

GAO

Report to the Honorable  
Hank Brown, U.S. Senate

March 1993

# SOVIET NUCLEAR WEAPONS

## Priorities and Costs Associated With U.S. Dismantlement Assistance



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United States  
General Accounting Office  
Washington, D.C. 20548

National Security and  
International Affairs Division

B-252558

March 8, 1993

The Honorable Hank Brown  
United States Senate

Dear Senator Brown:

In response to your request, we have reviewed several aspects of the U.S. effort to support the dismantlement of former Soviet nuclear weapons. Specifically, we assessed

- the extent to which the United States has developed a complete, prioritized list of all items affecting the destruction of nuclear weapons in the former Soviet Union and U.S. success in executing U.S. priorities first;
- the involvement of U.S. industry experts in developing priorities for dismantling former Soviet nuclear weapons;
- the progress made by former Soviet states in actually dismantling the former Soviet nuclear arsenal as a result of U.S. funds appropriated for that purpose; and
- the number, duration, cost, and source of funding of trips to the former Soviet Union by executive branch officials involved in planning for the use of U.S. funds.

## Background

The Soviet Nuclear Threat Reduction Act of 1991<sup>1</sup> authorizes a cooperative program of U.S. aid to former Soviet republics to

- destroy nuclear, chemical, and other weapons;
- transport, store, and safeguard weapons in connection with their destruction; and
- establish verifiable safeguards against proliferation.

The Dire Emergency Supplemental Appropriations Act of 1991 allowed up to \$400 million of Department of Defense (DOD) appropriations to be transferred to support the activities outlined in the Soviet Nuclear Threat Reduction Act. The DOD appropriations act for fiscal year 1993 made an additional \$400 million in DOD funds available for transfer for these and other objectives.

<sup>1</sup>Public Law 102-228, December 12, 1991. We did not focus our review on the implementation of more recent related legislation, such as the Former Soviet Union Demilitarization Act of 1992 (Title XIV of P.L. 102-484, Oct. 23, 1992) or Title V of the Freedom Support Act (P.L. 102-511, Oct. 24, 1992).

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## Results in Brief

The U.S. government has not prepared a single prioritized list of all items affecting the destruction of former Soviet nuclear weapons.<sup>2</sup> Its ability to do so has been limited by the fact that Russia has ruled out a direct U.S. role in dismantling former Soviet nuclear weapons. U.S. officials have instead identified broad program priorities, developed potential projects that do not directly involve nuclear weapons dismantlement, and made plans to obligate funds for such projects.

Four projects, valued at \$90 million, are now underway to advance the initial U.S. priority of enhancing the safety and security of former Soviet nuclear weapons. The executive branch has shifted the program's top priority toward dismantling nuclear delivery vehicles. It has also recently proposed to obligate \$75 million (in addition to a previously proposed \$15 million) to support the apparent top priority of Russian officials—a fissile material storage facility.

U.S. private industry experts have not been involved in developing priorities for dismantling nuclear weapons. U.S. officials informed us that using private firms to help determine priorities could suggest that such firms would enjoy an unfair advantage in subsequent bidding for contracts. They also suggested the U.S. government—and not the private sector—should define overall U.S. priorities for the program. Perhaps more importantly, Russia is not seeking a direct U.S. role in its nuclear weapons dismantlement operations.

To date, U.S. appropriations have not have directly resulted in dismantlements of former Soviet nuclear weapons because U.S. equipment deliveries have been limited to relatively small amounts of safety and security-related items.

From December 1991 to December 1992, 185 executive branch officials and national laboratory personnel took 343 trips to Russia and other former Soviet republics, in connection with the Soviet Nuclear Threat Reduction Act, at a cost of about \$1.7 million. About 21 percent of this cost was paid for with DOD funds transferred to support the objectives of the act. The balance was paid for with funds from the regular appropriations of the executive branch agencies.

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<sup>2</sup>This report uses the term “nuclear weapons” to describe nuclear warheads and bombs as opposed to vehicles (such as missiles and bombers) designed to deliver such weapons.

## U.S. Priorities Do Not Focus on Actual Dismantlement of Nuclear Weapons

U.S. officials did not provide us with a single, prioritized list of all items that affect the destruction of former Soviet nuclear weapons. The scope of possible U.S. aid has been circumscribed by Russia, which, according to DOD officials, has made clear that it neither needs nor wants a direct U.S. role in its nuclear weapons dismantlement operations. DOD officials have also noted that only trained personnel with access to sensitive design and fabrication data can safely dismantle former Soviet nuclear weapons.

Instead of addressing all items that could affect the dismantlement of former Soviet nuclear weapons, U.S. officials focused initially on enhancing the safety and security of those weapons. DOD has proposed obligating up to \$90 million for four projects that will provide Russia with 10,000 containers for fissile materials, emergency response equipment and training,<sup>3</sup> 2,500 armored blankets, and security enhancements for 115 railcars used in transporting nuclear weapons.<sup>4</sup> DOD obligated about \$14.5 million for these projects during 1992. By January 30, 1993, had delivered 250 U.S. surplus armored blankets and 6 sets of emergency access equipment to Russia.

The executive branch has shifted the program's top priority toward dismantling nuclear delivery vehicles. DOD has reported to Congress that a significant portion of additional assistance to Russia is anticipated to be for delivery vehicle dismantlement. According to the Department of State, the United States has discussed delivery vehicle dismantlement with Russia, Ukraine, and Kazakhstan.

The executive branch has also moved to address the Soviet Nuclear Threat Reduction Act's objective of establishing safeguards against proliferation. DOD has proposed obligating about \$66.5 million to support science and technology centers in Russia and Ukraine; provide export control assistance to Russia, Ukraine, Belarus, and Kazakhstan; and help Russia, Ukraine, and Kazakhstan develop material control and accountability systems. However, according to the Department of State, implementing agreements for several of these projects have not been concluded or ratified. On January 30, 1993, DOD reported that during 1992 it had actually obligated \$150,000 for only one of these projects—the Moscow science center.

<sup>3</sup>Such equipment would include protective clothing, video and optical gear, and emergency access and communications equipment.

<sup>4</sup>Appendix I lists 22 Soviet Nuclear Threat Reduction Act projects and their funding levels.

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After several months of consideration, the executive branch has acted to support a proposed Russian storage facility for fissile materials from dismantled former Soviet nuclear weapons. From the outset, Russian officials have indicated that the facility is one of their top priorities. In October 1992, the United States agreed to spend up to \$15 million to help Russia design the facility. In February 1993, DOD decided to obligate up to \$75 million to support the construction of the facility.

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## No Private Sector Role in Setting Priorities

The executive branch did not involve private industry experts in its efforts to develop priorities for dismantling nuclear weapons. Russia has ruled out a direct U.S. role in dismantlement operations. U.S. government and national laboratory experts have provided technical guidance in areas of potential U.S. assistance.

Executive branch officials expressed concern that using a private firm to develop priorities could create an appearance that the firm would enjoy an unfair advantage in bidding on contracts to carry out the program's objectives. A DOD official informed us that DOD would have had to either bar such a firm from bidding on contracts or take potentially costly steps to ensure that bidders were not unfairly disadvantaged. Officials also indicated that they believe that the U.S. government should determine overall program priorities.

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## U.S. Appropriations Have Apparently Not Directly Resulted in Dismantlement

To date, very few—if any—former Soviet nuclear weapons can be said to have been dismantled as a direct result of U.S. funds appropriated for this purpose. Only limited amounts of U.S. equipment, aimed at improving the safety and security of former Soviet nuclear weapons, have been delivered to Russia as of January 1993. As discussed previously, increasing amounts of aid are scheduled for delivery over the next 3 years.

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## \$1.7 Million Has Been Spent on Travel

Between December 18, 1991, and December 23, 1992, 185 officials from 8 agencies and 3 national laboratories<sup>5</sup> made 343 trips<sup>6</sup> to Russia, Ukraine, Belarus, and Kazakhstan in support of the Soviet Nuclear Threat

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<sup>5</sup>We obtained data from the Arms Control and Disarmament Agency (ACDA); the Departments of Commerce, State, and Energy; the Customs Service; the Nuclear Regulatory Commission (NRC), and the National Security Council (NSC). Department of Energy data includes the Los Alamos, Lawrence Livermore, and Sandia national laboratories.

<sup>6</sup>We defined a trip as travel undertaken to one or more destinations in the former Soviet Union by a single individual. Under this definition, a five-person delegation's travel to Moscow and Kiev would be counted as five trips.

Reduction Act at a cost of about \$1.68 million,<sup>7</sup> as shown in table 1. The average length of these trips was 10 days.<sup>8</sup>

**Table 1: Trips to the Former Soviet Union In Support of the Soviet Nuclear Threat Reduction Act**

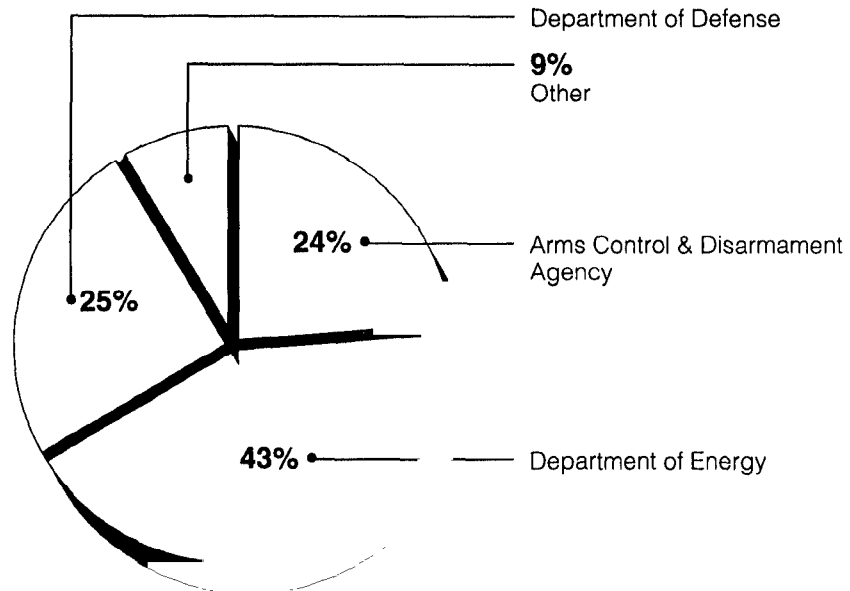
Agency	Trips	Staff	Average trip length (days)	Act-related funds	Other U.S. funds	Total cost
Energy	127	66	10	\$74,712	\$641,396	\$716,108
DOD	97	52	9	285,273	134,711	419,984
ACDA	72	38	14	0	399,223	399,223
State	20	13	11	0	56,508	56,508
NRC	13	7	9	0	56,883	56,883
Commerce	4	3	8	0	12,964	12,964
Customs	2	2	6	0	7,181	7,181
NSC	8	4	8	0	10,729	10,729
<b>Total</b>	<b>343</b>	<b>185</b>	<b>10</b>	<b>\$359,985</b>	<b>\$1,319,595</b>	<b>\$1,679,580</b>

As shown in figure 1, the Department of Energy (including the national laboratories) accounted for the largest share of this cost.

<sup>7</sup>Data provided by NSC indicates that, in addition to the funds displayed in table 1, the Department of Energy and DOD provided \$4,476 and \$997, respectively, to fund travel by NSC staff. This additional \$5,473 would raise the total cost of travel from \$1,679,580 (shown in table 1) to \$1,685,053. We did not include the additional amount in table 1 because NSC did not identify whether the \$5,473 came from act-related funds or other sources.

<sup>8</sup>The shortest trips lasted one day. According to the Department of Energy, the two longest trips—79 and 78 days—were taken by two U.S. officials who were temporarily assigned to positions at the International Science and Technology Center in Moscow.

Figure 1: Travel Costs by Agency



About 21 percent of the travel costs were financed with DOD funds transferred to support the act. The balance of the travel costs was paid for with funds from the executive branch agencies' general appropriations.

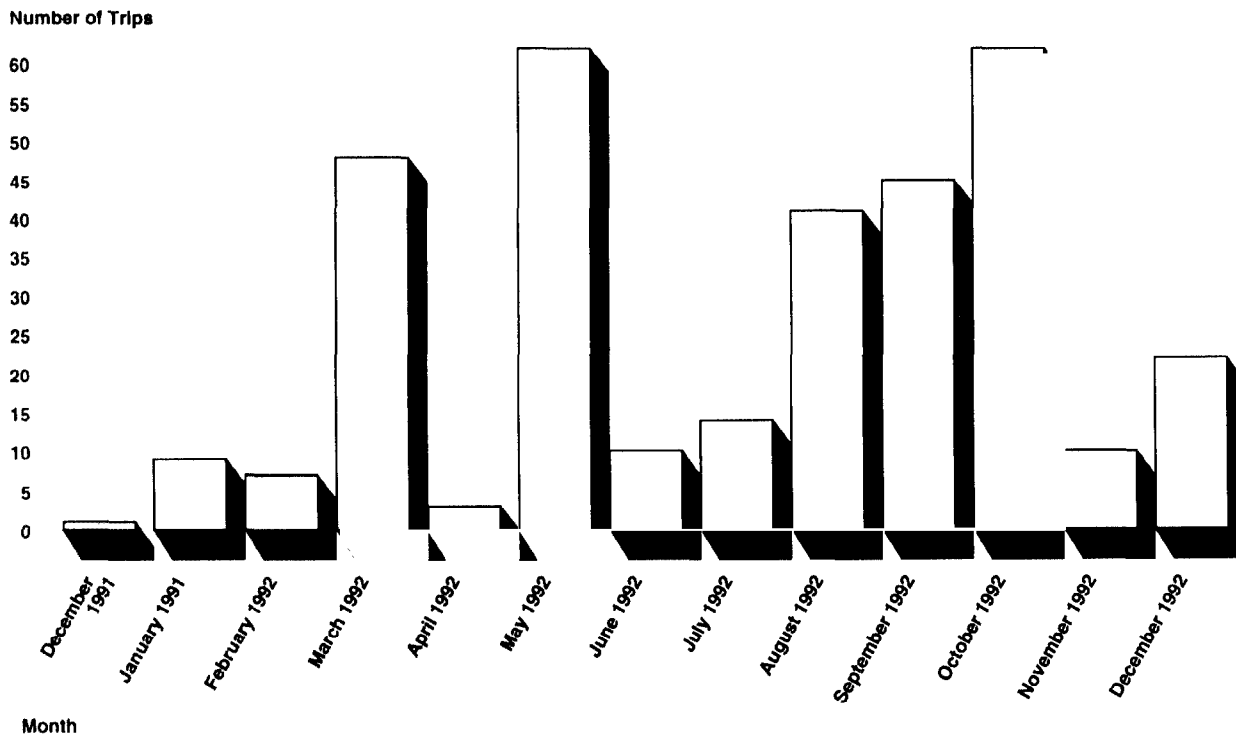
We asked the agencies to provide a brief justification for each trip. Provision of technical expertise was cited in connection with 55 percent of the trips. Technical assistance was provided in the areas of railcar safety, emergency response equipment, container design, storage facility design, material control and accounting, export controls, and the creation of an international science and technology center.

Executive branch travel was not evenly distributed over the period that we reviewed, as shown in figure 2. Trips undertaken in 3 months—March, May, and October of 1992—accounted for about half of the total number of trips. For example, in May 1992, 62 officials, experts, translators, and administrative support officers—from five agencies and three national laboratories—traveled to Russia and Ukraine for meetings that took place between May 24 and June 10. The delegation included representatives to meetings on nuclear weapons safety, security, and dismantlement; fissile materials control and accountability; fissile material containers; fissile material storage facilities; railcars; uranium and plutonium disposition;



and ballistic missiles. According to the Department of State, these meetings culminated in four agreements that were signed by the Presidents of the United States and Russia at their June 1992 summit.

Figure 1.2: Act-Related Trips to the Former Soviet Union (by month)



## Scope and Methodology

We conducted our review from November 1992 to February 1993 in accordance with generally accepted government auditing standards. We developed the information in this report by reviewing documents and meeting with officials at DOD, the Departments of Energy and State, ACDA, and NSC. We also obtained travel data from officials at NRC, the Department of Commerce, and the Customs Service. The Department of State informed us that its travel information included some estimated data. We did not validate the travel data provided by the agencies or attempt to determine whether the amount of travel was been appropriate.

As requested, we did not obtain written agency comments on this report, although we discussed the information in the report with officials at the

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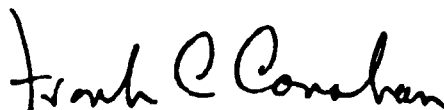
Departments of Defense and State. They indicated that the travel costs were appropriate for a program of this scope and complexity and noted that increasing amounts of U.S. aid are scheduled to be delivered in the future.

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We are sending copies of this report to the Secretaries of State, Defense, and Energy; the Director of the Arms Control and Disarmament Agency; and the National Security Council. Upon request, copies will be made available to other interested parties.

This report was prepared under the direction of Joseph Kelley, Director-in-Charge, International Affairs Issues, who may be reached at (202) 512-4128 if you or your staff have any questions. Other major contributors are Louis Zanardi, Assistant Director; Pierre Toureille, Evaluator-in-Charge; and Julie Hirshen, Evaluator.

Sincerely yours,



Frank C. Conahan  
Assistant Comptroller General



# Soviet Nuclear Threat Reduction Projects

Recipient nation or category	Project	Obligations proposed as of Jan. 30, 1993	Obligations (actual) as of Dec. 31, 1992
Russia	Armored blankets	\$ 5,000,000	\$ 2,691,000
	Railcar security	20,000,000	3,080,000
	Emergency response	15,000,000	8,168,000
	Material controls	10,000,000	0
	Storage containers	50,000,000	600,000
	Facility design	15,000,000	3,363,000
	Facility support	75,000,000	0
	Export controls	2,260,000	0
	Science center	25,000,000	150,000
	Chemical weapons	25,000,000	1,553,000
<b>Subtotal</b>		<b>\$242,260,000</b>	<b>\$ 19,605,000</b>
Ukraine	Emergency response	5,000,000	0
	Communications	2,400,000	0
	Export controls	2,260,000	0
	Material controls	7,500,000	0
	Science center	10,000,000	0
<b>Subtotal</b>		<b>\$ 27,160,000</b>	<b>0</b>
Belarus	Emergency response	5,000,000	0
	Communications	2,300,000	0
	Export controls	2,260,000	0
<b>Subtotal</b>		<b>\$ 9,560,000</b>	<b>0</b>
Kazakhstan	Emergency response	5,000,000	0
	Communications	2,300,000	0
	Export controls	2,260,000	0
	Material controls	5,000,000	0
<b>Subtotal</b>		<b>\$ 14,560,000</b>	<b>0</b>
General	Support/assessment	10,000,000	778,000
<b>Total</b>		<b>\$303,540,000</b>	<b>\$ 20,383,000</b>

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