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NUCLEAR NONPROLIFERATION

Coordination of U.S. Programs Designed to Reduce the Threat Posed by Weapons of Mass Destruction

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Mr. Chairman and Members of the Subcommittee:

We are pleased to be here today to discuss our recent work on U.S. nonproliferation programs designed to reduce the threat to national security posed by the former Soviet Union's weapons of mass destruction and to comment on S. 673—a bill to establish an interagency committee to review and coordinate U.S. nonproliferation programs. Our statement today, which follows our testimony before this Subcommittee last week that provided an overview of U.S. tools for combating proliferation,[1] emphasizes how the events of September 11, 2001, have heightened the importance to our national security of global U.S. nonproliferation programs.

In summary, our most recent work on the U.S. government's various nonproliferation programs has found that they have achieved some success, but more needs to be done to keep nuclear weapons, materials, and technologies out of the hands of terrorists and countries of concern. For example, hundreds of metric tons of nuclear material remain at some risk because the Department of Energy's (DOE) program to secure this material continues to experience problems with access to sensitive Russian sites. Furthermore, there are questions about how to sustain the security improvements being made. In addition, DOE and State Department programs to employ weapons scientists face difficulty in conclusively demonstrating that they are achieving their intended goal of preventing the spread of weapons-related knowledge and expertise.

With respect to S. 673, there is some debate among officials both within and outside government about the need for more coordination of U.S. nonproliferation programs. Based upon our work and the findings of two independent commissions that recently examined these programs, we believe that additional coordination would be helpful and that the legislation could serve as a vehicle to share information and best practices for addressing the problems we identified in our work. However, the legislation would not address a number of other problems, such as limited access to sensitive Russian sites and various program management concerns that diminish the effectiveness of U.S. nonproliferation efforts. We also believe S. 673 could be strengthened by mandating development of an overarching strategic plan that clearly identifies overall goals, time

[1] *Weapons of Mass Destruction: Assessing U.S. Policy Tools for Combating Proliferation* (GAO-02-226T, Nov. 7, 2001).

frames for meeting those goals, and ways to set priorities for allocating resources governmentwide to address U.S. nonproliferation concerns.

Background

The states of the former Soviet Union possess enormous assets, including nuclear material and scientific expertise, that could help terrorists or countries of concern acquire weapons of mass destruction. By some estimates, the former Soviet Union had, at the time of its breakup 10 years ago, about 30,000 nuclear weapons, 650 metric tons of weapons-usable nuclear materials, 40,000 metric tons of chemical weapons, an extensive biological weapons infrastructure, and thousands of systems capable of delivering weapons of mass destruction. The political changes and ensuing economic turmoil left 30,000 to 75,000 senior nuclear, chemical, and biological weapons scientists, as well as thousands of less experienced scientists, without full-time employment. In addition, Russia's 10 closed nuclear cities, which form the core of the nuclear weapons complex, have massive unemployment problems and face an uncertain future because Russia is downsizing its nuclear weapons activities.

To date, the Congress has authorized in excess of $5.5 billion for U.S. programs aimed at helping Russia and the other newly independent states to reduce the threats posed by their weapons of mass destruction. Much of this money has been spent on the Department of Defense's (DOD) efforts to eliminate vehicles for delivering nuclear weapons and to secure former Soviet weapons and their components. DOE is also a major player in U.S. nonproliferation programs. Its programs focus on, among other things, (1) improving the security of hundreds of metric tons of nuclear materials at various sites located throughout Russia and (2) employing Russia's weapons scientists, including those in Russia's 10 closed nuclear cities, so that they will not sell sensitive information to countries or terrorist groups trying to develop weapons of mass destruction. The State Department also oversees two international science centers in Russia and Ukraine that pay former Soviet weapons scientists to conduct peaceful research.

S. 673 calls for a committee that would consist of representatives from the Department of Commerce, DOD, DOE, and State, and be chaired by a representative of the Assistant to the President for National Security Affairs. The committee would be responsible for monitoring and coordinating nonproliferation efforts in the former Soviet Union (1) within and between U.S. government departments and agencies, (2) between the U.S. government and the private sector, and (3) between the United States and other countries in order to minimize conflict among the programs and to maximize the utility of U.S. public spending. Specifically, the bill calls

for the committee to arrange for the development of analyses and provide guidance on the issues and problems relating to coordination within and between the U.S. government, the private sector, and other countries' nonproliferation programs.

Nuclear Nonproliferation Programs Have Had Success, but More Work Needed to Secure Weapons, Materials, and Technologies

Today, I will focus my comments on our recent work related to several key nonproliferation programs: DOE's Material Protection, Control, and Accounting Program; the 1993 U.S./Russia Highly Enriched Uranium Agreement; and DOE's and State's programs to employ Russian weapons scientists. Successful implementation of these nonproliferation programs is clearly in our national security interests. While these programs have had some success, much more needs to be done to ensure their successful implementation.

In February 2001,[2] we reported that the security systems installed by DOE's Material Protection, Control, and Accounting Program were reducing the risk of theft of nuclear material in Russia but that hundreds of metric tons of nuclear material still lacked improved security systems. At that time, DOE had spent about $601 million and had installed completed or partially completed systems protecting, among other things, 192 metric tons of the 603 metric tons of nuclear material identified at risk of theft. Nevertheless, Russian officials' concerns about divulging national security information continue to impede DOE's efforts to install systems for the remaining nuclear material at sensitive Russian sites. DOE has recently concluded an improved access agreement with Russia. However, the program's continued progress depends on DOE's ability to gain access to sensitive sites and reach agreement with Russia on reducing the number of sites and buildings where nuclear material is located and where security systems are needed. DOE estimates that the program will not be completed until 2020, at a cost of $2.2 billion. In the meantime, nuclear material remains at some risk of theft. DOE also has limited information on how much financial assistance each site throughout Russia will require to sustain the operation and maintenance of the systems that are being installed and how long the assistance will be needed.

In responding to our February 2001 report, DOE agreed with our recommendations to develop options for completing the program on the

[2] *Nuclear Nonproliferation: Security of Russia's Nuclear Material Improving; Further Enhancements Needed* (GAO-01-312, Feb. 28, 2001).

basis of the progress made in gaining access to these sites and agreement on the closure of buildings and sites. Furthermore, while DOE currently does not have a means to monitor the security systems it is installing to ensure that they are working properly on a continuing basis, it has agreed to implement our recommendation to develop a monitoring system in cooperation with Russia.

Security of Russian nuclear material has also been improved through the implementation of the 1993 U.S./Russia Highly Enriched Uranium Agreement. The agreement calls for USEC, Inc. to purchase 500 metric tons of weapons usable highly enriched uranium by 2013.[3] We reported in December 2000[4] that USEC had purchased low enriched uranium blended-down from 103 metric tons of highly enriched uranium, which, according to USEC, represents the equivalent amount of material from 4,000 nuclear warheads. The corporation continues to purchase additional weapons usable material. Despite this success, problems exist in this program. Specifically, several key measures that are intended to provide confidence that the highly enriched uranium is extracted from Russian nuclear weapons and that this highly enriched uranium is then blended-down into low enriched uranium have not been put in place. Furthermore, U.S. officials lack access to Russia's dismantlement facilities for its nuclear weapons and to the weapons dismantlement process. DOE officials have told us that they are continuing to negotiate with Russia to solve these problems.

The United States funds three programs that share the goal of employing Russia's weapons scientists in nonmilitary work and thereby preventing them from selling their knowledge to terrorists or countries of concern. These three programs take a somewhat different approach to solving the same problem. For example, in general, the State Department's Science Center program funds grant research projects,[5] while DOE's two programs—the Initiatives for Proliferation Prevention (IPP) and the Nuclear Cities Initiative (NCI)— fund commercial projects with industry

[3] USEC, Inc.—formerly the United States Enrichment Corporation—enriches uranium for use as fuel in commercial nuclear power reactors.

[4] *Nuclear Nonproliferation: Implications of the U.S. Purchase of Russian Highly Enriched Uranium* (GAO-01-148, Dec. 15, 2000).

[5] *Weapons of Mass Destruction: State Department Oversight of Science Centers Program* (GAO-01-582, May 10, 2001).

partners. In early 1999,[6] we reported on a number of management weaknesses in the IPP program and recommended several corrective actions. DOE has since implemented all of our recommendations to improve program effectiveness. Among other things, DOE made program changes based on our findings that (1) the IPP program had not achieved its broader nonproliferation goal of long-term employment for weapons scientists, (2) some "dual-use" projects may have unintentionally provided defense-related information to Russia, and (3) most program funds were spent in the United States rather than in Russia.

Similarly, as we reported in May 2001,[7] NCI had limited success during its first 2 years. DOE estimates that the program employs about 370 people, including many weapons scientists who work primarily on a part-time basis through research projects sponsored by the U.S. national laboratories. We found that a disproportionate amount of the NCI program's funding has been spent in the United States. About 70 percent, or about $11.2 million, of the $15.9 million that DOE spent through December 2000 was spent in the United States—primarily at its national laboratories—for such items as overhead, labor, equipment, and travel. The remaining 30 percent was spent for projects and activities in Russia. Our review found that DOE needs to address a fundamental question: Does it need two programs operating in Russia's nuclear cities with a shared goal and, in some cases, with the same types of projects? DOE agreed with our recommendation to consider consolidating the two programs in order to achieve potential cost savings and other efficiencies.

A major problem with the three programs designed to employ former Soviet- weapons scientists is the difficulty in conclusively demonstrating that they are achieving the programs' intended goal of preventing the spread of weapons-related knowledge and expertise to terrorists or countries of concern.

[6] *Nuclear Nonproliferation: Concerns With DOE's Efforts to Reduce the Risks Posed by Russia's Unemployed Weapons Scientists* (GAO/RCED-99-54, Feb. 19, 1999).

[7] *Nuclear Nonproliferation: DOE's Efforts to Assist Weapons Scientists in Russia's Nuclear Cities Face Challenges* (GAO-01-429, May 3, 2001).

S. 673 Could Improve Coordination but Would Not Address Other Problems in Implementing DOE's Nonproliferation Programs

S. 673 is focused on improving the coordination of the various programs aimed at keeping weapons, materials, and technologies out of the hands of terrorists and countries of concern. Although there is debate about the need for more coordination of these U.S. nonproliferation programs, based on our work and the findings of two independent commissions that recently examined these programs, we believe that additional coordination would be helpful and that the requirements in the legislation represent a positive step overall. However, enactment of this legislation would not solve all of the problems we have identified with these programs and does not address the need for an overarching strategic plan for U.S. nonproliferation programs.

Knowledgeable officials both within and outside government disagree about the need for more coordination of U.S. nuclear nonproliferation programs. We spoke with representatives from DOD, DOE, State, and the Nuclear Threat Initiative—a private foundation dedicated to reducing the threat from nuclear, biological, and chemical weapons through direct action, education, and awareness building activities. These officials noted that the FREEDOM Support Act of 1992 (P.L. 102-511) establishes a coordinator in the State Department for assistance programs to the Newly Independent States of the former Soviet Union, including those programs dealing with nonproliferation. They were unanimous that coordination among federal agencies implementing nonproliferation programs is already taking place at a high enough level and that the coordinating mechanism established by this bill may not be needed. However, throughout the course of our work on various programs, officials from the U.S. government and the private sector told us that there is a need for greater coordination among U.S. nonproliferation programs and activities. Some officials also believe that improved coordination is needed between the United States and international programs, such as those implemented by the European Union. Officials have also stated that although coordination among U.S. nonproliferation programs does occur, it is frequently informal and subject to changes in program personnel.

Two independent commissions that have examined U.S. nonproliferation programs over the past 3 years share this view. In July 1999, the Commission to Assess the Organization of the Federal Government to Combat the Proliferation of Weapons of Mass Destruction (also known as the Deutch Commission) recommended the creation of a high-level council that would formulate policy, reach timely decisions, and harmonize the interagency process of program execution and resource allocation in accordance with an integrated national plan. In January 2001, the Secretary of Energy Advisory Board Russia Task Force (chaired by

former Senator Howard Baker and former Counsel to the President Lloyd Cutler) reported on DOE's nonproliferation programs in Russia. The task force recommended, among other things, improved coordination among programs of different agencies through the creation of a high-level leadership position in the White House. It also called for the development of a national strategic plan for U.S. nonproliferation programs.

In our view, enactment of this legislation could improve coordination and communication among U.S. government, private sector, and other countries' nonproliferation programs. Greater coordination could also have other impacts, such as (1) minimizing duplication, (2) leveraging resources, and (3) focusing programs more clearly on common goals and objectives. However, it would not solve many of the other problems facing the implementation of U.S. nonproliferation programs that we have previously reported on, such as access to sensitive Russian sites and various program management concerns. We agree with the views expressed by the Deutch Commission and the Baker-Cutler Task Force that a missing element from the current U.S. government implementation of nonproliferation programs is an integrated strategic plan. We believe that such a plan is needed and that S. 673 could be strengthened by mandating development of a plan that clearly identifies overall strategic goals, time frames for meeting those goals, and ways to set priorities for allocating resources governmentwide to address U.S. nonproliferation concerns. By delineating ways of measuring progress toward goals, a cross-cutting strategic plan would provide a mechanism to hold departments and agencies accountable for achieving the overall goals of U.S. government efforts to combat the spread of weapons of mass destruction. A governmentwide strategic plan could be built on strategic plans that have already been developed by the agencies that implement these programs and could address such issues as the following:

- Are the end dates for the completion of the various nonproliferation programs, such as securing nuclear materials in Russia, still viable?
- How can the security improvements made be sustained beyond the completion of the programs?
- In light of September 11, do we have the right mix of nonproliferation programs needed to address the varying security problems facing our nation?

This concludes my formal statement. I would be happy to respond to any questions that you or other Members of the Subcommittee may have.

Contact and Acknowledgments

For further information on this testimony, please contact Ms. Gary L. Jones on (202) 512-3841. Individuals making key contributions to this testimony included Gene Aloise, Ryan T. Coles, Joseph Cook, Beth Hoffman Leon, Hynek Kalkus, Glen Levis, and F. James Shafer.