

January 2005

# WEAPONS OF MASS DESTRUCTION

## Nonproliferation Programs Need Better Integration



G A O

Accountability ★ Integrity ★ Reliability



Highlights of [GAO-05-157](#), a report to the Committee on Armed Services, U.S. Senate, and the Committee on Armed Services, House of Representatives

## Why GAO Did This Study

Since 1992, the Congress has provided more than \$7 billion for threat reduction and nonproliferation programs in the former Soviet Union (FSU). These programs have played a key role in addressing the threats of weapons of mass destruction and are currently expanding beyond the FSU. The National Defense Authorization Act for Fiscal Year 2004 mandated that GAO assess (1) Department of Defense (DOD) and Department of Energy (DOE) strategies guiding their threat reduction and nonproliferation programs and (2) efforts to coordinate DOD, DOE, and Department of State threat reduction and nonproliferation programs that share similar missions.

## What GAO Recommends

GAO recommends (1) that the Secretaries of Defense and Energy develop an integrated plan for all U.S. threat reduction and nonproliferation programs and (2) that the Assistant to the President for National Security Affairs issue clear guidance for the coordination of border security programs. DOE agreed with the recommendations, while State and the NSC staff did not comment. DOD concurred with the need for better integrated nonproliferation programs, but did not specify whether it agreed with the need for an integrated plan. DOD concurred with the need for guidance governing border security programs.

[www.gao.gov/cgi-bin/getrpt?GAO-05-157](http://www.gao.gov/cgi-bin/getrpt?GAO-05-157).

To view the full product, including the scope and methodology, click on the link above. For more information, contact Joseph A. Christoff, (202) 512-8979 or [christoffj@gao.gov](mailto:christoffj@gao.gov); or Gene Aloise, (202) 512-3841 or [aloisee@gao.gov](mailto:aloisee@gao.gov).

# WEAPONS OF MASS DESTRUCTION

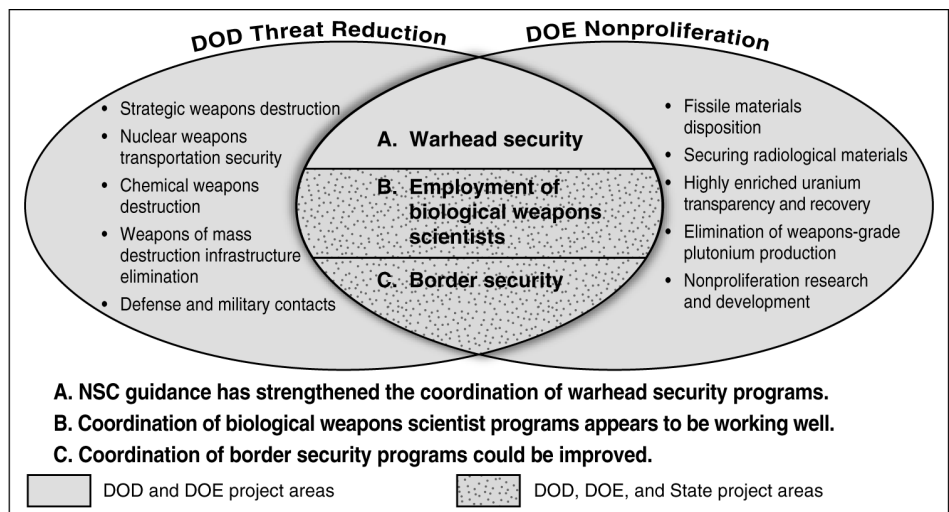
## Nonproliferation Programs Need Better Integration

### What GAO Found

GAO found that there is no overall strategy that integrates the threat reduction and nonproliferation programs of the DOD, DOE, and others. DOD and DOE have strategies governing their respective programs, which generally contain the elements of a strategy as established by the Government Performance and Results Act of 1993. These strategies include a mission statement and goals, identify external factors that could affect meeting these goals, establish metrics to evaluate the performance of the programs, provide cost estimates, and cover a period of at least 5 years. Given the involvement of multiple agencies, and the expansion of the threat reduction and nonproliferation programs beyond the FSU, integration of agencies' strategies is important.

The agencies' implementation of very similar programs has not always been well coordinated. While the majority of programs in DOD and DOE are distinct, GAO found three program areas that perform similar functions in the FSU. GAO found that the coordination of programs enhancing security at Russian nuclear warhead sites improved after the National Security Council (NSC) staff issued guidance. Specifically, the guidance delineates agencies' roles, interactions, and ways to resolve disputes. The biological weapons scientist employment programs in DOD, DOE, and State are well coordinated and also have NSC staff guidance addressing roles, interactions, and disputes. By contrast, there is no governmentwide guidance delineating the roles and responsibilities of agencies managing border security programs. According to DOD and DOE officials managing these programs, agencies' roles are not well delineated and coordination could be improved.

### DOD and DOE Threat Reduction and Nonproliferation Program Areas



Source: GAO analysis of DOD, DOE, and State data.

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## Abbreviations

CTR	Cooperative Threat Reduction
DNN	Defense Nuclear Nonproliferation
DOD	Department of Defense
DOE	Department of Energy
DTRA	Defense Threat Reduction Agency
FSU	former Soviet Union
GPRA	Government Performance and Results Act of 1993
NNSA	National Nuclear Security Administration
NSC	National Security Council
WMD	weapons of mass destruction

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United States Government Accountability Office  
Washington, D.C. 20548

January 28, 2005

The Honorable John Warner  
Chairman  
The Honorable Carl Levin  
Ranking Minority Member  
Committee on Armed Services  
United States Senate

The Honorable Duncan L. Hunter  
Chairman  
The Honorable Ike Skelton  
Ranking Minority Member  
Committee on Armed Services  
House of Representatives

Since 1992, the Congress has provided more than \$7 billion for threat reduction and nonproliferation programs in the former Soviet Union (FSU). These programs encompass a range of projects, including removing nuclear weapons from Ukraine, Belarus, and Kazakhstan; securing nuclear materials and warheads in Russia; and paying former weapons of mass destruction (WMD) scientists to engage in peaceful research. The National Security Council (NSC) staff has the principal role in coordinating the many U.S. threat reduction and nonproliferation programs that are implemented primarily through the Departments of Defense (DOD) and Energy (DOE), although the Departments of State, Commerce, and Homeland Security implement related programs. DOD and DOE threat reduction and nonproliferation programs have played a key role in addressing the threats posed by WMD in the FSU; these efforts have expanded in size and scope beyond the FSU states. For example, the United States recently provided assistance to dismantle WMD infrastructure in Libya, and DOE recently announced a new program to provide employment opportunities for Iraqi weapons scientists. Furthermore, in November 2003, the Congress authorized DOD to allow the Cooperative Threat Reduction (CTR) program to spend up to \$50 million annually of its existing funding to address proliferation threats outside the FSU. A bill pending in the Senate would allow DOD increased flexibility to undertake nonproliferation projects outside of the FSU.<sup>1</sup>

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<sup>1</sup>S. 2980, 108<sup>th</sup> Congress, 2<sup>nd</sup> Session.

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The National Defense Authorization Act for Fiscal Year 2004<sup>2</sup> mandated that we assess the current management of DOD and DOE threat reduction and nonproliferation programs. We agreed to approach this assessment in two phases. First, this report assesses (1) DOD and DOE strategies guiding their respective threat reduction and nonproliferation programs and how they are integrated with those of other agencies and (2) efforts to coordinate the implementation of DOD, DOE, and State threat reduction and nonproliferation programs that share similar missions, goals, and activities. We included State in assessing the coordination of threat reduction and nonproliferation programs because it shares responsibility in coordinating two programs. In the second phase, we plan to issue individual reports on DOD and DOE internal controls for their threat reduction and nonproliferation programs. A list of our prior reports concerning DOD and DOE threat reduction and nonproliferation programs is included at the end of this report.

To assess DOD and DOE strategies guiding their respective threat reduction and nonproliferation programs, we assessed the agencies' strategic plans against criteria established by the Government Performance and Results Act of 1993 (GPRA). We also relied on our previous reviews of the CTR program in DOD and nonproliferation programs in DOE. Furthermore, we met with officials at DOD, DOE, and State and reviewed documents to determine if a plan exists that integrates the implementation strategies of DOD, DOE, and other agencies. To assess efforts to coordinate DOD, DOE, and State threat reduction and nonproliferation programs, we reviewed agency documents and interviewed agency officials. DOD officials included the Deputy Undersecretary of Defense for Technology Security Policy and Counterproliferation and other senior leaders. DOE officials included the Deputy Administrator for Defense Nuclear Nonproliferation and other senior leaders. We spoke with State Department officials in the Office of the Coordinator of U.S. Assistance to Europe and Eurasia and the Bureau of Nonproliferation. Although NSC officials did not respond to our requests to meet, we were able to meet our audit objectives by obtaining records and having discussions with DOD, DOE, and State officials regarding the role of the NSC staff and the extent of its participation in coordinating programs. Additionally, we provided a draft of this report to NSC staff to obtain their comments. We performed our review in Washington, D.C., from February 2004 to November 2004 in accordance with generally accepted government auditing standards.

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<sup>2</sup>Public Law 108-136, Section 3611.

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## Results in Brief

While both DOD and DOE have individual strategies governing their respective threat reduction and nonproliferation programs, there is no overall strategy that integrates these plans with one another, or with those of other agencies. DOD and DOE individual strategies generally contain the elements of a plan developed using GPRA criteria. These strategies include a mission statement and goals, identify external factors that could affect meeting these goals, establish metrics to evaluate the performance of the programs, provide cost estimates, and cover a period of at least 5 years. In 2004, DOD and DOE implemented 39 threat reduction and nonproliferation projects costing approximately \$1.8 billion. While it is important and valuable for DOD and DOE to have strategies to guide their respective programs, the expansion of these programs beyond the FSU and the involvement of multiple agencies make integration of all agencies' strategies important. Since the mid-1990s, the Congress, GAO, and others<sup>3</sup> have called for the executive branch to develop governmentwide plans to coordinate U.S. threat reduction and nonproliferation programs worldwide. The NSC staff and State have prepared plans in response to these calls, but these plans either focus solely on one agency or on one geographic location. Therefore, these plans do not address U.S. threat reduction and nonproliferation programs worldwide.

The agencies' implementation of similar threat reduction and nonproliferation programs has not always been well coordinated. Coordination requires a delineation of each agency's roles and responsibilities, regularized interactions, and clear procedures for resolving interagency disputes. While the majority of programs in DOD and DOE have distinct missions, we identified one area where DOD and DOE programs share similar missions, goals, and activities and two areas shared by DOD, DOE, and State. Both DOD and DOE have programs to improve the security of sites where Russian nuclear warheads are stored. Warhead security programs experienced coordination problems in the past because DOD and DOE were pursuing different approaches to securing nuclear warhead sites in Russia.<sup>4</sup> On the basis of our review of NSC staff guidance

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<sup>3</sup>Other calls for governmentwide planning include the President's *National Strategy to Combat Weapons of Mass Destruction*, the Baker-Cutler Commission, and the Commission to Assess the Organization of the Federal Government to Combat the Proliferation of Weapons of Mass Destruction (the Deutch Commission).

<sup>4</sup>GAO, *Weapons of Mass Destruction: Additional Russian Cooperation Needed to Facilitate U.S. Efforts to Improve Security at Russian Sites*, [GAO-03-482](#) (Washington, D.C.: Mar. 24, 2003).

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and discussions with programs officials, coordination improved when guidance specified agencies' roles, interactions, and ways to resolve disputes. DOD, DOE, and State have programs employing former biological weapons scientists and enhancing the ability of countries to secure their borders against the smuggling of WMD materials. The biological weapons scientist employment programs in DOD, DOE, and State are well coordinated and have NSC staff guidance addressing roles, interactions, and disputes. Furthermore, DOD, DOE, and State Department officials were satisfied with the coordination of these programs. However, coordination of DOD, DOE, and State border security programs could be improved. DOD and DOE officials managing border security programs stated that agencies' roles are not defined, information sharing is infrequent, and there are no procedures to resolve differences among agencies.

We are recommending (1) that the Secretaries of Defense and Energy, in consultation with other agencies that manage threat reduction and nonproliferation programs, develop an integrated plan for all U.S. threat reduction and nonproliferation programs to ensure that the programs are effectively coordinated and (2) that the Assistant to the President for National Security Affairs, through the NSC staff, issue clear guidance for the coordination of DOD, DOE, and State Department border security programs, as it has done with programs to employ former biological weapons scientists and warhead security.

DOE agreed with the recommendations in this report, while State and the NSC staff did not comment on them. DOD concurred with the need for better integrated threat reduction and nonproliferation programs, but did not specify whether it agreed with the need for an integrated plan. DOD concurred with the recommendation for NSC staff guidance governing border security programs. DOD, DOE, and State provided technical comments that we incorporated as appropriate.

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## Background

After the breakup of the Soviet Union in 1991, Russia inherited the world's largest arsenal of nuclear, chemical, and biological weapons. As Russia adopted economic reforms and moved toward an open society, its economy and central controls deteriorated, thereby making it difficult to maintain security at its weapons sites. Recognizing these difficulties, the Congress began authorizing funds in 1992 for programs to help destroy Russian weapons and improve WMD security. More recently, the events of September 11, 2001, have increased U.S. concerns that terrorists might



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obtain WMD materials or weapons at poorly secured sites. While DOD and DOE implement most of the U.S. threat reduction and nonproliferation programs, the Departments of State, Commerce, and Homeland Security implement related programs.

The Congress established DOD's CTR program in 1992 to reduce the WMD threat posed to the United States from weapons remaining in the FSU. The program was designed to assist the FSU in securing and destroying WMD and its means of delivery.<sup>5</sup> Initial CTR assistance was provided to Ukraine, Kazakhstan, Belarus, and Russia, which had inherited the majority of the Soviet Union's WMD. The program helped Ukraine, Kazakhstan, and Belarus remove nuclear weapons from their soil, eliminating the potential emergence of three additional nuclear states. CTR also facilitated Russia's efforts to reduce its massive nuclear weapons arsenal and address its arms control commitments. In fiscal year 2004, CTR had 22 projects (see app. I). One of the newest CTR projects—the WMD Proliferation Prevention Initiative—is designed to strengthen the ability of non-Russian FSU states to deter, detect, and interdict illicit trafficking of WMD and related materials. For example, DOD is providing equipment and training to Uzbekistan to enhance its ability to monitor its borders for illegal transport of radioactive material. Additionally, the CTR program has expanded outside of the FSU, as DOD will use CTR funds to help Albania eliminate its chemical weapons stockpile. Furthermore, a bill introduced in the Senate in November 2004 would grant DOD additional flexibility to expand the CTR program outside the FSU. DOD implements the CTR program through the Defense Threat Reduction Agency (DTRA), which receives policy guidance from the Under Secretary of Defense for Policy.

In 1993, DOE began implementing programs funded by DOD, to help secure weapons-usable nuclear materials in the FSU. DOE also received funding in 1994 from State to employ former Soviet weapons scientists and engineers in cooperative research projects with U.S. laboratories and industry to deter their employment by rogue states. In 1996, with the growth of these programs, funding shifted directly to DOE. These programs remained focused on the FSU and were spread throughout DOE. In October 1999, DOE's nonproliferation programs were consolidated within the National Nuclear Security Administration (NNSA).<sup>6</sup> Since that time, NNSA's

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<sup>5</sup>Missiles, bombers, and missile carrying submarines may deliver WMD.

<sup>6</sup>NNSA also manages DOE's nuclear weapons and naval reactors programs.

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nonproliferation mission has been implemented by the Office of Defense Nuclear Nonproliferation (DNN), which seeks to detect, prevent, and reverse WMD proliferation. This mission has now expanded to address proliferation threats in more than 70 countries to prevent the spread of WMD. For example, DNN is initiating a new program to provide employment opportunities to Iraqi scientists, technicians, and engineers. In fiscal year 2004, DOE had 19 projects addressing nonproliferation threats worldwide (see app. I). The threat reduction and nonproliferation programs have evolved from a \$400 million DOD program in 1992 to approximately \$1.8 billion in programs at DOD and DOE in 2004.<sup>7</sup>

The State Department also manages its own nonproliferation programs and coordinates U.S. assistance to the FSU. In 1992, the Freedom Support Act<sup>8</sup> established the Office of the Coordinator within the State Department to coordinate U.S. assistance to the FSU. The coordinator's responsibilities include resolving program and policy disputes among U.S. government agencies regarding their programs in the FSU. In 1994, State and DOD established the International Science and Technology Center in Moscow to fund peaceful research carried out by otherwise underpaid weapons scientists.<sup>9</sup> The center supplements the income of scientists, purchases equipment for scientific research, and supports programs to help scientists identify and develop commercially viable research projects. In 1996, the Congress established State's Nonproliferation, Anti-terrorism, Demining, and Related Programs Account to fund programs addressing the spread of WMD. For example, the Nonproliferation and Disarmament Fund supports projects to prevent the proliferation of WMD, their delivery systems, and related materials.

NSC staff coordinates U.S. policy for threat reduction and nonproliferation programs and conducted reviews of these programs that validated the need

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<sup>7</sup>In 2004, DOD programs were appropriated \$451 million and DOE programs were appropriated \$1.33 billion, which includes funds for programs in the United States, the FSU, and countries outside the FSU. Although the DOD and DOE budget data are being used for background purposes only, we assessed the reliability of these data and found they were sufficiently reliable for the purposes of this report.

<sup>8</sup>Public Law 102-511.

<sup>9</sup>A similar center was also established in Ukraine.

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to maintain them in 2001 and 2002.<sup>10</sup> The Proliferation Strategy Policy Coordinating Committee, chaired by the Special Assistant to the President and Senior Director for Proliferation Strategy, Counterproliferation and Homeland Defense, sets general policy for U.S. nonproliferation programs. NSC staff establishes guidelines but does not implement programs or control their budgets.

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## **DOD and DOE Strategic Plans for Threat Reduction and Nonproliferation Programs Are Not Integrated and Do Not Address U.S. Programs Worldwide**

DOD and DOE prepare their own individual strategies to implement their respective threat reduction and nonproliferation programs, but there is no governmentwide strategy that integrates them with one another or with those of other agencies that implement threat reduction and nonproliferation programs.<sup>11</sup> We found that DOD and DOE strategies to address security issues for their authorized agency missions generally meet selected criteria for strategic planning established by GPRA. Recognizing the importance of coordinating U.S. efforts, using resources effectively, and enhancing agencies' abilities to anticipate growing nonproliferation concerns, the Congress, GAO, and others have required or recommended integrated planning among DOD, DOE, and other agencies' threat reduction and nonproliferation programs. NSC staff and State created plans in response to the above requirements and recommendations, but these plans either focus solely on one agency or on one geographic location. Furthermore, these programs are expanding beyond the FSU and may potentially involve the response of multiple U.S. agencies.

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<sup>10</sup>The 2001 review focused on programs implemented in Russia; the 2002 review focused on programs in non-Russian FSU states.

<sup>11</sup>Other agencies involved in threat reduction and nonproliferation programs include the Departments of State, Commerce, and Homeland Security.

DOD and DOE Strategies for Threat Reduction and Nonproliferation Programs Generally Meet Criteria Established by the Government Performance and Results Act

DOD and DOE each have strategic plans governing their respective threat reduction and nonproliferation programs.<sup>12</sup> We found that each agency’s strategic plan generally meets the selected GPRA criteria for strategic planning. See table 1 for a listing of the selected GPRA criteria. Additionally, we found that DOD and DOE have their own methods to prioritize their respective activities and programs. Furthermore, DOD and DOE threat reduction and nonproliferation programs undergo periodic internal and external reviews to improve program management.

Table 1: Selected GPRA Criteria for Strategic Planning

Strategic plan element	Description
Mission	A comprehensive and concise statement describing the basic purpose of the agency, with a particular focus on its major agency functions and operations
Goals	Provide clear direction to the work, services, programs, and activities of an organization and desired outcomes
External factors	Describe the broader environment that can influence inputs, outputs, and outcomes, such as policy or economic changes
Performance metrics	Provide a succinct and concrete statement of expected performance for subsequent comparison with actual performance
Cost estimates	Describe the resources required to achieve the goals
Covers 5 years	A strategic plan covers a period of at least 5 years forward

Source: GAO analysis of GPRA.

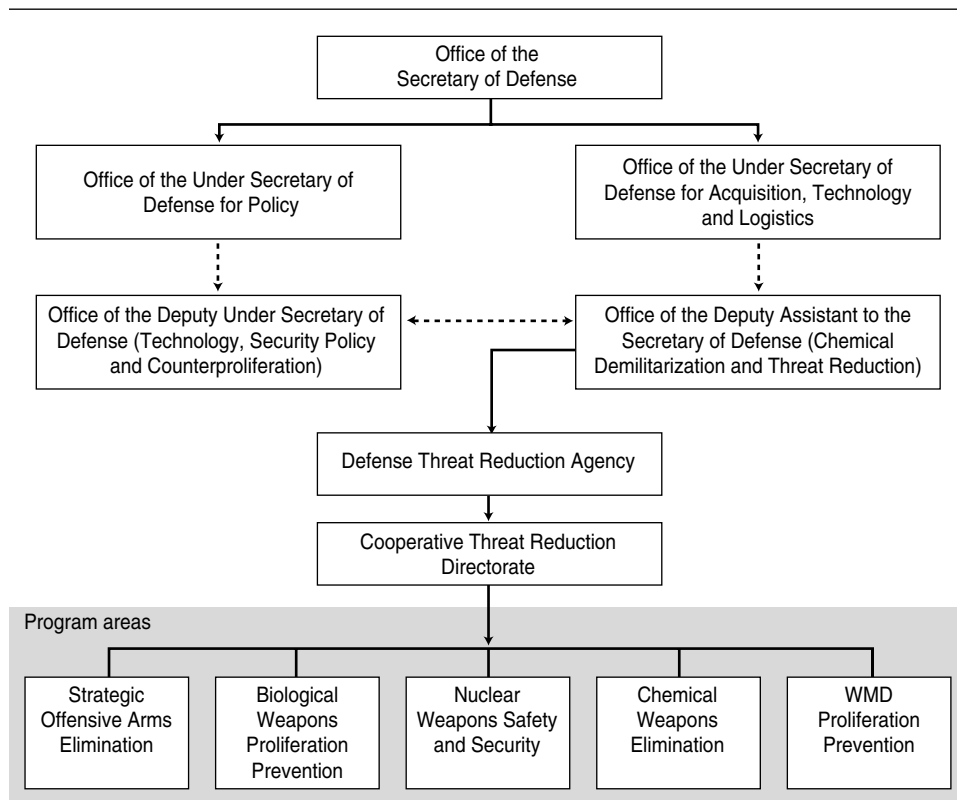
Department of Defense Cooperative Threat Reduction Planning

The CTR Policy Office, in conjunction with DTRA, produces and updates a strategy for the CTR program.<sup>13</sup> We found that this strategy generally contains the elements of a strategic plan developed using GPRA criteria. Additionally, all CTR projects develop detailed plans that also contain these elements. Figure 1 depicts DOD offices that are involved in strategic planning for the CTR programs.

<sup>12</sup>The agencies have a variety of planning documents—such as strategies, annual plans, and multiyear project plans—which we refer to collectively as strategic plans.

<sup>13</sup>The CTR Policy Office is located within the Office of the Under Secretary of Defense for Policy.

**Figure 1: DOD Offices That Are Involved in Strategic Planning for the CTR Program**



Source: GAO analysis of DOD data.

In accordance with GPRA, the CTR program's mission statement is comprehensive and concise: that is, to prevent the proliferation of WMD and related materials, technologies, and expertise from FSU states—including providing for the safe destruction of Soviet-era WMD, associated delivery systems, and related infrastructure. The CTR program's strategy also includes the following specific goals: (1) dismantle FSU WMD and associated infrastructure, (2) consolidate and secure FSU WMD and related technology and materials, (3) increase transparency and encourage higher standards of conduct, and (4) support defense and military cooperation with the objective of preventing proliferation. These goals provide clear direction to the activities and desired outcomes of the CTR program.

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The CTR strategy also cites external factors that could affect the program, describes how performance will be measured, and states budget requirements. For example, the level of Russian cooperation is cited as an external factor that will affect the successful implementation of the program. The strategy provides metrics by which performance of the program can be measured, such as the number of missiles destroyed. DOD and DOE performance metrics are shown in appendix II. In accordance with GPRA criteria, the CTR plans include cost estimates and cover a period of 5 years. For example, the overall CTR funding request for fiscal year 2005 is \$409 million, and the 5-year plan calls for an additional \$1.5 billion between fiscal years 2006 and 2009.

The CTR program has five program areas, with several projects under each program area. Each project has a plan that details its broad mission, specific objectives, external factors that could affect the achievement of these objectives, metrics that are used to evaluate the performance of the project, and cost estimates. For example, the mission of the Automated Inventory Control and Management System project, under the nuclear weapons safety and security program area, is to enhance Russia's capability to account for and track the strategic and tactical nuclear weapons scheduled for dismantlement. Specific objectives include installing hardware and software at 18 sites within Russia and providing initial training and data entry. External factors cited for this program include whether Russia will grant sufficient access to the sites and improve the equipment storage conditions. The project uses milestone dates, which range from the procurement of the software to the final certification of the system at all sites, as one method to measure its performance. The project is estimated to cost \$50.2 million.

Additionally, according to agency officials, DOD has not had to prioritize CTR projects on the basis of available funds. The CTR program generally receives the funding requested for its projects. DOD develops its budget request for the CTR program on the basis of funding needed to continue existing programs and implement new programs. As a result, projects have not competed for funding.

Furthermore, the CTR program has undergone internal performance reviews in order to improve management practices. In 2003, the CTR Policy Office conducted a 6-month, project-by-project review of the program that changed the scope of several CTR projects to ensure that program activities met threat reduction goals. The review also resulted in a decision to stop funding activities that did not contribute directly to threat reduction

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goals. For example, the CTR program no longer funds the restoration of the environment surrounding missile sites but continues to fund the elimination of the nuclear missiles and silos.

The CTR program also has undergone several external reviews to identify areas needing improvement. For example, in 1996, we recommended that no funds should be obligated for constructing a chemical weapons destruction facility in Russia until reliable cost estimates were completed.<sup>14</sup> (See prior GAO reports listed at the end of this report.) The DOD Inspector General also recommended that the CTR program adopt numerous controls to improve program management. For example, the DOD Inspector General recommended amendments to CTR program implementing agreements with Russia to ensure that Russia provides its weapons systems and their components scheduled for destruction, that it grants access rights to DOD, and that it is penalized for failure to use DOD assistance. As a result of this recommendation, DOD required Russia to sign an agreement specifying that all of Russia's declared nerve agents could be destroyed at a facility under construction by the CTR program.<sup>15</sup> However, DOD did not include a penalty for noncompliance.

## Department of Energy Nonproliferation Planning

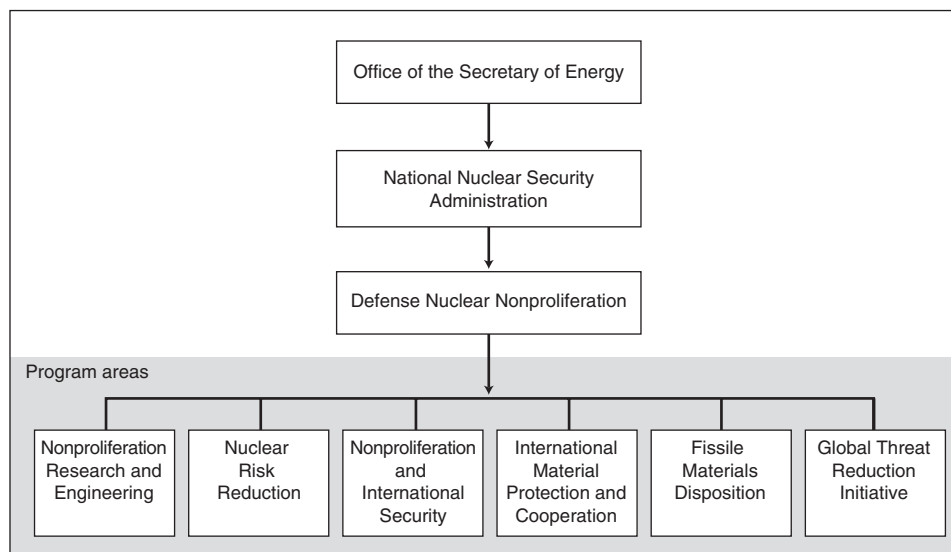
DNN produces a broad strategy for DOE's nonproliferation programs, and DNN's six program offices prepare strategic plans for their projects. Collectively, these plans generally contain the elements of a strategic plan developed using GPRA criteria. Figure 2 depicts DOE offices that are involved in strategic planning for DOE's nonproliferation programs.

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<sup>14</sup>GAO, *Weapons of Mass Destruction: Status of the Cooperative Threat Reduction Program*, [GAO/NSIAD-96-222](#) (Washington, D.C.: Sept. 27, 1996).

<sup>15</sup>Department of Defense Inspector General, *Cooperative Threat Reduction: Cooperative Threat Reduction Program Liquid Propellant Disposition Project*, Report No. D-2002-154 (Washington, D.C.: Sept. 30, 2002) and *Cooperative Threat Reduction: Cooperative Threat Reduction Construction Projects*, Report No. D-2004-039 (Washington, D.C.: Dec. 18, 2003).

**Figure 2: DOE Offices That Are Involved in Strategic Planning for Nonproliferation Programs**



Source: GAO analysis of DOE data.

In accordance with GPRA, DNN's strategic plan clearly states its mission—which is to prevent the spread of nuclear weapons, nuclear weapons-usable and radiological materials, technologies, and expertise. This plan also describes broad goals for its nonproliferation mission. For example, one of its goals is to secure nuclear and radiological materials at potentially vulnerable sites overseas. DNN's plan identifies external factors that could affect its program goals, such as delays in its program to employ weapons scientists due to lengthy Russian government clearance procedures.

Although DNN's strategic plan does not list performance measures for each of its nonproliferation projects, DNN maintains a database of goals and performance metrics for each of its six program areas. For example, to measure performance in preventing the migration of WMD expertise, DNN tracks the annual number of former Soviet weapons scientists, engineers, and technicians engaged by its programs. Appendix II contains performance metrics for DOE's nonproliferation. In accordance with GPRA criteria, DNN plans include cost estimates and cover a period of 5 years. For example, DNN is requesting \$1.3 billion for fiscal year 2005 and is projected to request an additional \$5.7 billion between fiscal years 2006 and 2009.



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In the past, DNN generally received requested funding for its nonproliferation programs, but as the scope of these programs expanded, DNN began to prioritize projects within program areas, according to agency officials. In fiscal year 2004, DOE first applied several criteria, such as risk, availability of funding, and legal obligations, to prioritize projects. The criteria were used to identify activities with the greatest proliferation risk, on which DOE focused its resources. For example, in fiscal year 2004, Russia provided access to more nuclear warhead storage sites than originally planned. DOE diverted funds from lower priority activities, such as converting weapons-grade uranium<sup>16</sup> to uranium that cannot be used in weapons,<sup>17</sup> in order to fund security enhancements at the new nuclear warhead storage sites.

DNN's nonproliferation programs have undergone internal and external reviews to identify areas needing improvement. The NNSA Under Secretary biannually reviews each program's budget, accomplishments, and any other concerns. DOE also uses the results of external audits to identify areas needing improvement. For example, audits conducted by the DOE Inspector General have recommended improvements to NNSA's process for matching program requirements with budgetary resources and managing the program to eliminate weapons-grade uranium in research reactors. In addition, we have conducted numerous reviews of various aspects of DOE's nonproliferation programs. For example, in 2001, we found duplication between DOE's two programs to employ former weapons scientists in Russia and recommended consolidating the programs.<sup>18</sup> In response, DOE merged the programs into a new program, the Russian Transition Initiatives.

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<sup>16</sup>Weapons-grade uranium is also known as highly enriched uranium.

<sup>17</sup>Uranium that cannot be used in weapons is also known as low enriched uranium.

<sup>18</sup>GAO, *Nuclear Nonproliferation: DOE's Efforts to Assist Weapons Scientists in Russia's Nuclear Cities Face Challenges*, [GAO-01-429](#) (Washington, D.C.: May 3, 2001).

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## The Congress and Others Have Called for a Governmentwide Plan, but None Has Been Developed to Address U.S. Programs Worldwide

Since the mid-1990s, the Congress and others have called for the executive branch to develop governmentwide plans to govern threat reduction and nonproliferation programs. The Congress found that although U.S. nonproliferation efforts in the FSU have achieved important results in securing WMD materials, technology, and knowledge, the effectiveness of these efforts has suffered from a lack of coordination within and among agencies.<sup>19</sup> Recognizing the importance of integrated planning of threat reduction and nonproliferation programs, the Congress required the executive branch to develop three plans. To comply with the requirements of the National Defense Authorization Act for Fiscal Year 2002, as amended,<sup>20</sup> the President submitted a plan and an annual report on the implementation of the plan covering all agency efforts to secure nuclear weapons, material, and expertise in the FSU. This plan addressed the specific requirements of the legislation, including identifying the goals and objectives of the programs and strategies for terminating U.S. contributions to the programs.

The Foreign Relations Authorization Act, Fiscal Year 2003 requires (1) the State Department to provide the appropriate congressional committees with a 3-year international arms control and nonproliferation strategy and (2) the President to provide the Congress with a plan detailing coordination of nonproliferation programs.<sup>21</sup> State submitted the 3-year international arms control and nonproliferation strategy to the Congress in August 2003. The strategy focuses on the State Department's programs and activities, discusses broad U.S. arms control and nonproliferation goals, and describes State's efforts under way to achieve these goals. For the coordination plan, the Congress required the establishment of an interagency committee consisting of representatives of the Departments of Defense, Energy, State, Commerce, Homeland Security, and the Attorney General and other officials that the President deems necessary. This committee will exercise responsibility for coordinating all U.S. threat reduction efforts and enhance the U.S. government's ability to anticipate

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<sup>19</sup>Public Law 107-228, Section 1332.

<sup>20</sup>Public Law 107-107, Section 1205; Public Law 107-314, Section 1205.

<sup>21</sup>Public Law 107-228, Section 1309.

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growing nonproliferation areas of concern. This committee is required to submit a coordination plan in May 2005.<sup>22</sup>

In past work, we found that the development of a governmentwide strategy could strengthen the coordination of threat reduction and nonproliferation programs.<sup>23</sup> The strategy should identify overall goals, time frames for meeting those goals, and ways to set priorities for allocating resources governmentwide to address all U.S. nonproliferation concerns.

The executive branch also called for the development of a governmentwide plan for U.S. threat reduction and nonproliferation programs. Specifically, the President's *National Strategy to Combat Weapons of Mass Destruction of 2002* calls on the Proliferation Strategy Policy Coordinating Committee, chaired by NSC staff, to prepare a 5-year governmentwide plan by March 2003.<sup>24</sup> To achieve greater efficiency through program coordination, the strategy stated that this governmentwide plan should include all threat reduction and nonproliferation programs in the FSU that are funded wholly or in part by the U.S. government. As of November 2004, the plan had yet to be developed.

In addition, independent panels have also called for the development of governmentwide plans. In 1998, the Congress established the Commission to Assess the Organization of the Federal Government to Combat the Proliferation of Weapons of Mass Destruction (the Deutch Commission), which recommended coordinated and consistent governmentwide strategies to address nonproliferation threats to the United States. In 2001, the Baker-Cutler Commission, established by the Secretary of Energy, recommended the development of a national strategic plan to secure all Russian nuclear weapons-useable material and prevent WMD expertise from leaving Russia. No reports have been developed that address either commission's recommendations. Table 2 is a listing of the various calls for governmentwide plans and their status.

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<sup>22</sup>The legislation calls for a report to be submitted to the Congress 120 days after each presidential inauguration.

<sup>23</sup>GAO, *Nuclear Nonproliferation: Coordination of U.S. Programs Designed to Reduce the Threat Posed by Weapons of Mass Destruction*, [GAO-02-180T](#) (Washington, D.C.: Nov. 14, 2001).

<sup>24</sup>For our assessment of the *National Strategy to Combat Weapons of Mass Destruction of 2002*, see *Combating Terrorism: Evaluation of Selected Characteristics in National Strategies Related to Terrorism*, [GAO-04-408T](#) (Washington, D.C.: Feb. 3, 2004).

**Table 2: Calls for Governmentwide Plans for Threat Reduction and Nonproliferation Programs**

Report name/Requester	Requirement/Summary	Status
National Defense Authorization Act for fiscal year 2002, as amended	Requires the President to submit a plan and an annual report on the implementation of the plan for all agency efforts to secure nuclear weapons and materials and prevent the outflow of WMD expertise from the FSU.	Initial strategy was due in June 2002 and the annual report on implementation was due in January 2003, and annually thereafter.  Both the strategy and 2003 annual plan were delivered late to the Congress on March 11, 2003.  As of November 2004, the 2004 annual implementation report had not been delivered.
Foreign Relations Authorization Act, fiscal year 2003	Requires the State Department to submit a 3-year international arms control and nonproliferation strategy for reducing and controlling the proliferation of WMD, which includes (1) U.S. goals for arms control and nonproliferation of WMD and (2) a description of State Department programs intended to accomplish these goals.	State Department sent report to the Congress on August 11, 2003.
Foreign Relations Authorization Act, fiscal year 2003	Requires the President to submit a strategy to coordinate the threat reduction and nonproliferation objectives of the executive branch agencies.	Report is not due until 120 days after the 2005 inauguration.
National Strategy to Combat WMD	Requires the Proliferation Strategy Policy Coordinating Committee to develop a 5-year plan for all threat reduction and nonproliferation programs in the FSU.	Plan was due in March 2003.  No plan was delivered as of November 2004.
Deutch Commission	Recommends developing coordinated and consistent governmentwide strategies that include country-specific, long-term plans to reduce the demands for WMD.	No deadline for submission.  No plan was delivered as of November 2004.
Baker-Cutler Commission	Recommends a plan for securing all nuclear weapons-usable material in Russia and to prevent the outflow of scientific expertise that could be used for nuclear or other WMD, which includes clearly defined goals and measurable objectives, associated budgets for each program, and criteria for success.	No deadline for submission.  No plan was delivered as of November 2004.

Source: GAO description of legislation and reports related to nonproliferation programs.

None of the existing plans in table 2 integrates agencies' plans with one another or addresses U.S. threat reduction and nonproliferation programs worldwide. For example, the plan developed as a result of the National Defense Authorization Act for Fiscal Year 2002 did not address programs to secure and eliminate chemical weapons in Russia or the infrastructure used to develop chemical and biological weapons throughout the FSU.

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Similarly, the 2003 arms control plan that State prepared addressed U.S. arms controls efforts, but the plan is limited to a description of DOE's programs for addressing these goals.

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## NSC Staff Guidance Delineating Agencies' Roles, Information Sharing, and Dispute Resolution Results in Improved Program Coordination

On the basis of our review of NSC staff guidance and discussions with DOD and DOE officials, we found that coordination among programs that share similar missions, goals, and activities is improved when each agency's roles and responsibilities are delineated, information sharing is formalized, and procedures for resolving interagency disputes are clear. While the majority of programs in DOD and DOE are distinct, three program areas perform similar functions in the FSU: (1) improving the security of sites where Russian nuclear warheads are stored, (2) employing former biological weapons scientists, and (3) enhancing the ability of countries to secure their borders against the smuggling of WMD materials. The warhead security programs implemented by DOD and DOE were not well coordinated in the past, but NSC staff guidance that describes each agency's role, formalizes meetings, and establishes a dispute resolution process has improved coordination, according to agency officials. DOD, DOE, and State officials in the biological weapons scientists programs understand each agency's roles and responsibilities, meet monthly, and follow dispute resolution procedures as described in governmentwide guidance for this program area. By contrast, there is no governmentwide guidance delineating the roles and responsibilities of agencies managing border security programs. As a result, DOD and DOE officials managing border security programs stated that agencies' roles are not defined, information sharing is infrequent, and there are no procedures to resolve differences among agencies.

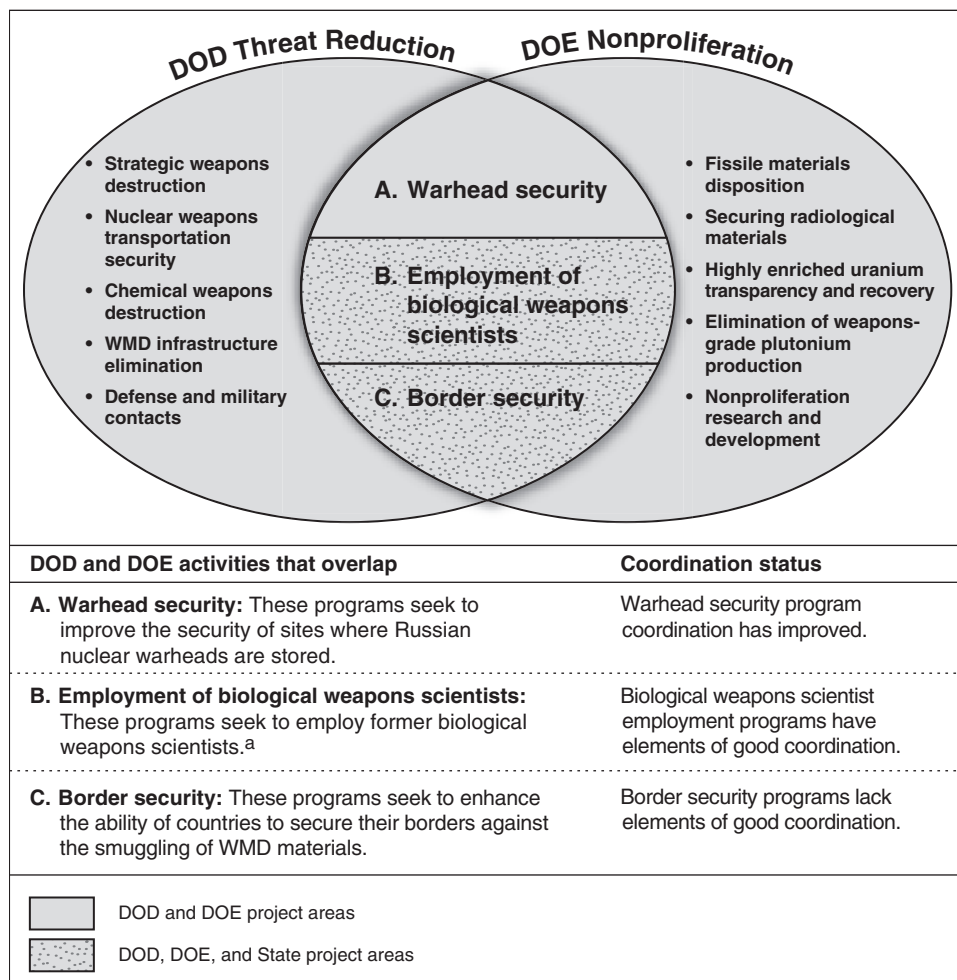
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## Most DOD and DOE Threat Reduction and Nonproliferation Programs Are Distinct

We found that most threat reduction and nonproliferation projects in DOD and DOE have distinct missions, goals, and activities. DOD's CTR program has few projects that are similar to those in DOE and State. Figure 3 folds DOD's projects into broader program areas and distinguishes those distinct program areas from those that are similar. First, DOD has several projects in the FSU to destroy strategic weapons systems such as bombers, missiles, and submarines. Second, DOD funds the safe and secure transport of the Russian nuclear warheads scheduled for elimination. Third, DOD is constructing a chemical weapons destruction facility at Shchuch'ye to help eliminate Russia's declared stockpile of nerve agents. Fourth, DOD is assisting in the elimination of WMD infrastructure by, for example,

dismantling biological weapons facilities in Kazakhstan. Finally, the CTR program engages in projects that facilitate contact between U.S. and FSU defense and military personnel. Program events include conferences, seminars, and combined military exercises designed to strengthen defense partnerships between the United States and FSU states.

**Figure 3: DOD and DOE Threat Reduction and Nonproliferation Program Areas**



Source: GAO analysis of DOD, DOE, and State data.

<sup>a</sup>Currently, DOD only has programs employing biological weapons scientists, whereas DOE and State's programs employ chemical, nuclear, missile, and biological weapons scientists.

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We also found that most DOE projects have distinct missions, goals, and activities addressing the proliferation threat posed by nuclear and radiological materials (see fig. 3). First, fissile materials disposition projects eliminate weapons-grade nuclear materials. For example, DOE has a project to eliminate surplus Russian plutonium by turning it into fuel for use in civilian nuclear power plants. Second, DOE is assisting Russia by shutting down three nuclear power plants that produce plutonium and replacing them with power plants fueled by coal. Third, DOE conducts nonproliferation research and development, such as developing technologies used to detect, locate, and identify nuclear explosions. Fourth, DOE consolidates and secures radioactive materials that could be used in dirty bombs.<sup>25</sup> Finally, DOE's highly enriched uranium transparency project monitors the conversion of material from Russian nuclear warheads into fuel for civilian nuclear power plants.

We found three program areas where both DOD and DOE have projects that perform similar activities in the FSU. First, both agencies have projects to improve the security of sites where Russian nuclear warheads are stored, such as installing fences and security systems. Second, both agencies have projects to employ former biological weapons scientists to prevent the proliferation of their expertise to states and terrorist organizations. Third, both agencies have projects to enhance the ability of countries to secure their borders against the smuggling of WMD materials. The State Department has its own programs to employ biological former biological weapons scientists and secure borders against the trafficking of WMD materials and plays a role in coordinating U.S. efforts in these areas. See appendix III for more information regarding DOD, DOE, and State's projects in these areas.

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## Warhead Security Program Coordination Has Improved

We have previously reported that DOD and DOE were pursuing different approaches to securing nuclear warhead sites in Russia.<sup>26</sup> DOD and DOE had plans to upgrade some of the same storage sites, and DOD had already purchased equipment to upgrade security at some of those sites. Additionally, DOD and DOE used different vendors to purchase different equipment to perform the same function, which could have resulted in

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<sup>25</sup>Dirty bombs are designed to disperse radioactive material by packaging explosives, such as dynamite, with radioactive material.

<sup>26</sup>GAO-03-482.

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extra training and maintenance costs. As a result of our work, DOD and DOE coordinated their efforts to avoid duplication by identifying the agency with the best access to and cooperation of the Russians to install the security upgrades. Furthermore, we recommended that an integrated plan be developed for these programs on issues such as resolving equipment standardization concerns.

During the course of our audit work, NSC staff issued common policy guidance for DOD and DOE programs that help Russia secure its nuclear warheads. The policy guidance prohibited assistance to operational sites due to concerns that U.S. assistance may enhance Russia's military capability. Additionally, NSC staff established interagency procedures for coordinating warhead security assistance activities through a working group that reviews all requests for assistance, with neither DOD nor DOE being allowed to implement a project without the group's approval. In the case of a dispute, an agency can escalate the request for assistance to a higher level interagency group. According to both DOD and DOE officials, the guidelines and procedures implemented since our report have improved coordination, such as holding interagency meetings. In commenting on a draft of this report, DOE stated that DOD and DOE include representatives from the other agency on each other's bilateral forums with the Russians. Other working group participants acknowledged that coordination concerns have been reduced but stated that information sharing should be improved, especially about issues escalated above the working group level.

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### **Biological Weapons Scientist Employment Programs Have Elements of Well Coordinated Programs**

We found that the coordination of biological weapons scientist employment programs is characterized by clearly delineated roles and responsibilities, regular interaction, and dispute resolution procedures. In September 2002, NSC staff issued guidelines governing the coordination of the biological weapons scientist employment programs, which addressed these three elements. These guidelines state the roles of each agency, formalize information sharing, and include procedures for resolving disputes. Additionally, the guidelines describe oversight requirements and other factors to be considered when implementing these programs.

Agency officials managing the biological weapons scientist employment programs did not report any difficulties pertaining to coordination or to the activities of other agencies. These officials stated that the NSC staff guidelines are valuable in ensuring that activities are undertaken by the appropriate agency and agencies' programs work toward common U.S.



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objectives. These guidelines established the Nonproliferation Interagency Roundtable, which ensures that all agencies are aware of each other's activities in employing biological weapons scientists in the FSU and that the agencies avoid duplication of efforts. Proposals for new projects are reviewed and voted on monthly by the Nonproliferation Interagency Roundtable. If disagreements arise after the voting process has occurred, agencies may escalate the decision to a group chaired by NSC staff. Officials we spoke with stated that coordination has worked successfully. DOD, DOE, and State officials all cited the NSC staff guidelines when discussing their programs with us and confirmed that these guidelines were applied governmentwide.

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## Border Security Programs Lack Elements of Well Coordinated Programs

There is no governmentwide guidance for border security programs that delineates agencies' roles and responsibilities, establishes regular information sharing, and defines procedures for resolving interagency disputes, according to DOD and DOE officials. Although the State Department prepared a strategic plan that identifies and describes border security programs and interagency coordination mechanisms in Eurasia, the plan does not clearly establish the departments' roles or how information is shared.<sup>27</sup> The plan also acknowledges that NSC staff will provide policy oversight and guidance to implement the border security programs, but DOD and DOE officials with whom we met were unaware of such guidance.

The primary coordination mechanism for all border security programs is an interagency working group chaired by the State Department's Nonproliferation Bureau. According to DOD and DOE officials, the group does not have regularly scheduled meetings.<sup>28</sup> DOE officials stated they would prefer to meet more often to facilitate coordination of their programs and reduce the amount of informal coordination, such as telephone conversations and e-mails, which they believe is less efficient. State Department officials acknowledged that coordination of these

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<sup>27</sup>Eurasia is defined as including the following countries: Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyzstan, Moldova, Russia, Tajikistan, Turkmenistan, Ukraine, and Uzbekistan.

<sup>28</sup>In commenting on a draft of this report, the State Department informed us that as of December 6, 2004, its Nonproliferation Bureau established a schedule for regular meetings of the interagency working group on border security issues. These meetings are scheduled to be held every 2 months during calendar year 2005.

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programs could be better, but stated that they lack the authority to resolve conflicts over coordination.

In the absence of guidance for coordination, agency officials question the other agencies' roles and responsibilities. For example, both State and DOD officials acknowledged that their border security programs conduct similar activities, such as training border security guards and providing equipment for detecting illicit trafficking of WMD. Furthermore, State Department officials questioned whether some aspects of DOD's International Counterproliferation Program were targeting countries that may no longer require the type of assistance being provided. For example, DOD's program provided basic level WMD courses to officials from Bulgaria, which is beyond the need for basic level training, according to a State Department official.

In May 2002, we reported problems with the coordination of border security programs.<sup>29</sup> We found that portal monitors provided through the State Department's border security program did not meet the standards established by DOE.<sup>30</sup> Since our report, the State Department has transferred responsibility of operation and maintenance of the monitors to DOE, and State is no longer funding the installation of portal monitors. According to State and DOE officials, the specific problems we highlighted have since been resolved, such as the coordination of agencies' border security activities. We have follow-up work under way regarding this issue.

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## Conclusions

DOD and DOE develop their own strategic plans, prioritize their own program activities, and measure their own program performance. While this approach helps keep the departments on track to meet their own objectives, it does not provide governmentwide guidance for U.S. threat reduction and nonproliferation programs, which would include goals, time frames for meeting those goals, and mechanisms for establishing priorities across the various departments involved in program implementation. In light of the U.S. government's elimination of nuclear infrastructure in Libya,

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<sup>29</sup>GAO, *Nuclear Nonproliferation: U.S. Efforts to Help Other Countries Combat Nuclear Smuggling Need Strengthened Coordination and Planning*, [GAO-02-426](#) (Washington, D.C.: May 16, 2002).

<sup>30</sup>Portal monitors are stationary equipment designed to detect radioactive materials carried by pedestrians or vehicles.

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recent agreement to eliminate chemical weapons in Albania, and the growing likelihood of other efforts expanding outside the FSU, overall strategic guidance becomes increasingly important given the involvement of multiple agencies. While NSC staff has provided guidance to agencies implementing programs to secure Russian warheads and employ former Soviet biological weapons scientists, there is no governmentwide strategy for agencies implementing threat reduction and nonproliferation programs worldwide. The requirement in the Fiscal Year 2003 Foreign Relations Authorization Act for a Presidential report detailing the coordination of nonproliferation programs provides an opportunity for the administration to review its broad array of threat reduction and nonproliferation programs to ensure that the programs and capabilities of the various departments address all proliferation threats worldwide. As part of this effort, DOD and DOE can draw upon lessons learned from programs in the FSU.

In addition, while the majority of threat reduction and nonproliferation programs do not address similar missions, it is still important for policy makers and program managers at DOD and DOE to (1) understand how their efforts contribute to broader U.S. goals and (2) have formal mechanisms for sharing information and lessons learned that cut across programmatic boundaries. In those areas where more than one department is addressing a similar mission, interagency coordination is important to avoid duplication and collectively meet common goals. We found that interagency coordination of threat reduction and nonproliferation programs appears to work best when there is clear guidance from NSC staff regarding the roles of the various departments, regularized agency interactions, and resolution of interagency disputes, as is the case with the projects to employ biological weapons scientists and secure warhead sites. However, we found that coordination is limited among the border security projects where there is no NSC staff guidance.

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## Recommendations for Executive Action

We recommend that the Secretaries of Defense and Energy, in consultation with other agencies involved in threat reduction and nonproliferation programs, develop an integrated plan for all U.S. threat reduction and nonproliferation programs to ensure that the programs are effectively coordinated and address all threats. The results of this review should be reported to the Congress as part of the President's response to section 1339 of the Fiscal Year 2003 Foreign Relations Authorization Act, which requires the President to submit a report after each presidential inauguration on threat reduction and nonproliferation objectives and how executive branch efforts will be coordinated.

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We also recommend that the Assistant to the President for National Security Affairs, through the NSC staff, lead the development of a plan guiding the implementation and coordination of threat reduction and nonproliferation programs addressing border security as they have done with the programs addressing the employment of biological weapons scientists. This plan should identify U.S. government goals and objectives, designate departments' roles and responsibilities, and establish procedures to resolve policy and program disputes.

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## Agency Comments

DOE and DOD provided comments on a draft of this report, which are reproduced in appendixes IV and V. DOE agreed with the report and the corresponding recommendations. DOD concurred with the need for better integrated nonproliferation and threat reduction programs, but did not specify whether it agreed with the need for an integrated plan. DOD concurred with the need for NSC staff guidance governing border security programs. State Department and the NSC staff did not comment on this report. DOE, DOD, and State provided technical comments, which we incorporated as appropriate.

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## Scope and Methodology

To assess DOD and DOE's strategies to implement their respective threat reduction and nonproliferation programs, we obtained agencies' strategic plans, project/program planning documents, budget documents, and annual reports. To assess attempts to integrate these strategies, we consulted relevant public laws and met with experts at the Nuclear Threat Initiative, a global initiative that seeks to raise public awareness of WMD threats and carries out threat reduction work; the Center for Nonproliferation Studies at the Monterey Institute of International Studies, a nongovernmental organization in the United States that provides research and training on nonproliferation issues; and the U.S. – Russia Corporate Partnerships Advancing Nonproliferation and National Security, a congressional bipartisan study group. To assess DOD and DOE strategies to implement their threat reduction and nonproliferation programs, we compared them against select criteria contained in GPRA and reviewed our prior work relating to performance metrics and program assessment. We also interviewed DOD and DOE officials, including the Deputy Undersecretary of Defense for Technology Security Policy and Counterproliferation, the Director and Deputy Director of DTRA's CTR program, and senior leadership from the CTR program office. The DOE officials we interviewed include the Deputy Administrator for Defense

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Nuclear Nonproliferation and senior officials from the Initiatives for Proliferation Prevention Program. In addition, we spoke with officials from the DOD and DOE Inspector's General office, the Office of Management and Budget, the Congressional Research Service, and the intelligence community.

To assess efforts to coordinate DOD, DOE, and State programs with similar missions, we obtained documents from these agencies regarding their threat reduction and nonproliferation programs. We also reviewed NSC staff guidance on biological weapons scientists' employment and warhead security programs. We also reviewed DOD, DOE, and State documents regarding their border security programs. Finally, we relied on our previous reviews of the CTR program and several nonproliferation programs within DOE and the State Department. We also interviewed numerous officials, including the Director and Deputy Director of DTRA's CTR program, the Office of the Secretary of Defense Policy for CTR programs, and the Deputy Undersecretary of Defense for Technology Security Policy and Counterproliferation. DOE officials include the Deputy Administrator for Defense Nuclear Nonproliferation, the Assistant Deputy Administrator of the Office of International Material Protection and Cooperation, and other senior officials from the other DNN program areas. At the State Department, we interviewed the Coordinator of U.S. Assistance to Europe and Eurasia and met with officials from the Bureau of Nonproliferation. We also met with the managers of programs addressing border security, weapons security, and employment of biological weapons scientists. NSC officials did not respond to our requests to meet. However, we discussed the role of the NSC staff and the extent of its participation in coordinating programs with DOD, DOE, and State officials.

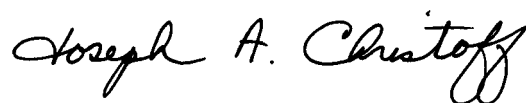
We also relied on related prior GAO reports. We performed our review in Washington, D.C., from February 2004 to November 2004 in accordance with generally accepted government auditing standards.

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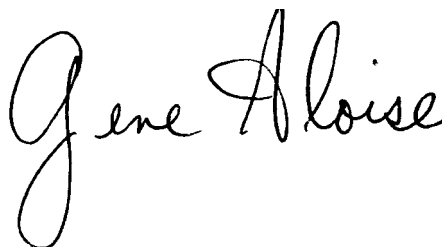
We are sending copies of this report to interested congressional committees; the National Security Council; and the Secretaries of Defense, Energy, and State. We will also make copies available to others upon request. In addition, the report will be available on the GAO Web site at <http://www.gao.gov>.

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If you have questions regarding this report, please contact Mr. Christoff at (202) 512-8979 or [christoffj@gao.gov](mailto:christoffj@gao.gov) or Mr. Aloise at (202) 512-3841 or [aloisee@gao.gov](mailto:aloisee@gao.gov). GAO contacts and staff acknowledgments are listed in appendix VI.

A handwritten signature in black ink that reads "Joseph A. Christoff". The script is cursive and fluid.

Joseph A. Christoff  
Director, International Affairs and Trade

A handwritten signature in black ink that reads "Gene Aloise". The script is cursive and fluid.

Gene Aloise  
Acting Director, Natural Resources and Environment

# DOD and DOE Threat Reduction and Nonproliferation Projects, Fiscal Year 2004

**Table 3: Department of Defense Cooperative Threat Reduction Projects**

<b>Project</b>	<b>Description</b>
Emergency Response Support Equipment	Provides equipment to Russia for use in an emergency response train should accidents occur during transportation of ballistic missiles. The equipment, including a rail-mounted crane, hydraulic tools, concrete pulverizers, and an excavator, is available to support missile transportation and dismantlement.
Solid Propellant Intercontinental Ballistic Missile (ICBM) and Submarine Launched Ballistic Missile (SLBM) and Mobile Launcher Elimination	Will refurbish and operate Russian missile disassembly facilities; provide the equipment for and operation of, mobile launcher elimination facilities; and perform destruction of treaty-limited components.
Liquid Propellant ICBM and Silo Elimination	Eliminates silos and destroy missiles in accordance with treaty requirements. Activities include deactivating silos, providing upgrades to the missile elimination and destruction facility at Surovatikha, and furnishing equipment to store and transport liquid missile propellant.
SLBM Launcher Elimination/Ballistic Missile Submarine Dismantlement	Assists Russia in eliminating submarine missile launchers in accordance with treaty requirements and provide assistance to dismantle and eliminate submarine.
Spent Naval Fuel Disposition	Supports submarine missile launcher elimination and associated ballistic missile submarine dismantlement through dry storage of spent nuclear fuel removed when defueling submarines. In addition to storing the fuel in storage/transportation containers, a means of transporting the containers by rail from the shipyard to a final storage/disposition location is included.
Liquid Propellant SLBM Elimination	Assists in destroying submarine missiles from the Russian Northern and Pacific Fleets. The destruction process includes shipping, defueling, neutralization, and cutting into pieces all proliferable components of submarine missiles.
Personnel Reliability and Safety	Provides training and equipment to assist Russia in determining the reliability of its guard forces.
Site Security Enhancements	Enhances the safety and security of Russian nuclear weapons storage sites through the use of vulnerability assessments to determine specific requirements for upgrades. The Department of Defense (DOD) will then develop security designs to address those vulnerabilities and install the equipment necessary to bring security standards consistent with those at U.S. nuclear weapons storage facilities.
Nuclear Weapons Transportation	Assists Russia in shipping nuclear warheads to more secure sites or dismantlement locations.
Railcar Maintenance and Procurement	Assists Russia in maintaining nuclear weapons cargo railcars. Funds maintenance of railcars until no longer feasible, then purchases replacement railcars to maintain 100 cars in service. DOD will procure 15 guard railcars to replace those retired from service. Guard railcars will be capable of monitoring security systems in the cargo railcars and transporting security force personnel.
Weapons Transportation Safety Enhancements	Will provide emergency response vehicles containing hydraulic cutting tools, pneumatic jacks, and safety gear to enhance Russia's ability to respond to possible accidents in transporting nuclear weapons. Meteorological, radiation detection and monitoring, and communications equipment is also included.
Chemical Weapons Destruction Facility	Is constructing a destruction facility for Russian nerve agent-filled munitions near the town of Shchuch'ye. The United States will fund the design, construction, equipment acquisition and installation, systems integration, training, and start-up of the destruction facility. The Russians will construct one of the two buildings in which the nerve agent will be removed from munitions and neutralized, and the drained munitions will be decontaminated.

**Appendix I**  
**DOD and DOE Threat Reduction and**  
**Nonproliferation Projects, Fiscal Year 2004**

*(Continued From Previous Page)*

<b>Project</b>	<b>Description</b>
Chemical Weapons Production Facility Demilitarization	Will demilitarize former nerve agent weapons production facilities by decontaminating, dismantling, and destroying specialized equipment and special features related to the production, transfer, and storage of chemical agent/weapons in accordance with treaty requirements.
SS-24 Missile Motor Elimination	Is contingent on Ukraine agreeing to a means of missile motor disposal other than the original "water washout method." According to DOD, this method was fiscally and technologically risky. If an alternate means is agreed upon, the project would also fund continued storage of the motors until eliminated.
Biological Weapons (BW) Infrastructure Elimination	Assesses all known former BW facilities and institutes in the former Soviet Union where access is provided. These assessments provide detailed vulnerability and threat analyses for each institute and facility, which will then be used to develop implementation plans for reducing BW proliferation threats and prioritizing facility dismantlement efforts.
Biosecurity and Biosafety	Provides security and safety upgrades at institutes engaged only in legitimate dangerous pathogen research. Tasks include identification and implementation of necessary structural improvements and consolidation of dangerous pathogen collections to reduce the number of sites in a given country storing pathogens.
Cooperative Biological Research	Engages former BW scientists in peaceful pursuits in order to prevent the proliferation of BW expertise to terrorist groups and rogue states. The United States works with institutes and scientists employed in legitimate research to develop collaborative projects involving dangerous pathogens for prophylactic, preventive, or other peaceful purposes.
BW Threat Agent Detection and Response	Will promote biosecurity and biosafety at biological facilities in Kazakhstan and Uzbekistan by strengthening dangerous pathogen detection and response networks, enabling discovery of the diversion or accidental release of biological materials, and removing pathogens from existing field stations by safely and securely transporting and consolidating them in central labs.
Caspian Sea Maritime Interdiction	Seeks to provide Azerbaijan and Kazakhstan with a comprehensive capability for WMD detection and interdiction of illicit trafficking in WMD-related materials and components along the maritime borders of Azerbaijan and Kazakhstan and the Caspian Sea.
Uzbekistan Portal Monitors	Provides a comprehensive nuclear detection and interdiction capability of illicit trafficking in WMD-related materials at key ports of entry.
Ukraine Land Border Proliferation Prevention	Provides Ukraine, in conjunction with DOE's Second Line of Defense, with a comprehensive capability for nuclear detection and interdiction of illicit trafficking in WMD-related materials along the Ukraine/Moldova border.
Defense and Military Contacts	Expands contacts between defense establishments in the former Soviet Union in order to stem the proliferation of WMD, support the implementation of new strategic frameworks, and increase U.S. access by strengthening defense partnerships. Events will include, among other things, exchange visits of senior and midlevel officers, combined military exercises, conferences, and seminars.

Source: GAO summary of DOD threat reduction projects.



**Appendix I**  
**DOD and DOE Threat Reduction and**  
**Nonproliferation Projects, Fiscal Year 2004**

**Table 4: Department of Energy Nonproliferation Projects within Defense Nuclear Nonproliferation**

<b>Project</b>	<b>Description</b>
Global Radiological Threat Reduction	Secures radiological sources no longer needed in the United States and locate, identify, recover, consolidate, and enhance the security of radioactive materials outside the United States.
Global Nuclear Material Threat Reduction	Eliminates the use of highly enriched uranium (HEU) in civilian nuclear facilities around the world by converting research reactors to the use of low enriched uranium (LEU) fuel, returns U.S.-origin HEU and LEU spent fuel to the United States from U.S.-supplied research reactors around the world, returns Russian-origin fresh and spent HEU fuel to Russia from Russian-supplied research reactors around the world, secures plutonium-bearing spent nuclear fuel from the BN-350 fast breeder reactor in Kazakhstan, and recovers nuclear materials at vulnerable locations throughout the world.
Proliferation Detection Project	Develops advanced remote sensing and ground-based technologies, in support of other agencies, to address problems related to detection, location, and analysis of foreign weapons programs.
Nuclear Explosion Monitoring Project	Develops satellite and ground-based technologies to detect nuclear test explosions.
HEU Transparency Implementation Project	Monitors Russian uranium processing facilities to provide assurance that LEU sold to the United States for civilian nuclear power plants under the 1993 HEU Purchase Agreement is derived from weapons-usable HEU removed from dismantled Russian nuclear weapons.
Elimination of Weapons-Grade Plutonium Production Project	Provides replacement fossil-fuel energy that will allow Russia to shutdown its three remaining weapons-grade plutonium production reactors.
International Emergency Management Project	Assists foreign governments and international organizations in the development of emergency policy and preparedness infrastructure, emergency operations facilities, emergency procedures, exercise programs, and technical and training assistance.
Nonproliferation Policy Project	Works to develop U.S. policy options and technical measures for use with foreign governments to promote safe, secure nuclear reductions and transparent monitoring of nuclear warheads, fissile material, and associated facilities; to strengthen regional security in order to reduce states' incentives to obtain WMD; and to strengthen global nonproliferation regimes. Works with DOE/NSA and National Laboratories to ensure compliance with applicable nonproliferation treaties and agreements.
Export Control Policy and Cooperation Project	Regulates the use and supply of technologies that could contribute to the spread of nuclear, chemical, and biological weapons as well as missile systems for the delivery of such weapons.
International Safeguards Project	Develops and delivers technology applications to strengthen capabilities to detect and verify undeclared nuclear programs; enhances the physical protection and proper accounting of nuclear material; and assists foreign national partners to meet safeguards commitments.
Russian Transition Initiatives Project	Redirects WMD scientists to peaceful, civilian employment.
Nuclear Warhead Protection Project	Provides material protection, control, and accounting upgrades to enhance the security of Navy HEU fuel and nuclear material.
Weapons Material Protection Project	Provides material protection, control, and accounting upgrades to nuclear weapons, uranium enrichment, and material processing and storage sites.
Material Consolidation and Civilian Sites Project	Enhances the security of proliferation-attractive nuclear material in Russia by supporting material protection, control, and accounting upgrade projects at Russian civilian nuclear facilities.

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**Appendix I**  
**DOD and DOE Threat Reduction and**  
**Nonproliferation Projects, Fiscal Year 2004**

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*(Continued From Previous Page)*

<b>Project</b>	<b>Description</b>
National Infrastructure and Sustainability Project	Develops national and regional resources in the Russian Federation to help establish and sustain effective operation of upgraded nuclear material protection, control, and accounting systems.
Second Line of Defense and Megaports Initiative Project	Negotiates cooperative efforts with the Russian Federation and other key countries to strengthen the capability of enforcement officials to detect and deter illicit trafficking of nuclear and radiological material across international borders. This is accomplished through the detection, location, and identification of nuclear and nuclear-related materials, the development of response procedures and capabilities, and the establishment of required infrastructure elements to support the control of these materials.
Surplus U.S. HEU Disposition Project	Disposes of surplus domestic HEU by down-blending it.
Surplus U.S. Plutonium Disposition Project	Disposes of surplus domestic plutonium by fabricating it into mixed oxide fuel for irradiation in existing, commercial nuclear reactors.
Surplus Russian Plutonium Disposition Project	Supports Russia's efforts to dispose of its weapons-grade plutonium by working with the international community to help pay for Russia's program.

Source: GAO summary of DOE nonproliferation projects.

# DOD and DOE Metrics Used to Assess the Performance of Threat Reduction and Nonproliferation Programs

DOD and DOE assess the performance of their threat reduction and nonproliferation programs. They establish goals and assess progress toward meeting these goals using performance metrics. Table 5 lists these DOD and DOE goals and metrics.

**Table 5: DOD and DOE Performance Metrics**

Goal	Metric
<b>DOD</b>	
Eliminate Intercontinental Ballistic Missiles, Submarine Launched Ballistic Missiles, and nuclear-capable Air to Surface Missiles.	1. Number of missiles eliminated.
Eliminate silos, rail/road-mobile launchers, ballistic missile submarine launch tubes, and bombers.	2. Numbers of launchers eliminated. 3. Percentage of design completed. 4. Percentage of construction completed. 5. Projected total program cost.
Eliminate Former Soviet Union (FSU) nuclear, chemical weapon, and biological weapon infrastructure at “n” sites.	6. Number of sites.
Conduct vulnerability assessments to consolidate and secure FSU nuclear, chemical and biological weapons facilities and materials.	7. Number of sites.
Develop site designs to consolidate and secure FSU nuclear and biological weapons facilities and materials.	8. Number of sites.
Complete site upgrades to consolidate and secure FSU nuclear, chemical, and biological weapons facilities and materials.	9. Number of sites.
Construct a Fissile Missile Storage Facility (FMSF) to provide safe and secure storage for fissile material from dismantled warheads.	10. Percentage of FMSF completed without transparency. 11. FMSF transparency system. 12. Projected total program cost.
<b>DOE</b>	
Develop new technologies to improve U.S. capabilities to detect and monitor nuclear weapons production and testing.	1. Number of advanced radiation and remote sensing technologies developed and evaluated. 2. Number of advanced technologies and operational systems (e.g., satellite payloads and seismic station calibration data sets) delivered to U.S. national security users. 3. Number of professional papers/exchanges presented, each representing Science and Technology knowledge and U.S. leadership in program area. 4. Annual percentage of all active research and development projects for which an independent research and development merit assessment has been completed within the last 3 years.
Detect, prevent, and reverse the proliferation of weapons of mass destruction (WMD) materials, technology, and expertise, and to strengthen the nonproliferation regime.	5. Annual number of safeguards or physical protection courses conducted. 6. Annual percentage of U.S. exports reviewed for proliferation concern. 7. Cumulative number of cooperative agreement actions completed. 8. Cumulative kilograms of HEU purchased and delivered.

**Appendix II**  
**DOD and DOE Metrics Used to Assess the**  
**Performance of Threat Reduction and**  
**Nonproliferation Programs**

*(Continued From Previous Page)*

Goal	Metric
Prevent nuclear terrorism by working in Russia and other regions of concern to (1) secure and eliminate vulnerable nuclear weapons and weapons-usable material; (2) locate, consolidate, and secure radiological materials that can be used in a dirty bomb; and (3) install detection equipment at border crossings and Mega-Seaports to prevent and detect the illicit transfer of nuclear material.	9. Percentage of 39 Russian Navy warhead sites secured. 10. Percentage of 25 Russian Strategic Rocket Forces sites secured. 11. Percentage of 600 metric tons (MT) of weapons-usable nuclear material secured. 12. Percentage of 27 MTs of HEU converted to LEU. 13. Cumulative number of Second Line of Defense sites with nuclear detection equipment installed. 14. Annual percentage of buildings scheduled for completion of security upgrades in a year that are done on time.
Prevent adverse migration of WMD expertise by engaging weapons experts in peaceful efforts and by helping to downsize the Russian nuclear weapons complex.	15. Annual number of former Soviet weapons scientists, engineers, and technicians engaged. 16. Cumulative number of technologies commercialized or businesses created. 17. Cumulative percentage of nuclear complex reduction targets completed at six weapons facilities. 18. Annual percentage of non-U.S. government funding contributions obtained.
Assurance that the LEU being purchased under the 1993 U.S./Russian HEU Purchase Agreement is derived from HEU extracted from dismantled Russian nuclear weapons, by developing and implementing mutually agreeable transparency measures to ensure that the 500 MT of HEU covered by the agreement is permanently down blended and eliminated from Russian inventory.	19. Number of Blend-Down Monitoring Systems operational and the annual percentage of operation during the HEU blend-down process. 20. Percentage completed of the 24 annually allowed Special Monitoring Visits to the four Russian HEU-to-LEU processing facilities. 21. Percentage of the year that the on-site Transparency Monitoring Office is staffed at the Ural Electrochemical Integrated Plant.
Reduce the threat of nuclear terrorism by facilitating shutdown of the three remaining weapons-grade plutonium production reactors in Russia through (1) construction of a new fossil-fuel plant, (2) refurbish an existing fossil-fuel power plant, and (3) execution of a nuclear safety upgrades project to improve reactor safety pending shutdown of the reactors.	22. Percentage of progress toward constructing a fossil plant in Seversk. 23. Percentage of progress toward constructing a fossil plant in Zheleznogorsk facilitating shutdown of one weapons-grade plutonium production reactor. 24. Percentage of progress toward completing interim safety upgrades to the three operating Russian plutonium production reactors. 25. Amount of Russian Federation weapons-grade plutonium production eliminated annually, and cumulatively, from the 1.2 MT per year baseline.
Eliminate surplus Russian plutonium and surplus U.S. plutonium and HEU.	26. Percentage of the design and construction of the Pit Disassembly and Conversion Facility completed. 27. Percentage of the design and construction of the mixed oxide (MOX) Fuel Fabrication Facility completed. 28. Amount of HEU shipped to the United States Enrichment Corporation for down blending. 29. Amount of off-specification HEU down blended. 30. Russianize the design and construct the MOX Fuel Facility in Russia.

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**Appendix II**  
**DOD and DOE Metrics Used to Assess the**  
**Performance of Threat Reduction and**  
**Nonproliferation Programs**

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*(Continued From Previous Page)*

<b>Goal</b>	<b>Metric</b>
Identify, secure, remove, and/or facilitate the disposition of vulnerable nuclear and radiological materials and equipment around the world.	31. Cumulative number of vulnerable radiological sites secured internationally. 32. Cumulative number of U.S. excess and unwanted sealed sources recovered. 33. Cumulative number of targeted research/test reactors converted from HEU to LEU fuel. 34. Cumulative kilograms of HEU fresh fuel and spent fuel from Soviet-supplied research reactors repatriated to Russia. 35. Cumulative number of fuel assemblies containing U.S.-origin spent fuel returned from foreign research reactors.

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Source: GAO analysis of DOD and DOE data.

# DOD, DOE, and State Department Projects Addressing Similar Missions

DOD and DOE and State have projects in three areas that address similar missions in the FSU. These areas are the employment of former biological weapons scientists to prevent the proliferation of their expertise, improvement of security at sites where Russian nuclear warheads are stored, and the enhancement of countries’ ability to secure their borders against the smuggling of WMD materials. Tables 6, 7, and 8 show the different projects, funding and countries served for all three agencies and areas.

**Table 6: DOD and DOE Warhead Security Projects**

Dollars in millions

Project	Lead agency	Description	2004 funding	Location
Site Security Enhancements	DOD	This project is designed to enhance the safety and security of Russian nuclear weapons storage sites by conducting vulnerability assessments and providing equipment such as fences and sensor systems.	\$47.9	Russia
Warhead Security Program	DOE	DOE is enhancing the security around some strategic rocket forces sites and some Navy sites. Threat assessments are conducted at the sites and security equipment is provided.	107.0	Russia

Source: GAO analysis of DOD and DOE data.

**Table 7: DOD, DOE, and State Biological Weapons Scientist Employment Projects**

Dollars in millions

Project	Lead agency	Description	2004 funding	Location
Biological Weapons Proliferation Prevention (BWPP) Program’s Cooperative Biological Research (CBR) Project	DOD	The CBR project engages former biological weapons (BW) scientists in peaceful pursuits in order to prevent the proliferation of BW expertise to terrorist groups and rogue states.	\$6.1	Russia, Kazakhstan, Uzbekistan, and soon-to-be Georgia
Russian Transition Initiative (RTI) Program’s Initiatives for Proliferation Prevention (IPP) Project	DOE	The IPP project engage scientists in the FSU in peaceful commercial activities.	23.3	Russia and the FSU

**Appendix III  
DOD, DOE, and State Department Projects  
Addressing Similar Missions**

*(Continued From Previous Page)*

Dollars in millions

<b>Project</b>	<b>Lead agency</b>	<b>Description</b>	<b>2004 funding</b>	<b>Location</b>
Office of Proliferation Threat Reduction Program's Bio-Chem Redirect Program	State Department	The Bio-Chem Redirect Program funds efforts to redirect former biological and chemical weapons scientists via civilian research projects in collaboration with the U.S. Department of Health and Human Services, Department of Agriculture, and Environmental Protection Agency.	19.9	Russia and the FSU
BioIndustry Initiative	State Department	The initiative seeks to engage and strategically transform former Soviet biological production facilities, their technology and expertise for sustainable, commercial, and peaceful enterprises.	2.0	The FSU

Source: GAO analysis of DOD, DOE, and State data.

**Table 8: Overview of Border Security Projects**

Dollars in millions

<b>Project</b>	<b>Lead agency</b>	<b>Description</b>	<b>2004 funding</b>	<b>Location</b>
Second Line of Defense Program	DOE	The Second Line of Defense Program seeks to provide detection equipment to combat nuclear material smuggling.	\$52.0	FSU states and other countries
WMD Proliferation Prevention Initiative	DOD	Bolsters states' ability to prevent proliferation of WMD across their borders, DOD will provide equipment and logistics support, training, and other support to those agencies of recipient governments vested with the authority to monitor borders for illegal transport of WMD or related materials.	29.0	Non-Russian FSU states
International Counter-proliferation Program	DOD	Provides a series of training courses and equipment to counter and respond to WMD-related incidents in-country and at borders, this is a DOD coordinated effort with the Federal Bureau of Investigation and U.S. Customs designed to detect, deter, and prevent smuggling of WMD and related materials.	10.0	The FSU, Baltic states, and Eastern Europe
Export Control and Border Security	State Department	Provides technical assistance, develops training materials, and provides support to enhance countries' export control and related border security capabilities.	35.8	The FSU, Baltic states, and Eastern Europe

Source: GAO analysis of DOD, DOE, and State data.

# Comments from the Department of Energy



Department of Energy  
National Nuclear Security Administration  
Washington, DC 20585



JAN 11 2005

Joseph A. Christoff  
Director  
International Affairs and Trade  
Government Accountability Office  
Washington, DC 20548

Dear Mr. Christoff:

The National Nuclear Security Administration (NNSA) appreciates the opportunity to have reviewed the Government Accountability Office's (GAO) draft report GAO-05-127, "WEAPONS OF MASS DESTRUCTION: Nonproliferation Programs Need Better Integration." While we agree with the report and the corresponding recommendations, NNSA is submitting the attached comments to clarify or correct information contained in the draft report.

NNSA is also aware that the Department of Defense provided comments to the draft report. Since there is a recommendation for the Secretaries of Defense and Energy, we believe it is important for GAO to know that NNSA agrees with the Department of Defense's response that they submitted to GAO.

Should you have any questions related to this response, please contact Richard Speidel, Director, Policy and Internal Controls Management. He may be contacted at 202-586-5009.

Sincerely,

Michael C. Kane  
Associate Administrator  
for Management and Administration

Attachment

cc: Paul Longworth, Deputy Administrator  
for Defense Nuclear Nonproliferation  
Robert Braden, Senior Procurement Executive  
Karen Boardman, Director, Service Center



**Comments on Draft GAO Report:  
Weapons of Mass Destruction:  
Nonproliferation Programs Need Better Integration**

Page 12, chart and paragraph immediately below-

- Rationale: *accuracy*: Change office of International Nuclear Safety and Cooperation to Office of Nuclear Risk Reduction
- Rationale: *accuracy*: insert after “technologies and expertise...” “eliminate or secure inventories of surplus nuclear materials usable for nuclear weapons.”

Page 21:

- Delete last sentence of first paragraph “Other working group participants...”  
**Rationale:** *It is contradicting and is not “sourced.” Also, it is a truism that “information sharing could be improved,” so there’s no need to say it. It’s obvious and true in every setting no matter how good the working relationships are:* Insert after “such as holding interagency meetings” the following statements:  
“For example, coordination and information sharing have improved through the practice of DoD and DOE including representatives from the other agency on each other’s bilateral forums with the Russians (e.g., DoD now sends a representative to DOE’s Joint Coordinating Group, and DOE sends a representative to DoD’s Implementation Working Group). Moreover, a number of issues – ranging from security system design concepts to sustainability strategies – have been resolved outside formal work settings during frequent technical exchanges held jointly by DOE and DoD.”

Page 33

- Rationale: *accuracy*: Amend language in Global Nuclear Material Threat Reduction description box to state: “Eliminate the use of high enriched uranium (HEU) in civilian nuclear facilities around the world by converting research reactors to the use of low enriched uranium (LEU) fuel; return US-origin HEU and LEU spent fuel to the US from US-supplied research reactors around the world; return Russian-origin fresh and spent HEU fuel to Russia from Russian-supplied research reactors around the world; secure plutonium-bearing spent nuclear fuel from the BN-350 fast breeder reactor in Kazakhstan; and recover nuclear materials at vulnerable locations throughout the world.”
- Rationale: *accuracy*: Amend language in HEU Transparency Project description box to read: “Monitors Russian uranium processing facilities to provide assurance

that low enriched uranium (LEU) sold to the U.S. for civilian nuclear power plants under the 1993 HEU Purchase Agreement is derived from weapons-usable HEU removed from dismantled Russian nuclear weapons."

- Rationale: *The Nonproliferation Policy project really shouldn't be included at all since it is a policy office. However, if GAO insists in including it in the final report, it should be amended for accuracy reasons. The description should read: "Works to develop U.S. policy options and technical measures for use with foreign governments to promote safe, secure nuclear reductions and transparent monitoring of nuclear warheads, fissile material and associated facilities; to strengthen regional security in order to reduce states' incentives to obtain WMD; and to strengthen global nonproliferation regimes. Works with DOE/NNSA and National Laboratories to ensure compliance with applicable nonproliferation treaties and agreements."*

RTI

- Rationale: *accuracy*: Amend description to read: "Redirects WMD scientists to peaceful, civilian employment."

Pages 35 - 37

- Rationale: *accuracy/incorporate updated information*: Table labeled "DOD and DOE Performance Metrics" delete metric #5, 14, 33, 34, 35, and the goal associated with these last three metrics. Add the following goal:
  - **Goal: Identify, secure, remove and/or facilitate the disposition of vulnerable nuclear and radiological materials and equipment around the world.**
    - 2) **Cumulative number of vulnerable radiological sites secured internationally**
    - 3) **Cumulative number of US excess and unwanted sealed sources recovered**
    - 4) **Cumulative number of targeted research/test reactors converted from HEU to LEU fuel**
    - 5) **Cumulative kgs of HEU fresh fuel and spent fuel from Soviet-supplied research reactors repatriated to Russia**
    - 6) **Cumulative number of fuel assemblies containing US-origin spent fuel returned from foreign research reactors.**

# Comments from the Department of Defense



POLICY

OFFICE OF THE UNDER SECRETARY OF DEFENSE  
2000 DEFENSE PENTAGON  
WASHINGTON, DC 20301-2000

Mr. Joseph A. Christoff  
Director, International Affairs and Trade  
U.S. Government Accountability Office  
441 G Street, N.W.  
Washington, DC 20548

JAN 07 2005

Dear Mr. Christoff:

This is the Department of Defense (DoD) response to the draft GAO report, "WEAPONS OF MASS DESTRUCTION: Nonproliferation Programs Need Better Integration," dated November 30, 2004 (GAO Code 320255/GAO-05-157). We have reviewed the draft report and are providing the following comments:

GAO Recommendation (1): the Secretaries of Defense and Energy, in consultation with relevant agencies, develop an integrated plan for all U.S. threat reduction and nonproliferation programs.

- DoD concurs with the view that better integrated threat reduction and nonproliferation programs are in the U.S. national security interest, and believes the National Security Council (NSC) staff plays a useful role assisting in the coordination of U.S. threat reduction and proliferation prevention programs. NSC staff-developed guidelines for warhead security, biological weapons (BW) threat reduction, and other nonproliferation programs have facilitated sound interagency coordination.
- The NSC's Proliferation Strategy Policy Coordinating Committee is chaired by the Special Assistant to the President and Senior Director for Proliferation Strategy, Counterproliferation and Homeland Defense; it includes all relevant U.S. Government agencies; and it has been charged with establishing priorities for U.S. nonproliferation efforts in the former Soviet states, coordinating the implementation of those efforts, and recommending overall policies and budget options to the President through the NSC Deputies and Principals Committees.

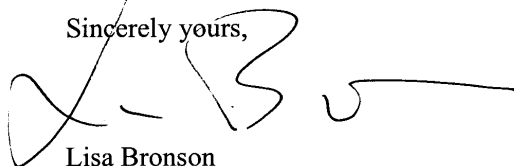
GAO Recommendation (2): the National Security Council issue clear guidance for the coordination of border security programs.

- DoD concurs with this recommendation.



We appreciate the opportunity to respond to this report and will provide additional administrative comments directly to the author. My point of contact for this report is James H. Reid at (703) 696-7737, james.reid@osd.mil.

Sincerely yours,

A handwritten signature in black ink, appearing to read 'L. Bronson', with a long horizontal stroke extending to the right.

Lisa Bronson  
Deputy Under Secretary of Defense,  
Technology Security Policy and  
Counterproliferation

cc: ATSD (NCB)  
Director, DTRA

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# GAO Contacts and Staff Acknowledgments

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## GAO Contacts

Dave Maurer (202) 512-9627  
F. James Shafer (202) 512-6002

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## Staff Acknowledgments

In addition, Hynek Kalkus, Wyatt R. Hundrup, Nanette J. Ryen, William Lanouette, Dorian L. Herring, Stacy Edwards, Lynn Cothorn, Etana Finkler, Judy Pagano, and Ernie Jackson made significant contributions to this report.

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# Related GAO Products

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*Russian Nuclear Submarines: U.S. Participation in the Arctic Military Environmental Cooperation Program Needs Better Justification.* [GAO-04-924](#). Washington, D.C.: September 9, 2004.

*Nuclear Nonproliferation: DOE Needs to Take Action to Further Reduce the Use of Weapons-Usable Uranium in Civilian Research Reactors.* [GAO-04-807](#). Washington, D.C.: July 30, 2004.

*Nuclear Nonproliferation: DOE's Effort to Close Russia's Plutonium Production Reactors Faces Challenges, and Final Shutdown Is Uncertain.* [GAO-04-662](#). Washington D.C.: June 4, 2004.

*Nuclear Nonproliferation: U.S. and International Assistance Efforts to Control Sealed Radioactive Sources Need Strengthening.* [GAO-03-638](#). Washington, D.C.: May 16, 2003.

*Weapons of Mass Destruction: Additional Russian Cooperation Needed to Facilitate U.S. Efforts to Improve Security at Russian Sites.* [GAO-03-482](#). Washington, D.C.: March 24, 2003.

*Weapons of Mass Destruction: Observations on U.S. Threat Reduction and Nonproliferation Programs in Russia.* [GAO-03-526T](#). Washington, D.C.: March 5, 2003.

*Nuclear Nonproliferation: U.S. Efforts to Help Other Countries Combat Nuclear Smuggling Need Strengthened Coordination and Planning.* [GAO-02-426](#). Washington, D.C.: May 16, 2002.

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

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

*Nuclear Nonproliferation: Security of Russia's Nuclear Material Improving; Further Enhancements Needed.* [GAO-01-312](#). Washington, D.C.: February 28, 2001.

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*Biological Weapons: Effort to Reduce Former Soviet Threat Offers Benefits, Poses New Risks.* [GAO/NSIAD-00-138](#). Washington, D.C.: April 28, 2000.

*Nuclear Nonproliferation: Limited Progress in Improving Nuclear Material Security in Russia and the Newly Independent States.* [GAO/RCED/NSIAD-00-82](#). Washington, D.C.: March 6, 2000.

*Weapons of Mass Destruction: Effort to Reduce Russian Arsenal May Cost More, Achieve Less Than Planned.* [GAO/NSIAD-99-76](#). Washington, D.C.: April 13, 1999.

*Weapons of Mass Destruction: Reducing the Threat From the Former Soviet Union: An Update.* [GAO/NSIAD-95-165](#). Washington, D.C.: June 17, 1995.

*Weapons of Mass Destruction: Reducing the Threat From the Former Soviet Union.* [GAO/NSIAD-95-7](#). Washington, D.C.: October 6, 1994.

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