR. JON WOLFSTHAL, ASSOCIATE AND DEP-UTY DIRECTOR FOR NON-PROLIFERATION, CARNEGIE EN-DOWMENT FOR INTERNATIONAL PEACE

Mr. WOLFSTHAL. Thank you, Mr. Chairman and Members of the Committee. I will summarize my remarks and ask that the full text be inserted into the record.

I think we have broad agreement here that the multiple nuclear threats facing the United States as well as our friends and allies can't be understated, and yet we have all expressed concern that they still remain underappreciated both in the public and within many quarters of the U.S. and foreign governments

many quarters of the U.S. and foreign governments.

While, Mr. Chairman, I have commended the current Administration for championing the role of the G-8 and the cause for non-proliferation and believe they have helped galvanize international awareness that the effects of the nuclear attack would be felt well beyond the blast zone and that more must be done, I concur with the statements that the G-8 Global Partnership to date has, at best, a mixed record.

Self-interest dictates that the G-8 countries, as the countries with the most economically to lose from a nuclear attack, take action to prevent this nightmare from becoming a reality. The G-8 Partnership remains a high watermark, but more must be done. There has been a lot of detail about how pledges are not money flowing to the projects and that some of these projects may not be as prioritized as they should be, but, in the end, I think we are here to assess primarily the American record on this agenda, and I will focus mostly on that.

It has been said many times, but perhaps best by Senator Sam Nunn, that we are in a race for our lives. It is us versus the terrorists; and, to date, the terrorists are winning. And I think a couple of key examples or key projects that the United States Government has worked on for many years and the time lines that are now in place demonstrate why the sense of urgency these projects demand is simply not in place. The two projects are the Material Protection Control and Accounting program securing nuclear materials in the former Soviet Union, but mainly in Russia, and, as has been mentioned, the Global Threat Reduction Initiative. This is clearing out nuclear material that can be used in nuclear weapons from research facilities around the world—not just in Russia, but all over the globe. And both of these vital programs have time lines that stretch out far too long.

While the Bush Administration has recently moved up the MPC&A program time table and stated its intention to complete security upgrades in the former Soviet Union by 2008 as opposed to 2013, no one who works on these programs or understands them believes that this target will be achieved. The political resources

aren't there, and the real concern is that even this new, aggressive target is more the result of statistical creativity than real project

engineering.

Likewise, the Global Threat Reduction Initiative, or global cleanout, designed to keep those materials most likely to end up in the hands of terrorists is now slated for completion in 10 years. World War II was fought and won in just over half that time, and yet these materials will remain vulnerable for at least a decade. We must act faster.

I would also like to follow up with Michèle's eternal optimism that the 10 plus 10 over 10 is designed to be a floor, not a ceiling. And this is to say nothing of the ambition that was laid out by the Baker-Cutler report, the high-level advisory panel for the U.S. Department of Energy, which recommended that \$30 billion be spent on the nuclear agenda by the United States alone. This report came out before the terrorist attacks of 9/11; and I am convinced that had that panel been convened after the attacks, we would have seen much more emphasis on the time line in which that money should be spent.

There has been a number of comments made on the bureaucratic problems, logistical problems in implementing these programs. I will just focus really on one, which is my concern that it is very difficult to understand why the G–8 leaders have not established single responsible coordinators within each government with full-time responsibilities over coordination and implementation. Even those experts and officials who argue against the creation of a non-proliferation czar within the U.S. Government, I think, should see the value in having a coordinating position for the G–8 Global Partnership that can cut across multiple government agencies, that can be held accountable to national leaders, and that have a direct hand in the Global Partnership.

Mr. Chairman, I have talked about some of the challenges facing the G–8 Global Partnership. I would like to add a few words about a slightly broader perspective within the G–8 and the anti-proliferation effort.

We will hear a lot at the Gleneagles Summit about debt relief, which is an important issue and demonstrates the type of collective economic and political leadership that can be brought to bear on complex issues; and I believe the United States needs to look to additional sources of international legitimacy and capabilities on counterproliferation efforts, including the G-8.

As a start, G–8 members should be asked to develop and maintain the highest standards for protecting their own nuclear materials and for controlling sensitive exports, not just in Russia but across the G–8. The G–8 must set an example by having both the unity and moral authority to address these challenges worldwide.

Another step has been championed by our colleagues, that the Nuclear Threat Initiative would be for the G–8 countries to immediately agree to phase out all use of weapons, uranium, or weapons-usable uranium, in research facilities. Today, five of the eight member states, including the United States, run peaceful, relatively unguarded research facilities on the very same materials needed to make nuclear weapons.

Moreover, I believe that the United States should be a bit more creative and effective at using the opportunity presented by the G-8 on nonproliferation. One of the underlying issues that holds back greater cooperation between ourselves and our allies is that we do not have in place shared common threat assessments between the U.S. Government and our allies and among intelligence agencies with those we feel comfortable sharing intelligence information. In addition to urgent need for the United States to develop these risk assessments, I believe it is time for the United States to pursue a joint economic risk assessment through the G-8. Helping the world market economies agree on and understand the dramatic economic cost of a nuclear attack would help improve the outlook for commitments from these states to address these dangers. While the proliferation risk assessment is long overdue, and there is no replacement—the economic risk assessment is no replacement for that hard security risk assessment, I think now is the time for us to think about this as an agenda item.

Mr. Chairman, in conclusion, if the leading economic powers on earth cannot demonstrate the commitment and urgency, the threat of nuclear terrorism and proliferation demand, then we have little hope of preventing those who would seek to use nuclear capabilities against us from succeeding. But, in making these choices, we have to remember that there are no good responses once a nuclear weapon, or enough nuclear material to produce one, goes missing. Prevention is all we have, and we must do better than what we are

doing today.

Mr. ROYCE. Thank you, Mr. Wolfsthal. [The prepared statement of Mr. Wolfsthal follows:]

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

Mr. Chairman and Members of the Committee, it is an honor to once again testify before the subcommittee on an issue of such critical importance to our nation's security. The urgency of the multiple nuclear threats facing all Americans, as well as our friends and allies around the world cannot be understated. Yet despite the grave reality of these threats, these dangers continue to be underappreciated by the public and in many quarters of the U.S. and foreign governments. I commend you for helping to raise the profile of this issue and spur debate on what the United States Government is doing, is not doing, and can do better to protect our great country from

this, our top security threat.

Mr. Chairman, I have commended the current administration for championing the role of the G-8 in the cause of nonproliferation. Building on groundwork laid by its predecessor, the Bush administration helped galvanize international awareness that the affects of a nuclear attack would be felt far beyond the blast zone. A nuclear terrorist strike would have unprecedented and global societal, political and economic implications. Self-interest dictates that the G-8 countries—as the countries with the most economically to lose from such an attack—take action to prevent such a nightmare from becoming reality. The creation of the G-8 Global Partnership Against the Spread of Weapons and Materials of Mass Destruction remains a high water point for efforts by this administration to confront this acute danger and for that it should be recognized. The formation of the Global Partnership, initially known as the *Ten Plus Ten Over Ten* (\$10 billion from the US, \$10 billion from other G-8 partners over 10 years) is a true accomplishment and a symbol of America's ability to harness its economic and political relationships to the broader good, as well as in its own self-interests.

Yet despite broad rhetorical support and the pledges of additional financial resources by our G-8 partners, I am sorry to say that efforts by our government and the G-8 collectively are falling short and our urgency is fading fast. Worse, this is not just a flaw within the Global Partnership, but symptomatic of our broader antiproliferation efforts within the United States. We have not yet learned the lesson

that good is just not good enough in the battle against nuclear terrorism. The vast majority of G–8 pledges are just that, pledges. The money and expertise are needed now to ensure that the threats we all face are reduced and eliminated as quickly as possible. A number of factors have delayed the rapid implementation of critical projects. To be sure, one of the top reasons is the lack of effective leadership and management from and with Russia, which must do more to deserve its place in the partnership as more than just a mere recipient. While some progress has been made in helping Russia see the need to take independent action and organize more effectively, much remains to be done. But in the end, we are here to assess our own record and consider what policies the United States might adopt to ensure its own interests and those of our G–8 partners. That record leaves much to be desired.

It has been said many times but perhaps said best by Senator Sam Nunn. We are in a race for our lives. It is us versus the terrorists and the terrorists are winning. A quick review of the administration's own milestones makes clear that despite good words and intentions, we are not giving steps to prevent a nuclear attack against this country the utmost urgency they demand. As examples, let me cite just two key objectives many experts see as absolute requirements to protect this country from a terrorist nuclear attack—securing nuclear materials in Russia and recovering nuclear materials from research facilities around the globe—respectively known as MPC&A and the Global Threat Reduction Initiative. Both of these vital programs have timelines that stretch out far too long. While the Bush administration has recently moved up the MPC&A program timetable and stated its intention to complete nuclear security upgrades in the former Soviet Union by 2008 instead of the 2013 originally envisioned, no one believes that this objectives will be achieved. The political resources are just not there and there are real concerns that this new aggressive target is as much a result of statistical "creativity" as project engineering. Likewise, the GTRI or Global Clean out, designed to keep those materials most likely to end up in the hands of terrorists—those poorly protected in research facilities across the globe—is now slated to be completed in 10 years. WWII was fought and won in just over half that time. My colleagues and I at the Carnegie Endowment for International Peace have recommended in our recent policy proposal Universal Compliance: A Strategy for Nuclear Security 1 that the United States undertake and complete the same task in 4 years, with the requisite dedication of resources, including manpower and incentives for other countries to cooperate.

And I am sorry to say that when one looks at the pace of cooperation and achieve-

And I am sorry to say that when one looks at the pace of cooperation and achievements within the G-8 Global Partnership, the results and sense of urgency track the same as with these other important activities. In some areas, we are moving at the same or even a slower pace that before the 9/11 attacks. Yes, our G-8 partners have committed substantial resources to the challenge, and they now help share the burden. But these pledges have fallen far short of the initial goal of 10 billion additional dollars hoped for. This is to say nothing of the ambition that the \$20 billion should be seen as a floor, not a ceiling to the international commitment of resources. As of June 2005, pledges to the G-8 Global Partnership totaled roughly \$17 billion. It is good news that thirteen non-G-8 states have committed to making pledges including Australia, Belgium, the Czech Republic, Denmark, Finland, Ireland, Netherlands, New Zealand, Norway, Poland, South Korea, Sweden, and Switzerland. But only eight have actually made pledges thus far (Australia, Czech Republic, Finland, Netherlands, Norway, Poland, Sweden, and Switzerland). These partners and their pledges are a sign of hard work and good governance and we should not lose sight of this progress. But we need more than commitments—we need action. Results matter.

Even in the best of lights, the G-8 Global Partnership target of \$20 billion still falls far short of the \$30 billion target recommended by the Department of Energy's own high level advisory panel, chaired by Ambassador Howard Baker and Lloyd Cutler, who's recent passing we all mourned. I believe that had this report been written after 9/11, we would have seen even greater emphasis placed on the speed with which these resources should have been spent. Those bi-partisan leaders saw an urgency before the terror attack in 2001 that I am afraid has not been recognized by the rest of the Government, even after those strikes.

Ladies and gentlemen, analysts such as I often make financial comparisons to prove our point. These are made not to disparage the programs we compare them to, but to force people to consider the relative security gained per dollar spent. It seems to me that if we can spent \$10 billion a year on National Missile Defense, designed to protect against a limited threat that even the Joint Chiefs rank relatively low on their threat board, then we can surely spend more than 1 tenth of that amount on a known and defined threat we all must recognize. Likewise, the

<sup>&</sup>lt;sup>1</sup> Available at www.carnegieendowment.org/strategy

war in Iraq has already cost well over 20 times in money alone what the US plans to spend in 10 years on the Global Partnership. Just as we must urgently win the war in Iraq, we must urgently win the war against those who would use nuclear

materials against our allies and ourselves.

nuclear materials.

Key problems have plagued the implementation of the G–8 beyond financial resources. My colleagues have or will catalogue many of them. But it is important to note that this is not just about money. More money is needed, but it was international coordination through the G–8 that was supposed to catalyze our efforts to prevent proliferation. Yet the coordination efforts have been lacking among the G–8 partners and we have seen a bureaucratically tangled effort in the United States become magnified eightfold. We are not organized for success. It remains difficult to understand why the G–8 leaders have not established single, responsible coordinators within each government with full time responsibilities over these critical efforts. Even those who argue against the creation of a nonproliferation Czar within the US Government should see the value in having a coordinating position that can cut across the multiple government agencies with a hand in the Global Partnership. While early problems with coordination have improved, it is still not surprising for government officials from G–8 countries or prospective contributors to approach nongovernmental experts asking to find their counterparts in the United States structure. That 3 years after the partnership was launched that there is no central points of contacts and clear understanding of parallel government programs is a major concern. So in addition to financial concerns, it seems obvious, based on the record to date that we have not invested the organizational and political resources needed to ensure the success of the G–8 effort. More must be done, and it must be done quick-

Mr. Chairman, I have talked about the challenges facing the G–8 Global Partnership. I'd like to add a few words, however, in a larger perspective on the G–8 and the anti-proliferation effort. I began my remarks by noting that the G–8 nations have the much to lose from the use of nuclear weapons. Too date, however, the G–8 nations have not used their political clout to address the broader problem of proliferation, including demand for and access to these capabilities. We will hear a lot at the Gleneagles summit about debt relief for Africa, an important issue that demonstrates the type of collective economic and political leadership that must be brought to bear on complex issues. I believe the United States must now look to additional sources of international legitimacy and capabilities on proliferation, including the G–8. As a start, G–8 members should be asked to develop and maintain the highest standards for protecting nuclear materials and controlling sensitive exports. Today's physical protections standards are woefully inadequate. The G–8 must set an example to have both the unity and the moral authority to address these challenges. This is no different from the issue of debt relief. Thus, G–8 countries should take the lead by fully implementing the terms of UN Security Council Resolution 1540 and should adopt and implement new, high standards of protecting

Another key step, as my colleagues from the Nuclear Threat Initiative have championed, would be for the G-8 countries to all immediately agree to phase out the use of weapons-uranium in research facilities. Today, at least 5 of the 8 members states, including the United States run peaceful research facilities with the very same materials needed to make nuclear weapons and this despite long-standing U.S. and international efforts to end the civilian use of this dangerous material.

Moreover, I believe the United States should be more creative and effective at using the opportunity presented by the G-8 on nonproliferation. One of the underlying issues that holds back greater cooperation between the United States and other close allies is that we do not share the same perception of the threats and risks posed by the possible spread and use of these weapons and materials. Berlin sees a different threat than Washington does, just as Tokyo faces a different threat than London. In addition to the urgent need for the United States to develop joint proliferation risk assessments with our close allies in Europe and East Asia, I believe it is time for the United States to pursue a joint economic risk assessment through the G-8. Helping the world's leading market economies agree on and understand the dramatic economic costs of a nuclear attack would help improve the outlook for commitments from these states to address these dangers. The need for a common U.S.-European proliferation risk assessment is long overdue. I would imagine that my colleague, Michele Flournoy who has worked for several years to help improve European understanding of the proliferation risks could readily attest to this basic observation. While no replacement for the desperately needed common threat assessment, the development of this economic risk assessment could have great value, reinvigorate cooperative nonproliferation efforts and should be actively considered. I am not an economist, but I am confident that such an assessment would show the clear cost/benefit value in investing more resources now to prevent

the threats we are discussing from becoming realities.

Mr. Chairman, in conclusion, if the leading economic powers on earth cannot demonstrate the commitment and urgency the threat of nuclear terrorism and proliferation demand, then we have little hope of preventing those who seek to use nuclear capabilities against us from succeeding. But in making this choice, we have to remember that there are no good responses once a nuclear weapon or enough nuclear material to produce one goes missing. Prevention is all we have, and we must do better than we are today.

Mr. ROYCE. When you are talking about this risk assessment, economic risk assessment, give us a little bit more of an understanding. Are you talking about how cost-effective it would be to be a part of solving this proliferation problem? Are you talking about how costly it would be if they were hit, the damage that would come to that economy? Because you are asking us to take risk assessment into the economic sphere here; and why don't you explain it for us.

Mr. Wolfsthal. Sure, Mr. Chairman.

I think the first consequences would flow naturally from the main one that I had thought about in this recommendation, which is that—and I think Michèle Flournoy may be able to talk in a little more detail about this because she has run scenarios—consequence or threat scenarios for European Governments and the European Parliament on what exactly a terrorist strike might look like as it is coming toward us, and then looking at what the consequences are.

Mr. ROYCE. They have different perceived threat risks.

Mr. WOLFSTHAL. No doubt. And there are different threats. Washington and New York face a different level of threat than Hamburg or Leon.

But, at the same time, I think that working together so that these countries not only understand the economic impact should they be hit but the economic impact on other countries or on the result of a strike in yet another country—

So let's take a look at the terrorist strikes of 9/11 and the global economic impact that had. What would a nuclear strike in New York mean to the economies of the other G–8 members? I think from that we can quickly generate much greater public support and

government support for a higher spending level.

Mr. ROYCE. Before we go to Ms. Flournoy for her observations on that, one of the things that Mr. Spring in his paper suggested is that we actually get G–8 leaders to participate in sort of these scenarios, these simulation exercises, in which they are part of the progress of monitoring what happens when the genie is out of the bottle. And maybe—Mr. Spring, that is kind of an interesting concept—maybe you could all talk to some extent about how we could get G–8 leaders more focused by having them participate in such an exercise at a G–8 Summit and then maybe also including your analysis there to sort of further encourage them to look at the consequences country by country.

Mr. Spring. Essentially, I think that is exactly right. Taking the leadership of any of these countries in the G-8 and pulling them through the educational process that is associated with making the decisions that they may think are unlikely, but have such huge

risks for their societies, will concentrate their minds.

Obviously, you can talk about the economic consequences. I think that for any of us the humanitarian costs would be first and foremost, of course.

Mr. ROYCE. But I think what Mr. Wolfsthal had in mind was that the gap between perceived risks might be bridged partly by this economic analysis which is going to show the consequences

Mr. Spring. I think that is absolutely true. But I also say I wouldn't shortchange the humanitarian elements of what we are

talking about here.

I would also say that, on the military side, as related to my comments is that-more so in the question of the state actor in proliferation than maybe with regard to the terrorist-but, nonetheless, that we need to look at stability outcomes. We have assumptions about what proliferation means in terms of stability, but we don't have too much, in my judgment, in the way of hard simulation outcomes that look at that in terms of stability, the likelihood of attack and so forth and so on, and that we need to understand that in the context of not just arms control issues but also what we do on the military side.

What is the proper mix of offensive and defensive forces that would ultimately, in many cases, reduce instabilities, increase the likelihood of a stable outcome in state to state proliferation? The more difficult simulations, of course, address the nonstate actors and terrorist groups. That is all very, very difficult work.

Mr. ROYCE. Let's ask Ms. Flournoy.

Mr. Spring. We have gone through that in the context of nuclear strategy in the Cold War. We haven't done anything near that level

in my judgment.
Mr. ROYCE. I think one of the questions we would like to pursue is, what institutions might be able to take the lead? Who in the NGO community might be viewed as acceptable if you wanted to look at both simulations, you know, the humanitarian and economic consequences and then also the simulations on the military end?

Ms. Flournoy, could you guide us through a way in which we might be able to entice the G-8 to sit through such an exercise?

Ms. FLOURNOY. We have developed a simulation called Black Dawn that we have run twice now in Europe, once for the European Union and just last month for the entire NATO Assembly, which basically posits al-Qaeda getting hold of highly-enriched uranium from one of these civilian research reactors, putting together a crude nuclear device, and then exploding it at the gates of NATO in Europe.

And precisely one of the objectives of the exercise is to look at the consequences—not only the number of lives lost, radiation illness, infrastructure damage, but to look at the economic consequences and how quickly they become not only regional but global. If this happens in Europe, it is going to do billions and billions of dollars of damage to the United States. If it happens in the United States, the same is true for Europe. This is very interconnected.

So we have done those exercises for both EU and NATO. I think something similar could certainly be developed—a la Black Dawn or Dark Winter that CSIS also did in the bio domain—for the G–8. We have compressed this simulation down to a few hours of time. In all of the cases where we have run this, there is something different about a simulated experience that gets people beyond just the intellectual understanding to the experiential. I think that is very much needed to make people realize that the costs of investing up front in prevention are so much smaller than the costs of trying to deal with the consequences of an attack at the back end.

Mr. ROYCE. If we wanted to pursue this and we have Members of Congress participate with you, and maybe of this Committee,

can you give us an invitation?

Ms. FLOURNOY. Certainly. Following the hearing, we will be happy to. Dr. John Hamre, CSIS President and CEO—we could certainly sit down with you, sir, and talk about ways in which we can approach some of the G–8 governments, including ours—to per-

haps explore the idea.

Mr. ROYCE. I think there has to be a way to get this on the page for G-8 leaders. There has to be a way—a challenge could be made for participation. Maybe the NGO community could actually organize or originate that—I think it would be a lot stronger than coming from Congress—in order to get them to go beyond intellectualizing on this to the experiential level, as you said. And I think that might be very helpful.

Ms. FLOURNOY. Frankly, sir, what we have already done with

Black Dawn might be a useful vehicle with minor adaptation.

Mr. ROYCE. We will talk a little afterwards about that.

I have one last question before we go to Mr. Menendez. Well, I will come back to mine. You go ahead, Bob.

Mr. MENENDEZ. Thank you, Mr. Chairman.

I want to thank all the witnesses for their testimony, and let me

ask a couple of things.

Mr. Spector, if the Russians are not taking care of their own spent fuel, how can we possibly trust them to take the spent fuel back and secure it from Iran, which is part of the deal they are

suggesting we should all be comfortable?

Mr. Spector. Well, first of all, it is important to make the distinction between spent fuel which stays as spent fuel and the rods with very radioactive—with about 1 percent plutonium in them, all mixed up with unused uranium and a lot of other junk. That is one version. And that is relatively safe. Everyone considers that to be safe from the threat of terrorism and proliferation, even if it was seized by another government.

What is very dangerous is if you take that rod and then you process it; and, as a result, you extract the plutonium and you just

have the plutonium sitting separately.

What I was complaining about in my remarks was that the Russians are doing this domestically for a portion of their civilian nuclear plant fuel. They actually have no purpose, there is no program to use the plutonium. Although it is conceivable there may be one some day. In the meantime, they are cranking out all this plutonium and creating new dangers because they are processing the spent fuel instead of leaving it as it comes out of the reactor.

What they are planning to do with Iran is a little bit uncertain. This particular kind of reactor is the same type—it is called a

VVR-1,000, I believe—where the Russians do store the fuel domestically. So if they have the same approach to the Iranian fuel as they have to this particular kind of fuel in Russia, it will stay intact, and it will actually not be particularly much of a terrorist threat. And it is out of Iran. I think we don't have to worry that it will be misused by a national government. It will be sitting in pretty much safe storage in Russia.

So I think in this area Russia has done okay. It is when it starts to separate the plutonium out of the fuel that we all get nervous.

Mr. Menendez. You have a lot of "ifs" there, and those "ifs" don't reassure me in that context. But I understand the differences. But—

Mr. Spector. That is a fault—if I may, the plan is to keep the fuel intact; and that will be a reasonably safe outcome, much better than keeping it in Iran.

Mr. MENENDEZ. Mr. Wolfsthal?

Mr. WOLFSTHAL. I would take a slightly different tack on that, which is I would much rather have some spent fuel from Iran go to Russia, where there is already a lot of other spent fuel that is being managed and upwards of 15,000 nuclear weapons, than left in Iran, which doesn't have nuclear weapons, for which this might be a very attractive issue.

So we have to look at the relative risks, given the fact that the Russians are willing to cooperate with the international community on both inspections for this material and we can help them with safeguarding it. I think those risks are better managed in Russia

than in Iran.

Mr. MENENDEZ. Let me ask you a question then. I heard you talk about your concerns about Russia. While it may be better than in Iran, do we really want to have the wherewithal for Iran to have this capability?

Mr. WOLFSTHAL. I think if you give all of us a magic wand, Congressman, we would all say, great, let's not have nuclear reactors

ın Iran.

I think we have to recognize that this reactor is built and that, given what we have learned about Iran and their secret nuclear program over the past 20 years to acquire enrichment equipment, which is much farther along than their ability to use this material out of the power reactor for nuclear weapons purposes—we had been focused on the Bushehr reactor for a long time, and I think we were focused on the wrong part of the problem.

In fact, allowing Russia and Iran to cooperate on power reactors that have a relatively low risk for proliferation may be part of the solution for Iran. If this is the fig leaf that Iranian officials can cover their willingness to give up enrichment with, then I would argue so much the better. But I recognize that is not reducing the

risk to zero.

Mr. MENENDEZ. Let me ask you one other set of questions in the same vein. Where are we in terms of overall—in terms of our efforts in weapons material control in the post-September 11th era—compared to the pre-September 11th era in terms of our success?

I listened not only to what you said but I read your full statement. I think others may have some expression of this, but it seems yours is the clearest. To cite your statement, for example,

you say, two key—I am paraphrasing here—but two key objectives many experts see as an absolute requirement to protect this country from a terrorist nuclear attack are securing nuclear materials from Russia and recovering nuclear materials from research facili-

ties around the globe.

Then you go on to say that both of these vital programs have time lines that stretch out far too long. And you go on to say, no one believes that the upgrading of the time frame is an objective that will be achieved. Then you go on to say that the political resources are just not there, and there are real concerns that this new, aggressive target is as much the result of statistical creativity, "as opposed to project engineering." And the rest of it goes on to say, a lack of a sense of urgency by the G-8 and its Partnership.

What do we need? Do we need the size of a hockey disk of plutonium to come into the United States, be put in a bomb, exploded

here, and then we will have the sense of urgency?

Mr. WOLFSTHAL. That is the nightmare, Congressman, that we all worry about and hope that we don't have to wait for. I think there is broad recognition in the expert community. I think there is broad recognition in the professional community, inside the Gov-

ernment, of the importance of these issues.

What we have not seen, I think, as Michèle said, is a willingness—I think we have all echoed this—of the President of the United States to make this a number one agenda item every single time he meets with President Putin and of Secretary Rumsfeld and Secretary Rice and Secretary Bodman to make this their number one agenda item every time they meet with their counterparts.

I am not dismissing the importance of other issues, and I am admittedly a nuclear geek who focuses on this exclusively. But I can't think of anything more important than this. And I have tried.

So is it a question of doubling the number of men and women that are working on this problem in the United States Government? I think that would be a start.

Is it a question of letting them break beyond the bureaucratic restrictions on hiring, on travel, on spending? I think those are important issues.

We have to have proper oversight, of course. But we know that there are problems with many government programs. This is one that I think we should be willing to err on the side of caution.

Mr. ROYCE. The rest of you, what is it going to take for the rest of us to have the sense of urgency to bring this to the top—if not the near top—of our agenda in terms of—talk about homeland security, talk about protecting the United States, talk about the fact that the number one responsibility of the Federal Government is to protect its people; and yet for something that seems, unfortunately, potentially so accessible and so consequential, it seems so far down on our list of priorities.

Ms. FLOURNOY. I would hope that it wouldn't take an attack, sir. But, barring an attack, I think another motivator would be some credible intelligence that there has been a security breach at a facility or that some material has gone missing and so forth. But, again, once you get to that point, material on the move is very hard to interdict; and it might be too late. Exactly what you're talking

about—getting through the access issue to complete the security upgrades for all of the Russian sites—that was the main focus of discussion at the United States-Russian Summit in Bratislava, and there was some sense of momentum created because Bush and Putin focused on the issue.

But, once again, after the summit, things devolved back into bureaucratic channels. And without continued Presidential involvement—even if it is not face-to-face but continuing to push and say, "I want to sign something on X date." One opportunity would have been to say, "We want to come to Gleneagles and sign something to clear up this problem, so you better deliver the paperwork by then." That is the kind of Presidential involvement: Sustained attention—pushing, pushing, pushing through the red tape—that it is going to take to get at this very sensitive access issue.

Mr. MENENDEZ. So the answer is leadership.

Ms. FLOURNOY. Leadership.

Mr. MENENDEZ. Thank you, Mr. Chairman.

Mr. ROYCE. Mr. McCaul.

Mr. McCaul. Thank you, Mr. Chairman. Thanks for holding this hearing.

I want to thank the witnesses for being here. I agree with just about everything that has been said here today, including the fact that this is the most important issue facing this Nation. I also serve on Homeland Security and have been briefed quite a bit on the nuclear threat.

We know that terrorists have the intent to use a nuclear device here. But what we don't know is, do they have the capacity? We know that Dr. A.Q. Kahn was a master proliferator in terms of technology. But the question we don't know is, has any of this material gotten in the wrong hands? And that is more of a proliferation issue, I understand.

But as it comes to the country's participating in target countries at the G–8 conference, will there be any discussion—I think there shall be in terms of accountability—as to what they had? There has been testimony about all sorts of threats, whether it is nuclear briefcases that the Soviet had that are unaccounted for, other types of smaller nuclear tactical devices. It may be proving a negative at this point.

My question—I do have a couple that I want to throw out. The first one is whether they maintained any records in the Soviet Union, in the Soviet Bloc countries that we can look at and determine, do you still have this material? That is very helpful in terms of assessing the threat, in terms of what has escaped, through the hands, either by bribery or being sold or stolen, so we can better determine what the threat is against us here in the United States.

Mr. WOLFSTHAL. I am happy to start, Congressman. I agree with you. I think accountability on nuclear materials and nuclear weapons is a very important issue.

My colleagues and I at the Carnegie Endowment put out a policy report earlier this year laying out our take on what the new nonproliferation strategy should be. And one of the elements was that we need a global accounting of nuclear materials. That is very useful for a number of reasons, not the least of which is, you cannot secure what you do not have. There are challenges for that, particularly in the area of nuclear materials. For example, in the United States we did an accounting of our own plutonium production throughout the Cold War. And in a nuclear reactor, you have a relatively good sense of how much plutonium is produced every day per unit of power. And over the period, we estimated that there were 99 tons of weapons-usable plutonium that was produced, give or take a ton. That is a lot of nuclear weapons. So it is nuclear science, but it is not an exact science.

But we can do better in terms of what we are counting. In fact, the United States Government has funded Russian efforts to do an accounting of their own plutonium production. That is something that they have not completed and something they have not shared, but I think that would be a useful effort to make, not just with regard to Russia, but across the G–8.

Mr. McCaul. I know in this schedule we had an accounting of the nuclear materials. Do we have a similar recordkeeping in the

Soviet Union, former Soviet Union?

Mr. WOLFSTHAL. Yes and no. They did keep records. They were all kept largely by hand, but we have good—well, they are bad stories, but good evidence. But generally they kept double books.

They would be expected to produce a certain amount of plutonium per year. And so they would mark down that amount. If they produced an extra 500 kilograms, they would hold that in reserve, leave it off the books for when they failed to make their quota next month; then they would add it back on.

So I do not think we have high confidence on the accounting. What we have been focusing on is getting into as many facilities as we can, seeing what is there and locking it down. In large part, that is still the precess we are undergoing

that is still the process we are undergoing.

Mr. ROYCE. They have the same auditors as Enron. Mr. McCaul. Anybody else like to comment on that?

Ms. FLOURNOY. I would just add two footnotes. One is on tactical nuclear weapons, the confidence there is not very high. Again, these are ready-made weapons that might be portable and used by a terrorist. And there is lots of internal debate and discussion even today over what the actual arsenal in Russia is.

Also, the materials accounting really needs to go beyond Russia. During the Atoms for Peace era—and the Russians had a similar program—the two superpowers sent weapons-usable material all over the world into small civilian research facilities. And we are trying to account for that material. So I think it is a much larger global problem.

Mr. McCaul. That raises an issue in terms of the target countries that I saw on the list for the G-8 conference. I think it is much broader than the list that I see here. Would you agree with

that?

Ms. Flournoy. I would like to see the Global Partnership be expanded to include international support for this idea of a global cleanout of highly-enriched uranium from all 130-plus sites in 40 countries around the world. I think that is an international priority, and one that the global partnership should embrace.

Mr. Spring. One thing I would say on that, too, that may be an issue that is addressed at this summit, is the question of the fur-

ther spread of enrichment and reprocessing technology, something that President Bush has been reasonably well focused on. The question is whether there will be some permanent standard set.

At this point in time, from what I gather in terms of where we stand, the better approach, at least for now, will be to continue the policy of interim restraint that was established at Sea Island.

Mr. McCaul. Just as a follow-up: We did a table-top exercise on homeland security with a smallpox outbreak. And I know Russia has yet to open four of its biological weapons facilities. We know that we unilaterally shut ours down—I believe it was under the Nixon Administration—that while they may have portrayed that they were actually going full force with their biological weapons program.

And where are we on that issue? That is, you know, I think nuclear is obviously the threat that will kill millions, but biological still remains a serious threat to this country.

Ms. FLOURNOY. My impression is that the Russians have been more transparent with parts of their biocomplex that are on the civilian side of the infrastructure.

Where we have had less transparency and penetration, in terms of cooperation, has been on the defense side of the house, in their military complex. That is a very hard nut to crack.

It is something that, as Sandy mentioned, people are getting frustrated with and starting to pull back from. I think that is an area where we need to maintain pressure, maintain focus, and keep hammering away at. Because to the extent they have any kind of remaining capacity or pathogen collections, that is where it will be, and that is really where we need to build the transparency and the security measures.

Mr. Spring. Let me just put that a little bit in context, which is as much, I guess, for Mr. Menendez' questions as for you; which is, yeah, we can use perhaps some stronger leadership here in the United States and among the G-8; but what has happened with regard to the leadership for accountability in the recipient countries, I think, pales in comparison.

I mean, the leadership there on the recipient side with regard to access and accountability issues—and Russia, by no means is the only one—is critically important.

That is one of the things that I hope is signaling perhaps a change in that, is the adoption of the U.N. Security Council Resolution 1540. Because then we are taking everybody in, people that clearly have been operating under the radar screen for some considerable period of time, probably.

So I think we would—I would be fearful that we arrived at the unbalanced conclusion that the lack of leadership is here in the United States, whether it be in Congress or the Executive Branch, which in my judgment, certainly there may be some problems there, but we need to focus on the other side of the ledger.

Mr. McCaul. Well, going back to the—there were weapons-grade biological agents that were produced in the Soviet Union. Is that going to be a topic of discussion at the G–8, opening up their facilities?

Mr. Spector. It was to have been a leading issue that the Brits were going to take up. But we are not seeing any action that I am aware of.

If I can just reiterate a point that was in my testimony. It is true the military facilities in Russia have been closed off to us. That is a big negative. That leaves a lot of uncertainty as to what is going on. The United States has not been prepared to certify that Russia is in compliance with its obligations under the Biological Weapons Convention. That is a problem area.

But the areas where we have been allowed in, is a place where we are actually pulling back. While we are not going to complete the job of securing all of these locations—and I think that becomes very troubling—this is predominantly an issue that the Pentagon has with the way the Russians are behaving, and it is not necessarily a U.S. Government-wide view, but it is the way the pro-

gram is unfolding.

So the suggestion I had in my remarks was, we maybe get a second agency involved. The Department of Energy would be a reasonable one. They do security of sites in the nuclear area. They have at their national labs a lot of expertise on biological weapons as well. They also know how to manage these kinds of projects. So I think there is an area where we are a little bit at fault here.

Mr. McCaul. If I can indulge the Chair, if I can ask just an addi-

tional question.

The forgiveness of debt issue. Tell me how that would be helpful

on this topic.

Mr. WOLFSTHAL. Well, what I was trying to say in my testimony is that to draw an analogy between how the G-8 is developing the moral leadership to focus on poverty elimination and getting African countries and others to restructure their economies by canceling debt, I think we would collectively be in a much stronger situation in the G-8 if we maintained higher standards ourselves on nuclear security, on controlling exports, then to get the recipient countries and beyond to meet those same high standards.

Mr. McCaul. If you were a Member of Congress and sent a letter to the President on this topic, with respect to preparation for the meeting with President Putin, what would be the four main points

you would highlight?

Ms. FLOURNOY. I would say, number one, there is no issue more important than for you to make your top priority with President Putin every time you meet and talk with him, given its centrality to our national security.

Two, that you personally have to hold your bureaucracies accountable, both President Putin and President Bush, by giving them clear deliverables, things that you want to sign on dates specific to force progress and cut through the red tape.

And it is imperative to engage your G-8 partners to refocus the Global Partnership efforts on those measures that specifically relate to keeping these materials out of the hands of terrorists.

Mr. Spector. I think that is very good advice. I think a lot of us are echoing the same points in our remarks. Specifically, it would be nice to get this liability issue resolved. Now, the liability issue is not merely important to this particular agreement on plutonium disposition, it is the core part on the umbrella agreement

that covers many, many different nonproliferation activities in Russia by the United States, the so-called "umbrella" agreement.

If we do not get it resolved first in the context of the Plutonium Disposition Agreement, then the umbrella agreement, which has to

be renegotiated this year, the entire enterprise is flat.

It is the Administration's desire to get it resolved in both contexts, but it is a particularly important issue not only for one agreement but also for the umbrella agreement. And I would really press for this one, because you have got to clear the underbrush out here and get this issue resolved. It is a stumbling block which has already caused much damage and promises to cause much

Mr. McCaul. Thank you very much. Mr. Chairman, I thank you

for holding this hearing.

Mr. ROYCE [presiding]. Mr. Spector, when you talk about the stumbling block between the Department of Defense and the Russian Government on this issue, are you talking about only the liability issue, the liability issue as it applies to pathogens, as well as it applies to nuclear, or are there additional considerations?

Mr. Spector. Two different issues.

Mr. ROYCE. Let's go to the DoD issue first.

Mr. Spector. The DoD umbrella agreement, it really is the granddaddy of all of the agreements. It was the first one negotiated, and it got very, very good terms for the United States, which the Russians are now pushing back on a bit. Because it was in place, and it was perceived to be solid, a lot of other programs kind of came under it, Department of Energy programs among others, like the one we are speaking about, to secure nuclear materials.

If the big agreement collapses over the liability issue, then a lot of other things are in trouble. Next door is the Plutonium Disposition Program.

Mr. ROYCE. Same issue.

Mr. Spector. On the biological weapons side, it is a whole different set of questions. Here the Administration has been very concerned about lack of transparency in the defense institutes that we were speaking of. They have been concerned that Russia has not signed a bilateral agreement, like it has in other areas. It has not signed one to allow us into the civilian bioinstitutes to do the secu-

I think, frankly, at least part of the Administration has gotten a bit fed up. They are just not happy with the way the Russians

are responding

Mr. ROYCE. They have got 50 sites and 60,000 that they trained in this area of pathogens. I was over in Moscow once and had an opportunity to try to get into some of those sites and to get briefed

by an individual who they call the "father of the plague."

He was given the task of taking the black plague, and somehow taking the DNA of this pathogen and mixing it with anthrax so that they could get a type of anthrax that would evolve, for which there would not be an antidote. And he finally succeeded. His life's work was to do this. And after about 30 years he succeeded at it.

And it was a meeting that a friend set up, so it wasn't part of an official dialogue, but I have since read books about this fellow's work, and his whole life was underground. Well, he was telling me about the network of people that worked in his area of expertise, and I can understand why some would like to get access.

But I wonder if we could do this liability issue and these access issues multilaterally G8-wide. Is there another way to approach

this that will get us to where we want to go? I do not know.

Mr. Spector. Well, in a certain sense, that may have happened to a degree. Because the G-8 partners have individually, or sometimes in small groups, have signed agreements with the Russians with a different liability clause, not much different, but just a little bit different. And the Russians have bought into that. The Duma has actually ratified some of those agreements, where they have never ratified the Cooperative Threat Reduction Agreement.

And so that provided a model which we are now prepared to go with. So in that sense, the G-8 did help clear away the underbrush, some of the other partners. But, I think for these particular agreements, if they are bilateral now, it is probably wise to keep them bilateral. Because any changes you introduce, you introduce negotiations. So you want to keep things as simple as possible.

Mr. ROYCE. So what should be the next step on the U.S. side, or

what could Congress do here?

Mr. Spector. To be honest, after a lot of to-ing and fro-ing, the U.S. side finally made an adjustment in its position. It had a very tough position until quite recently, and now it is sort of up to the Russians. I think what is occurring, in a sense currently, is rather high-level exchanges—pushing the Russians to get the job done.

This is Michèle's point where you have got high-level understanding and agreement, but it is just not getting through the sys-

tem.

Ms. Flournoy. If I can add on the bio side, sir. I think one of the greatest incentives you can offer to the Russians is the prospect of commercial cooperation that would actually yield a profitable biotech industry for them.

If they see the prospect of converting something and having it be profitable, the transparency usually comes a lot more quickly.

Mr. ROYCE. So more funding directly into that. Ms. Flournoy. Introductions to the private sector.

Mr. ROYCE. Well, there is very little intellectual infrastructure out there doing the type of work that you are doing. So we are particularly appreciative to Heritage and CSIS and Monterey Institute and the Carnegie Endowment for the type of hard thinking that you have put into this.

One question that is a bit of an enigma, I think, just regionally, is discussing Japan and their lack of interest, seemingly, in being

part of this process.

And I wanted to ask you why you thought psychologically or policywise Japan, that normally participates in so many ways, why there is no real partnership there? They are often the largest donors in many agreements. In many international forums they play a major role, and yet here there is a lack of commitment that is rather startling. I wondered if you could give us any insights on that.

Ms. Flournoy. My reading is that their initial experience with Russia was quite negative. They actually pledged some money on

a bilateral basis and wanted to cooperate, also working with the U.S. And they could not get the legal framework in place. They had trouble enabling the money to be spent. Their parliament ended up reprogramming money that had been allocated because it was not being used.

So it soured the whole political context for assistance. They have tried to recover by instituting a pilot project, which they have just completed of dismantling—I believe it was just one submarine.

This has actually gone pretty well.

Now they are saying, okay, let us try five more. So they are wading back in on a very careful basis, given their earlier experience.

Mr. Spring. I think, to put it in a nutshell, the Japanese thresh-

old for frustration tolerance is lower.

Mr. ROYCE. You know, the Atoms for Peace Program, I stumbled over, in our travels, particularly in Africa, in Congo, there was a reactor outside of Kinshasa that we ran into. And they were proud of the fact that they still had that reactor up and running. That was during the civil war at the time when the government had fallen and been replaced, and they were still trying to maintain that.

In Nigeria, likewise, there was a reactor.

And when you were speaking about the fact that all over the world, we sowed seeds here, Atoms for Peace, but it seems that the way in which many nations identify with having nuclear power is not necessarily what I think Eisenhower had in mind in terms of

the end game of what to do with it.

And I think the concept of trying to recall or get control over this inventory, and maybe one of the things we do around the world is make this part of our equation when we are pushing for debt relief and other initiatives. Well, yes, we are going to do that, but we have got to secure certain facilities that you have operating here that are not doing any visible benefit long range in terms of research or developing an ability to produce any type energy.

But I just wondered about your reactions to that.

Mr. Wolfsthal. Well, Mr. Chairman, if I may. When I worked at the Department of Energy, I used to manage that works to convert these reactors from weapons uranium to nonweapons uranium. And, when I was working for Sandy, I helped to try and push through, or actually pushed through the 10-year program to take back American-origin fuel, which is not a very popular initiative as we went to these ports to try to convince people that this was a good idea.

I think the Bush Administration really deserves tremendous credit for having brought together these disparate elements and

combined it into a broader initiative.

I think now the challenge for this program is to really sort of catalyze itself. We see one team in the Department of Energy, very capable, very dedicated, responsible, who are either trying to convert or shut down these reactors all over the world. We need mul-

Mr. ROYCE. Congo has the greatest hydro potential anywhere on the planet. And you sort of wonder about the investment here

versus hydro.

Mr. WOLFSTHAL. And incentivizing those countries I think is the key to this. For example, many of these reactors—I cannot speak directly to the Congo—but many of the reactors have weapons-grade uranium in them and they want to get out.

A big problem is not that they want to keep that reactor running, although they do not want to have that symbol, but they want to make sure that the people working there are going to have something to do.

I think we do scientific redirection through cooperative threat reduction all over our other programs; we should think seriously

Right now the Department of Energy is not allowed to spend the money appropriated for reactor conversion or elimination on scientific redirection. So I think we need to be more creative with the way we think about it.

Mr. ROYCE. So that is a recommendation you make, too.

Mr. Wolfsthal. Definitely.

Mr. ROYCE. Okay. Any last thoughts?

Thank you all again for your testimony here today. We are adjourned.

[Whereupon, at 3:20 p.m., the Subcommittee was adjourned.]