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Cooperative Threat Reduction Annual Report to Congress Fiscal Year 2005

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FY 2005 CTR ANNUAL REPORT TO CONGRESS

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I. STATUTORY REQUIREMENTS ADDRESSED

The Cooperative Threat Reduction Annual Report to Congress for Fiscal Year 2005 (FY 2005 CTR Annual Report) addresses both recurring statutory requirements as well as two reports previously provided under separate cover:

- ?? “Summary of Amounts” Report Requested by Project Category; and
- ?? Moscow Treaty Report, Section 2(1) (relating to CTR activities).

Recurring Requirements Addressed in This Report

The Annual Report to Congress on CTR activities (CTR Annual Report) for FY 2005 is submitted in accordance with Section 1308 of the Floyd D. Spence National Defense Authorization Act (NDAA) for FY 2001, as amended by Sections 1307 and 1309 of the NDAA for FY 2002 and Section 1304 of the NDAA for 2003. This report uses data through January 2004. It addresses the “Five-Year CTR Program Implementation Plan” (FY 2005 – FY 2009) and the FY 2003 requirement for “Accounting for CTR Program Assistance to States of the Former Soviet Union (FSU).” These requirements have been consolidated into one section in this year’s report at the suggestion of the General Accounting Office (GAO).

Financial commitments for FY 2005 from the international community and from Russia for the Chemical Weapons Destruction Facility (CWDF) located at Shchuch’ye, Russia, are shown in Appendix D to this report, as required by Section 1309 of the NDAA for FY 2002.

Additional Reporting Requirements Addressed by the CTR Annual Report

Two additional requirements were established by Section 1304(a) of the NDAA for FY 2003 and are addressed herein:

- ?? A description of how revenue generated by CTR activities in recipient states is being utilized, monitored, and accounted for. (See Appendix E.)
- ?? A description of CTR defense and military contact activities carried out during the fiscal year preceding the year of the report. (See Appendix F.)

The description of Russia’s tactical nuclear weapons arsenal required by Section 1308 (c)(5) of the NDAA for FY 2001 will be submitted under separate cover.

Reporting Requirements Addressed Separately in Prior Years

(1) Section 1307 of the NDAA for FY 1999 (Public Law 105-261) entitled, “Requirement to Submit Summary of Amounts Requested by Project Category,” states:

- (a) The Secretary of Defense shall submit to Congress as part of the Secretary’s annual budget request to Congress

- (1) a descriptive summary, with respect to the appropriations requested for Cooperative Threat Reduction programs for the fiscal year after the fiscal year in

which the summary is submitted, of the amounts requested for each project category under each Cooperative Threat Reduction program element; and

- (2) a descriptive summary, with respect to appropriations in which the list is submitted and the previous fiscal year, of the amounts obligated or expended, or planned to be obligated or expended, for each project category under each Cooperative Threat Reduction program element. (See Appendix G.)
- (b) The descriptive summary required under subsection (a) shall include a narrative description of each program and project under each Cooperative Threat Reduction program element that explains the purpose and intent of the funds requested.

Project descriptions in this Annual Report respond to this requirement.

- (2) Senate Executive Report 108-1, Section 2(1), dated March 6, 2003, regarding advice and consent to ratification of the Moscow Treaty states: “Recognizing that implementation of the Moscow Treaty is the sole responsibility of each party, not later than 60 days after the exchange of instruments of ratification of the Treaty, and annually thereafter on February 15, the President shall submit to the Committee on Foreign Relations and the Committee on Armed Services of the Senate a report and recommendations on how United States Cooperative Threat Reduction assistance to the Russian Federation can best contribute to enabling the Russian Federation to implement the Treaty efficiently and maintain the security and accurate accounting of its nuclear weapons and weapons-usable components and material in the current year. The report shall be submitted in both unclassified and, as necessary, classified form.” (S. Exec. Rpt. 108-1, Section 2(1)).

Appendix H of this report responds to this requirement.

II. EXECUTIVE SUMMARY

This FY 2005 CTR Annual Report to Congress provides details on the CTR Implementation Plan for FY 2005 – FY 2009 and results of accounting activities conducted in FY 2003. With certain exceptions noted in this report, the Department of Defense (DoD) has determined that CTR assistance to the FSU recipient states is being used efficiently and effectively for its intended purpose.

CTR Program and United States National Security

Maintaining an effective set of threat reduction activities in the FSU states remains a priority for the United States. These activities are designed to address the proliferation threat stemming from large quantities of Soviet-legacy weapons of mass destruction (WMD) and missile-related expertise and materials remaining in the FSU states, preferably through the safe elimination weapons material, associated delivery systems, and related infrastructure.

In December 2002, the President issued the National Strategy to Combat Weapons of Mass Destruction. It cites WMD in the possession of hostile states and terrorists as one of the greatest security challenges facing the United States (U.S.). The Strategy further states that the U.S. must pursue a comprehensive strategy to counter this threat in all of its dimensions. The Strategy calls on U.S. agencies to take full advantage of today's opportunities, including applying new technologies, increasing emphasis on intelligence collection and analysis, strengthening alliance relationships, and establishing new partnerships with former adversaries. The CTR Program supports the National Security Strategy by pursuing four objectives. These reflect DoD's overall efforts to address high priority security and proliferation concerns in Russia and the other FSU states, to assist their transition to full partnership in the Global War on Terrorism, and to combat the threat of WMD.

Objective 1: Dismantle FSU WMD and associated infrastructure,

Objective 2: Consolidate and secure FSU WMD and related technology and materials,

Objective 3: Increase transparency and encourage higher standards of conduct, and

Objective 4: Support defense and military cooperation with the objective of preventing proliferation.

CTR activities are intended to help deny rogue states and terrorists access to WMD and related materials, technologies, and expertise; exploit the Soviet biological weapons (BW) legacy in order to enhance preparedness against biological threats; support the Global War on Terrorism; contribute to stability and cooperation in the FSU; and expand U.S. influence in the FSU states. The CTR Program dismantles strategic weapons delivery systems and infrastructure; enhances the security and safety of WMD and weapons material storage and transportation; monitors and consolidates those dangerous pathogens that pose particular risks for theft, diversion, accidental release or use by terrorists; helps prevent trafficking of WMD across non-Russian FSU states; and facilitates defense and military contacts to encourage military reductions and reform.

CTR Program—Proliferation Prevention

CTR's Biological Weapons Proliferation Prevention (BWPP) program and the Weapons of Mass Destruction-Proliferation Prevention Initiative (WMD-PPI) expand DoD efforts to prevent WMD proliferation, recognizing its importance to the success of the Global War on Terrorism.

Under the BWPP program, DoD aims to counter the threat of bioterrorism and to prevent the proliferation of biological weapons technology, materials, and expertise at their source in FSU states. The strategic vision for the BWPP program is for FSU states to become full partners in eliminating biological weapons and preventing bioterrorism. The approach is to build cooperative partnerships in BW elimination and proliferation prevention at multiple levels: regional, government-to-government, lab-to-lab, and scientist-to-scientist.

Under the WMD-PPI, DoD intends to build capabilities of non-Russian FSU states to stem the potential proliferation of WMD. DoD will help these states develop self-sustaining, integrated capabilities to prevent proliferation of WMD, and related materials and technologies to terrorists and hostile states. The approach is to build capabilities in coordination with programs of other U.S. agencies that support regulatory enforcement and security regimes focusing on each state's unique circumstances.

CTR Program Accomplishments

With CTR Program assistance, 6,202 Russian strategic nuclear warheads have been deactivated and their related weapons platforms dismantled. Approximately 3,200 additional strategic nuclear warheads and over 600 delivery systems are scheduled for deactivation and dismantlement by December 2012 by Russia that may assist it to meet its Moscow Treaty reductions. In FY 2003, 92 submarine launched ballistic missiles (SLBMs), 12 SLBM launchers, and 3 nuclear powered ballistic missile submarines (SSBNs) were destroyed or eliminated with CTR assistance. Eighteen SS-18 intercontinental ballistic missiles (ICBMs) were removed from silos, defueled, and shipped to storage facilities to await destruction. Twelve SS-18 ICBM silo launchers, 1 launch control center silo, and 36 ICBMs (25 SS-17, 8 SS-18, and 3 SS-19) were destroyed.

In FY 2003 the CTR Program assisted in moving nuclear weapons from operational bases to storage and dismantlement facilities through the shipment of 69 trainloads of nuclear warheads and components. DoD employs a Russian subcontractor along with other data to assess that these trains contain nuclear warheads and components and travel to sites of enhanced security or dismantlement locations. At DoD's initiative, the Russian Ministry of Defense (MOD) signed a protocol in February 2003 allowing unprecedented U.S. access to Russian nuclear weapons storage sites to validate vulnerability assessments. DoD completed vulnerability assessments for nine MOD nuclear weapons storage sites and began designing comprehensive security upgrades for those sites.

Figure 1 CTR Program Assisted Reductions to Date (Current as of 31 December 2003).

Ukraine, Kazakhstan, and Belarus are Nuclear Weapons Free					
CATEGORY	BASELINE	FY 2003 Reductions	Current Cumulative Reduction	CY 2007 Target for Reductions	CY 2012 Target for Reductions
Warheads Deactivated	13,300	182	6252	8564	9444
ICBMs Destroyed	1473	36	527	821	1131
ICBM Silos Eliminated	831	13	455	485	485
ICBM Mobile Launchers Destroyed	442	5	8	174	381
Bombers Eliminated	207	24	124	129	138
Nuclear ASMs Destroyed	708	141	668	708	708
SLBM Launchers Eliminated	728	12	408	520	628
SLBMs Eliminated	936	92	460	629	712
SSBNs Destroyed	48	3	27	35	40
Nuclear Test Tunnels/Holes Sealed	194	0	194	194	194

The project to construct the Fissile Material Storage Facility (FMSF) at Mayak, Russia for storage of the eligible weapons-grade plutonium and uranium equivalent of 12,500 dismantled nuclear weapons was completed in December 2003; the corresponding transparency regime is unfinished though we continue to press for prompt conclusion of this agreement. This included involvement of senior DoD leadership during 2003. Construction of Russia's first chemical weapons destruction facility for nerve agent-filled, proliferable weapons was initiated during 2003 after the President exercised his authority to waive conditions that limited construction for the previous two years. This waiver was executed in recognition of the important U.S. interest in elimination of proliferable nerve-agent munitions. The U.S. continues to press Russia for resolution of all the conditions.

The Defense and Military Contacts program to prevent proliferation and promote demilitarization conducted some 300 events with FSU states in FY 2003. These events included exercises, senior official visits, defense reform exchanges, and force professionalism exchanges.

In Ukraine, dismantlement and elimination work continued on nuclear-capable bombers and associated air-launched missiles. One hundred and sixty-three rocket motors from disassembled SS-24 ICBMs are in storage; DoD support for their elimination is contingent upon Ukraine requesting assistance for elimination through a method other than water washout.

Validating the Proper Use of CTR Assistance

In FY 2003, accounting for CTR assistance was accomplished through the application of several control methods. These controls include the following:

- ?? Audits and Examinations (A&Es) under applicable international agreements;
- ?? CTR monitoring assistance provided through other government agencies;

- ?? Defense Contract Audit Agency (DCAA) audits of International Science and Technology Center (ISTC) projects;
- ?? DCAA/Defense Contract Management Agency (DCMA) audits and surveys;
- ?? Audits/investigations by the GAO and the DoD Inspector General (DoD IG), including a series of DoD IG audits performed at the request of the Deputy Secretary of Defense;
- ?? Application of U.S. Federal Acquisition Regulations (FARs) and appropriate DoD regulations including acquisition procedures in contracting with U.S. and FSU participants (e.g., the use of fixed price contracts with payment and contract deliverables by FSU enterprises);
- ?? Use of good business practices by CTR management team;
- ?? Frequent, direct observations of CTR assistance at implementation sites in recipient states, including site visits by CTR program management, project managers, technical teams, and CTR Logistics Support (CLS) contractor personnel and oversight provided by on-site U.S. contractors; and
- ?? Use of National Technical Means.

Audits and Examinations (A&Es)

A&Es are a key component of DoD's system of accounting for CTR Program assistance. In accordance with the applicable CTR umbrella and implementing agreements, the U.S. has the right to examine the use of any material, training, or other services provided under these agreements.

In FY 2003, DoD conducted 19 A&Es in the recipient states: 14 of 15 scheduled in Russia; 3 of 3 scheduled in Ukraine; and 2 of 2 scheduled in Kazakhstan. In Russia, audits of the Nuclear Weapons Transportation Security (NWTS) and Nuclear Weapons Storage Security (NWSS) programs were scheduled concurrently during September 2003. However, due to staff limitations and in accordance with DoD agreement not to deploy more than two MOD audit teams to remote locations simultaneously, MOD was only able to support NWSS audits of two separate MOD sites. Therefore, the NWTS component of this audit was cancelled. Results of A&Es conducted in FY 2003 appear with the corresponding CTR project area.

Enhancing the Efficiency and Effectiveness of the CTR Program

The NDAA for FY 2003 directs DoD to include in the CTR Annual Report a description of the "means (including program management, audits, examination, and other means) used" by the U.S. to ensure that CTR assistance is fully accounted for and "that such assistance is being used for its intended purpose, and that such assistance is being used efficiently and effectively." Highlights of steps taken to improve the effectiveness and efficiency of the CTR Program appear below with a more detailed description in the next section.

Revalidation/Rescoping. In March 2003 CTR staff began a project-by-project review of the program's activities. The objective was to determine whether these projects, many of which tend to require lengthy construction, were still supporting current U.S. national security priorities

including the Global War on Terrorism. Virtually all of the projects had been conceived prior to September 11, 2001, and in a period when Russia's post-Soviet future was much less certain than it is today. This review was the first at the project-level of detail undertaken since initiation of the CTR Program. The review did not address projects in the Biological Weapons Proliferation Prevention area because they are less reliant on heavy infrastructure. Similarly, the review did not address the Weapons of Mass Destruction Proliferation Prevention area because it will only begin obligating funds in FY 2004. The Chemical Weapons Destruction Facility (Shchuch'ye) project was considered revalidated under the Administration's 2002 review of non-proliferation assistance to Russia. The review did identify ways to limit risks to CTR assistance inherent in the Shchuch'ye project which can be effected through the implementing agreement amendment process.

The revalidation/rescoping effort concluded that the majority of projects in Russia support current U.S. national security interests, though a number of important changes were identified. In Ukraine, a significant CTR project to eliminate 163 SS-24 solid-fuel rocket motors was cancelled due to unacceptable fiscal and technical risks. The U.S. has offered Ukraine assistance through the CTR Program to eliminate the motors through less risky means. Several smaller CTR projects in Ukraine were also cancelled given their inapplicability to current U.S. national security interests. DoD has worked with Ukrainian officials to explain that the net impact of these changes can be minimized by refocusing CTR assistance in Ukraine on more current threats relating to biological weapons and WMD proliferation prevention.

Institutionalizing Executive Reviews. CTR senior management has continued its program of semi-annual "Executive Reviews" with Russian counterparts, undertaken in response to the diversion of liquid rocket propellant ("heptyl") to the Russian space program. These meetings have provided a vehicle for high-level consultations on assumptions, timelines, and related matters pertaining to CTR activities in Russia. The DoD Executive Review teams are composed of policy, implementation, and legal specialists and have periodically included DoD Inspector General and Department of State representatives.

Improving Legal Agreements and Phasing Contracts. The CTR Program has continued to use amendments to implementing agreements as the process to convert assumptions into firm commitments, as well as to implement management responses to the "heptyl" and "Votkinsk" situations. During the January 2003 Executive Review, the DoD team was advised that local political problems in Votkinsk would prevent construction of the planned "closed-burn" component of the CTR solid rocket elimination project area. The resulting loss to the CTR Program was substantial. In response, CTR program management has adopted a phased contracting approach in order to ensure that construction does not outstrip the design work necessary to satisfy local permitting processes. In addition, the CTR Program has insisted that amendments to implementing agreements put responsibility for land allocation and construction permits on the Russia CTR Executive Agents. The implementing agreements have also been used to limit CTR program risks in a number of project areas.

Reduction of Planning/Execution Risks. The CTR Program continues to refine the Joint Requirements and Implementation Plans (JRIPs) process that is the basis of Executive Review discussions and improves transparency among Russian and U.S. CTR project managers. DoD has also sought to improve the quality and timeliness of CTR contractors' cost performance

reporting and their independent validation processes, and also has instituted a new series of performance metrics across all program areas.

Exceptions to the Proper Use of CTR Assistance

The CTR Program believes that activities and assistance executed under its purview are generally being implemented effectively and efficiently for their intended purposes. Five exceptions and the CTR Program's plan for resolving them are described in this report.

III. CTR PROGRAM IMPLEMENTATION AND EXECUTION

DoD provides CTR assistance (goods and/or services) through U.S. contractors whenever feasible. In all cases, contracts are executed, managed, and reviewed in accordance with DoD and FAR requirements. Currently, U.S. contractors are developing key hardware items, providing consolidated logistics support, and functioning as integrating contractors with U.S. and FSU subcontractors.

In some cases (e.g., strategic submarine dismantlement), fixed price contracts are negotiated directly with local enterprises in recipient states to accomplish the work. Fixed price contracts (as opposed to cost-plus or other contracting formats) are always used with local enterprises in recipient states, with payment provided only upon completion of each requirement under the contract.

Interagency Responsibilities

The Department of State (DOS) leads negotiation of CTR umbrella agreements with recipient states. Umbrella agreements are in place for Russia, Ukraine, Kazakhstan, Moldova, Georgia, and Uzbekistan. These agreements provide a comprehensive set of rights, exemptions, and protections for U.S. assistance personnel and CTR Program activities. Each umbrella agreement designates DoD as the U.S. CTR Executive Agent. As such, and pursuant to statutory responsibilities, DoD negotiates the implementing agreements and other arrangements necessary to implement CTR Program activity with the counterpart CTR Executive Agent of the recipient state. There may be more than one CTR Executive Agent in a recipient country (i.e., an executive agent for each program area). Appendix A provides a list of all applicable umbrella and implementing agreements that are part of the legal framework for program execution.

Other Executive Branch departments are pursuing related programs; some of them initially funded by DoD through the CTR Program. DOS directs and provides funding for the ISTCs, which are designed to employ former Soviet WMD scientists and engineers on non-military research activities. DoD is an ISTC partner and manages some projects through the ISTC. DOS directs and provides funding for the Export Control and Related Border Security Assistance (EXBS) program, which seeks to improve export control capabilities of FSU states to prevent the proliferation of WMD and WMD components, technology, and delivery systems. Other U.S. agencies, including the Department of Commerce, Department of Energy (DOE), U.S. Customs Service, and U.S. Coast Guard, help implement this program with DOS-provided funds. DOE has separate funds for its Second Line of Defense program to place radiation detection systems at ports of entry. CTR's WMD-PPI is coordinated with these interagency programs and other DoD programs to include the International Counterproliferation Program; a coordinated effort with the Federal Bureau of Investigation and U.S. Customs designed to detect, deter, and prevent smuggling of WMD and related materials.

DoD Responsibilities

DoD executes the CTR Program. The Office of the Under Secretary of Defense for Policy (OUSDP), through its CTR Policy Office, is responsible for developing and coordinating policy guidance; defining CTR Program objectives, scope, and direction; conducting long-range planning; providing a portion of program oversight; and undertaking activities with recipient states, including the negotiation and conclusion of CTR implementing agreements and arrangements. The CTR Policy Office, with other DoD offices, works closely with Congress, the National Security Council staff, and other Executive Branch departments and agencies on interagency and policy matters. DTRA, reporting to the Under Secretary of Defense (Acquisition, Technology, and Logistics) through the Deputy Assistant to the Secretary of Defense for Chemical Demilitarization and Threat Reduction (DATSD CD&TR), is the CTR implementing agency and provides program, contract, and funding management.

CTR Funding

CTR assistance to the FSU states totals \$4,732.2 million in total obligation authority through FY 2004. In FY 2003 \$476.7 million was obligated to support CTR projects under applicable implementing agreements. The requested CTR Program budget for FY 2005 is \$409.2 million. Since the CTR's inception, 62 program areas have received funding. Fifty-one of the program areas, which Congress authorized \$794.7 million to implement, are now complete or do not require additional funding. These programs are not included in the President's Budget submission.

Audits and Examinations (A&Es)

For projects in Ukraine, A&Es may be conducted through the expiration of the U.S.-Ukraine CTR Umbrella Agreement (currently expires on December 31, 2006). In Kazakhstan, DoD can conduct a program of A&Es for a period of three years after the expiration of the Umbrella Agreement (currently expires on December 13, 2007). A&Es of Russian projects can be performed for a period of three years after the expiration of the Umbrella Agreement (currently expires on June 15, 2006). For Moldova, Georgia, and Uzbekistan, DoD may conduct a program of A&Es during the period in which the U.S. provides assistance to each country and for three years thereafter. Currently, DoD is providing assistance to both Georgia and Uzbekistan. However, more than three years have transpired since assistance was provided to Moldova, therefore the U.S. may no longer conduct A&Es of CTR-provided assistance in that country. Results of FY 2003 A&Es are in the narratives presented in the body of this report for each CTR project for the following agreements and corresponding projects:

Russia: *Nuclear Weapons Storage Security Implementing Agreement* (Automated Inventory Control and Management System, Quick Fix, Personnel Reliability and Safety); *Strategic Offensive Arms Elimination Implementing Agreement* (Liquid Propellant ICBM and Silo Elimination); *Nuclear Weapons Transportation Security Implementing Agreement* (Supercontainers, Emergency Support Equipment, and Security Enhancements for Railcars); *Chemical Weapons Destruction Implementing Agreement* (Chemical Agent Analytical Monitoring);

and *International Science and Technology Centers Funding Memorandum of Agreement* (BWPP).

Ukraine: *Strategic Nuclear Arms Elimination Implementing Agreement* (All Projects); *Defense Conversion Implementing Agreement* (Defense Conversion); *Emergency Response Implementing Agreement* (Emergency Response); and *Weapons of Mass Destruction Infrastructure Elimination Implementing Agreement* (Weapons of Mass Destruction Infrastructure Elimination).

Kazakhstan: *Weapons of Mass Destruction Infrastructure Elimination Implementing Agreement* (BW Production Facility Dismantlement and BW Site Security).

Through FY 2003 a total of 145 A&Es have been conducted in Russia, Ukraine, Kazakhstan, Belarus, and Georgia.

Monitoring CTR Assistance Provided Through Other Government Agencies

DoD funds activities performed by other government agencies in support of CTR objectives. These activities are monitored through review of both financial and audit reports.

Defense Enterprise Fund (DEF): The DEF is a privately managed venture capital fund formed to promote the conversion of FSU defense-related industries into non-military commercial businesses. The DEF made investments in joint ventures between FSU enterprises and Western partners. DoD monitors activities of the DEF through the oversight of a CTR program manager, an annual presentation by DEF management, and the results of the annual audit performed by an independent certified public accounting firm. As of September 2003 the DEF was capitalized with approximately \$66.7 million (from the U.S. Government (USG)). The DEF has funded more than \$43.4 million to 15 projects. The DEF is in the process of selling remaining investments and anticipates closing in FY 2004.

Science and Technology Centers (STCs): DOS oversees all Science and Technology Center activities, including those supported through DoD partner relationships. A DOS representative sits on the STC Boards of Governors and votes the U.S. position on project funding based on an interagency review of proposed projects. Board of Governors meetings are conducted quarterly for the ISTC and semi-annually for the Science and Technology Center–Ukraine (STCU). The ISTC and STCU conduct project oversight to ensure that funds are used as approved by their Boards of Governors.

Each active ISTC/STCU project receives an on-site monitoring visit at least once a year and is subject to ISTC/STCU audit. Financial audits of the STCs, both internally and for specific projects, and monitoring technical progress of projects funded by the STCs are key management activities. The accounting firm of Deloitte Touche Tohmatsu audits the ISTC annual financial report. The ISTC and STCU publish annual reports on the program.

Department of Energy (DOE) Assurance Program: DOE reports that the assistance provided to recipient states is being used for intended purposes and there is no evidence of material diversion. DoD no longer funds DOE's Material Control and Accounting

(MC&A)/Proliferation Prevention program. However, DOE reported the status of activities previously funded by DoD in its program to Congress in the Initiatives for Proliferation Prevention Program FY 2003 Annual Report.

DoD contracts with the Civilian Research and Development Foundation (CRDF) to assist with cooperative research. This activity is not managed by DoD and is not subject to A&Es applicable to other CTR activities. However, PriceWaterhouseCoopers LLP will conduct an audit of the financial status of the CRDF as of December 2003. The audit will be conducted in accordance with generally accepted auditing standards; Government Auditing Standards issued by the Comptroller General of the United States; and Office of Management and Budget Circular A-133, "Audits of Institutions of Higher Education and Other Nonprofit Institutions."

DCAA Audits of ISTC Projects

DCAA completed audits of six ISTC research projects and an audit of the State Research Center for Applied Microbiology (SRCAM) at Obolensk, Russia. Both the Defense Threat Reduction Agency (DTRA) and CRDF technical support representatives assisted the DCAA audit teams. The audit reports described satisfactory technical progress in each of these projects. Additionally, the DCAA audit team reported that the ISTC had paid value added tax (VAT) on some purchases, which is an unallowable expense per the project agreement.

A DCAA audit team examined the bankruptcy status of the SRCAM and made recommendations to consolidate space and upgrade infrastructure to reduce operating costs. A detailed report of these audits is included in the narratives of the BW infrastructure elimination projects in this report. The concerns of the audit teams were conveyed to the ISTC chief financial officer who generally concurred with the DCAA findings and responded favorably to the audit team recommendations.

DCAA/DCMA Audits and Services

DCAA and DCMA support the implementation and administration of the CTR Program. DCAA is responsible for performing contract audits for DoD and providing accounting and financial advisory services regarding contracts and subcontracts to DoD components responsible for procurement and contract administration. These services are provided in connection with negotiation, administration, and settlement of contracts and subcontracts. DCMA provides a wide range of services, including total contract and subcontract administration, payment of invoices, and support in the closeout of contracts.

Application of U.S. Federal Acquisition Regulations (FARs) and Good Business Practices

Under the applicable CTR umbrella and implementing agreements, contracts are awarded in accordance with U.S. laws and regulations. The implementation of U.S. contracting laws and regulations, including the FARs, is central to providing and accounting for CTR assistance in the FSU states. Implementation of the FARs is a non-negotiable item in contract negotiations with enterprises in the U.S. and FSU recipient states. The FARs, along with DoD good business practices, provide assurance that the CTR Program is executed properly. In

addition, the following conditions have proven important in providing and accounting for CTR assistance in the FSU states:

- ?? Rigorous discussion of requirements before work is contracted, including site access whenever possible under current agreements, to ascertain the scope of the problem and possible solutions;
- ?? Independent USG cost estimate before beginning procurement;
- ?? Prohibition against transferring any assistance to other entities without written USG approval;
- ?? Compliance with the Competition in Contracting Act;
- ?? Government-to-government (“umbrella”) agreements ensure tax and customs exemptions, liability protections, and privileges and immunities for the U.S. and its citizens, and the right to verify assistance is used for intended purposes;
- ?? FSU private companies may compete for CTR contracts, but only on a firm fixed price basis;
- ?? U.S. project managers must be allowed to closely monitor the cost, schedule, and performance of the contractor and the project;
- ?? U.S. project managers must be able to monitor any work promised by the recipient that is integral to project success (e.g., infrastructure needed to support a CTR-constructed demilitarization site);
- ?? Payment only upon inspection and acceptance by a USG representative;
- ?? Payment to recipient country contractors or subcontractors only after work is completed;
- ?? Only accepted Western financial accounting methods may be used for non-fixed price contracts;
- ?? U.S. project managers must be able to monitor payments from the USG to the bank selected by the contractor; and
- ?? U.S. project managers must be able to meet regularly with CTR contractors (both U.S. and foreign) to review their work and discuss their banking arrangements and financial situations.

Site Visits/Observations of CTR Assistance by DoD Personnel and Contractors

During FY 2003 CTR Program management teams conducted 163 trips to develop requirements; negotiate contracts, agreements, and arrangements; monitor contractor performance; resolve program concerns; and assess whether CTR-provided services, materials, and equipment were used for their intended purpose in an efficient and effective manner.

These trips were in addition to on-site project management support from USG teams and U.S. contractors who reside “in-country” and frequently submit written project status reports to CTR Program management. For example, the U.S. Army Corps of Engineers had on-site offices

to manage the Fissile Material Storage Facility project at Mayak. There is a similar, permanent on-site presence at the Shchuch'ye project.

CTR's Logistics Support (CLS) contract personnel complement the visits of CTR program managers when they maintain DoD-provided equipment. The CLS contractor provides further assurance that equipment is properly controlled through equipment inventories and the transfer of custody process.

During FY 2003, CLS teams from logistics support bases in Russia, Ukraine, and Kazakhstan conducted 525 site visits to CTR project locations in the recipient states. The teams performed 4,907 maintenance actions. Most of these actions are attributed to particular projects and are noted in the narratives for each CTR project later in this report.

Also during FY 2003, the CLS contractor reported an aggregate Operational Readiness Rate of greater than 99% for CTR equipment. Reports from the CLS contractor are used in the development of DoD's assessment and the CTR Annual Report to Congress. The CLS contractor did not report any misuse of assistance.

National Technical Means

The CTR Program uses National Technical Means to help ensure that assistance is being used as intended.

Enhancing the Efficiency and Effectiveness of the CTR Program

The NDAA for FY 2003 directs DoD to include in the CTR Annual Report a description of the "means (including program management, audits, examination, and other means) used" by the U.S. to ensure that CTR assistance is fully accounted for and "that such assistance is being used for its intended purpose, and that such assistance is being used efficiently and effectively." DoD has taken the following actions to enhance the effectiveness and efficiency of the CTR Program's implementation.

- ?? During the periods of January 14-17, March 24-28, and July 28-31, 2003, DoD conducted semi-annual high-level Executive Reviews of each major CTR Program in Russia. These reviews were conducted with the four Russian CTR Executive Agents: Russian Aviation and Space Agency (RASA), MOD, Ministry of Atomic Energy (MinAtom), and Russian Munitions Agency (RMA). They provided an opportunity to jointly evaluate CTR assistance and project assumptions and objectives; clarify responsibilities of each party; and adjust program plans as necessary to ensure that U.S. national security interests and resources are appropriately protected.
- ?? The Executive Review process was instituted by the U.S. during July 2002 in response to Russia's undisclosed diversion of liquid rocket propellant to its space program. This diversion undermined confidence in Russia's ability to ensure proper use of CTR assistance.
- ?? During the January 2003 Executive Review, RASA advised that political tensions at the local/regional level at Votkinsk would make allocation of land for, and permitting for

construction of, the solid rocket motor disposition facility impossible. Since 1997, DoD had worked with Russia on the project for removing solid propellant from mobile ICBMs (SS-24/ SS-25) and SLBMs (SS-N-20). The initial reception from regional officials at Votkinsk was warm, but began to sour in 2001.

- ?? Approximately \$106.0 million was spent on design, testing and improvements at the intended site. Unlike the “heptyl situation,” DoD had been informed of land allocation and permitting issues by the Russia CTR Executive Agent. Moreover, DoD was aware of a significant level of effort on the part of the Russian federal government to resolve local concerns as they arose. Based on this information, and to be ready for a rapid drawdown of mobile missiles, designs and site preparation at Votkinsk proceeded. As a result of the Votkinsk situation, recent amendments to implementing agreements place the burden to obtain local permits on the Russian Executive Agents. CTR has also begun phasing contracts on large projects in order that program risks can be limited before the full permitting process is complete.
- ?? DoD has taken several steps to reduce risks in planning and executing CTR projects. One initiative undertaken is the development of Joint Requirements and Implementation Plans (JRIPs), which outline project requirements, risk assessments and mitigation, and DoD and Russia responsibilities. In addition, an acquisition management system has been implemented which will:
 - ?? Establish cost, schedule, and performance baselines for all programs;
 - ?? Establish a milestone decision authority process for all projects; and
 - ?? Implement a phased approach to project implementation, where appropriate.
- ?? Where it is feasible to do so, risk has been shifted to the Russian Government. For example, once the Solid Propellant Disposition Facility (SPDF) (Votkinsk) project was terminated in February 2003, the responsibility for renovating existing burn stands to burn propellant from solid rocket motors (SRMs) and obtaining operating permits was transferred to Russia. DoD has agreed to provide reimbursement for the cost of operating the completed burn stand on an SRM-by-SRM basis only after the propellant is burned.
- ?? The Deputy Under Secretary of Defense (Technology Security Policy and Counterproliferation) and RASA have amended the Strategic Offensive Arms Elimination-Russia Implementing Agreement to establish the responsibilities and commitments of each party for the disposal of solid propellant missile systems.
- ?? In late 2002, the CTR Program began a concerted effort to improve the quality and timeliness of its contractors’ cost performance reporting. On December 3, 2002, the CTR Integrating Contract (CTRIC) program manager held a meeting with all CTRIC contractors to discuss the proper application of an Earned Value Management System (EVMS) requirement for CTR work. The CTR Program has worked with DCMA to obtain its support. DCMA is the designated DoD Center of Excellence for EVMS, and the only DoD agency that can provide formal system validation.
- ?? Based on the USG’s assessment of proper requirements, bolstered by the contractors’ assessments, DoD issued a contract modification in February 2003 that added a clause to

each of the base contracts requiring cost performance reporting on all cost reimbursable task orders with a ceiling price in excess of \$1.0 million and a period of performance in excess of six months. This modification includes a requirement to provide an explanation for variances that exceed established threshold limits. The modification also stipulates that each CTRIC contractor is required to maintain an EVMS.

- ?? DoD has initiated meetings with each of the CTRIC contractors to discuss the independent validation process. One CTRIC contractor already has a DoD-validated EVMS. DCMA will include monitoring of this contractor's CTR work in its routine system surveillance. With the exception of one contractor that does not have a task order requiring a validated EVMS, all CTRIC contractors are in various stages of the verification process.
- ?? In addition to the system validation efforts described above, DoD has begun using a commercial software package, wInsight, to receive, analyze, and archive cost performance reports from its contractors. This gives the DoD program and project managers enhanced capability to use the information to manage their projects.
- ?? DoD has instituted a series of metrics across all program areas. These metrics are intended to establish meaningful goals/milestones for each project. The results of these measurements, including an explanation of deviations from planned results, are briefed to CTR and the Office of the Secretary of Defense (OSD) management at each CTR Quarterly Program Review. These metrics establish an additional accountability measurement for key indicators in each program area and provide useful data for management decision making.

Exceptions to the Proper Use of CTR Assistance

Through application of the aforementioned accountability controls applied during FY 2003, DoD can report that CTR assistance provided to recipient states is fully accounted for and is being used efficiently and effectively for its intended purpose. However, there are compliance and accounting concerns that have been or are being resolved, including the following.

- ?? The CTR BWPP program in Russia has no implementing agreement; therefore, the CTR Program relies on the Memorandum of Agreement (MOA) between the U.S. and the ISTC to implement projects. The ISTC MOA does not allow DoD to contract directly with the Russian institutes that perform the majority of the biological research. This limits the ability of the CTR project managers to ensure that work is performed efficiently, as standard USG contracting procedures cannot be applied to monitor the contractor's performance. DoD will continue to pursue a BW implementing agreement with Russia.
- ?? According to Russian interlocutors, new export control laws are the reason Russia has failed to transfer dangerous pathogen strains to the U.S. for study. The strain transfers were a deliverable under ISTC projects "Monitoring of Anthrax Infection" (ISTC #1215) and "Conservation of Genetic Material and Study of Genomic Structure of Different

Variola Virus Strains” (ISTC #1987). Payment for these deliverables was withheld and delivery of DNA data is being pursued.

- ?? ISTC project agreements include provisions that prohibit the reimbursement of VAT for USG-funded projects. However, DCAA audit teams reported that VAT for each ISTC project has been remitted to Russian vendors and recorded as a separate expense line-item for reimbursement by USG funding. For example, \$136,802.32 of VAT was included in the final accounting reports for project 1699p. In effect, this unallowable VAT was charged to the USG-funded ISTC project in violation of the provisions of the project agreement. DOS has oversight responsibility for ISTC projects; accordingly, the failure of projects under the ISTC to comply with the ISTC agreement has been referred to DOS for resolution.
- ?? Article 2 of the Special Arrangements for the conduct of A&Es at NWSS sites states, “Within a 60-day period from the day of equipment transfer, MOD will provide to DoD a list of all the equipment with the region of its location (East or West). This list will be renewed at least once a year or more frequently in the event of a transfer of a significant quantity of equipment.” However, due to the absence of a consolidated equipment inventory tracking system, Russia's MOD has not complied with this requirement. Because DoD has very limited access to MOD NWSS sites, this is an accountability concern that MOD needs to remedy. MOD has requested assistance from DoD and is working collaboratively to develop a solution using the same database tool that DoD uses to track equipment under the CLS contract.
- ?? DoD is working toward a final transparency agreement covering material stored in the Mayak Fissile Material Storage Facility. Differences remain regarding the number of monitoring visits per year and the time the monitors may be on-site during each visit, as well as how to measure the mass of the fissile material. The CTR Program has elevated the matter to senior DoD leadership.

IV. CTR PROGRAM ACTIVITIES AND ASSISTANCE – INCLUDES FIVE-YEAR (FY 2005 – FY 2009) IMPLEMENTATION PLAN AND FY 2003 ACCOUNTING ACTIVITIES

Section 1308 Requirements Addressed

The Floyd D. Spence National Defense Authorization Act for FY 2001, Section 1308, Reports on Activities and Assistance Under the CTR Program, requires the Secretary of Defense to submit an annual report to Congress. This CTR Annual Report for FY 2005 addresses the following legislative requirements:

“(1) An estimate of the total amount that will be required to be expended by the United States in order to achieve the objectives of the Cooperative Threat Reduction programs. (See Figure 7.)

(2) A five-year plan setting forth the amount of funds and other resources proposed to be provided by the United States for Cooperative Threat Reduction programs over the term of the plan, including the purpose for which such funds and resources will be used, and to provide guidance for the preparation of annual budget submissions with respect to Cooperative Threat Reduction programs. (See project descriptions in this section and Figures 2–7.)

(3) A description of the Cooperative Threat Reduction activities carried out during the fiscal year ending in the year preceding the year of the report, including –

(A) the amounts notified, obligated, and expended for such activities and the purposes for which such amounts were notified, obligated, and expended for such fiscal year and cumulatively for Cooperative Threat Reduction programs (See project descriptions that follow and Appendix B.);

(B) a description of the participation, if any, of each department and agency of the United States Government in such activities (See project descriptions that follow.);

(C) a description of such activities, including the forms of assistance provided (See project descriptions that follow.);

(D) a description of the United States private sector participation in the portion of such activities that were supported by the obligation and expenditure of funds for Cooperative Threat Reduction programs (See project descriptions that follow.); and

(E) such other information as the Secretary of Defense considers appropriate to inform Congress fully of the operation of Cooperative Threat Reduction programs and activities, including with respect to proposed demilitarization or conversion projects, information on the

progress toward demilitarization of facilities and the conversion of the demilitarized facilities to civilian activities (See project descriptions that follow.).”

(4) “A description of the means (including program management, audits, examinations and other means) used by the United States during the fiscal year ending in the year preceding the year of the report to ensure that assistance provided under Cooperative Threat Reduction Programs is fully accounted for, that such assistance is being used for its intended purpose, and that such assistance is being used efficiently and effectively, including:

(A) if such assistance consisted of equipment, a description of the current location of such equipment and the current condition of such equipment (See Appendix C for equipment locations and values. The current condition is addressed in the project narratives.);

(B) if such assistance consisted of contracts or other services, a description of the status of such contracts or services and the methods used to ensure that such contracts and services are being used for their intended purpose (Project narratives for services description, status, and management actions.);

(C) a determination whether the assistance described in subparagraphs (A) and (B) has been used for its intended purpose and an assessment of whether the assistance being provided is being used effectively and efficiently (See Exceptions to the Proper Use of CTR Assistance in the Executive Summary.); and

(D) description of the efforts planned to be carried out during the fiscal year beginning in the year of the report to ensure that Cooperative Threat Reduction assistance provided during such fiscal year is fully accounted for and is used for its intended purpose. (FY 2003 A&E are detailed in the project narratives. A schedule of future audits is in Figure 8.)”

Format of This Report

In this CTR Annual Report to Congress, the CTR Implementation Plan and the Accounting for CTR Program Assistance are combined and organized according to the four CTR Program objectives. Under each objective, project descriptions are listed according to program area (e.g., the Strategic Offensive Arms Elimination (SOAE) program area). Narratives for each program identify active projects, site visits by CTR Program management (project managers, technical teams, on-site U.S. contractors, and CTR Logistics Support personnel), Executive Reviews, and A&E summaries.

For each project, detailed information includes: the FY 2005-FY 2009 Five-Year Plan, Purpose, and Resources; a Description of CTR Activities Carried Out in FY 2003; the location(s) of CTR assistance in the FSU; program management (site visits by CTR project managers, technical teams, on-site U.S. contractors and CTR Logistics Support personnel); and A&E information (if one was completed in FY 2003). Not all projects contain information in all of

these categories. If a project has been previously reported as completed or terminated, then only information that applies to accounting for CTR assistance is included.

A table at the conclusion of each objective details DoD proposed funds and other resources for each project under that objective through the Future Years Defense Plan (FYDP). At the end of this section, Figure 7 provides total CTR Program funding through the FYDP by program objective. Projects requiring funding beyond the FYDP (FY 2009) will be identified in future CTR Annual Reports. Paragraph numbers in the CTR Accountability Actions by Project for FY 2003 chart and in Appendix C, CTR Equipment and Locations as of September 30, 2003, are cross-referenced to the program and project narratives.

Objective 1: Dismantle FSU WMD and Associated Infrastructure

1.1 STRATEGIC OFFENSIVE ARMS ELIMINATION (SOAE) PROGRAM–RUSSIA

DoD is assisting Russia by contracting for, and overseeing destruction of, strategic weapons delivery systems in accordance with the SOAE Implementing Agreement and relevant Strategic Arms Reduction Treaty (START) Treaty provisions and agreements, including the START Conversion or Elimination (C or E) Protocol. CTR assistance provides an incentive for Russia to draw down its Soviet legacy nuclear forces, thereby reducing opportunities for their proliferation or use. DoD is providing equipment and services to destroy or dismantle ICBMs, ICBM silo launchers, road and rail mobile launchers, SLBMs, SLBM launchers and associated SSBNs, and WMD infrastructure. Also, the CTR Program supports the placement into casks designed for long-term storage of spent naval reactor fuel from SSBNs being prepared for elimination and the provision of emergency response support equipment. Legal commitments replaced good faith obligations whenever CTR-provided infrastructure or equipment is used to carry out elimination projects.

Program Management: Three Executive Reviews were conducted this year, which are summarized below. DoD management and technical teams made seven trips involving the entire SOAE program. A DoD implementation team traveled to Moscow to conduct a general program review with MinAtom, RASA, and contractors. Discussions were held regarding program background, current status, planned activities for FY 2003 and FY 2004, and potential impediments to mission accomplishments. Discussions also included the DoD plan to mitigate risks through the use of phased project execution, under which projects will not be allowed to progress beyond the first phase unless appropriate permits and assurances are in place.

On several trips, DoD teams met with RASA and MOD officials regarding access to restricted project sites. DoD and RASA officials signed the site access arrangements in October 2003. Teams also discussed the status of amendments to the existing SOAE Implementing Agreement.

The CLS contractor and its subcontractors made trips to SOAE project sites, performed maintenance actions, and provided transfer of custody and letter of verification services. These actions are detailed in the Program Management section for the applicable project.

Russia Executive Reviews

The DoD contingent for the January 2003 RASA meetings on SOAE projects included members of the DoD IG. CTR program management invited IG participation as part of the broader review of diversion of heptyl from the CTR-funded disposition facility. DoD asserted that, if RASA had notified DoD of its decision to divert heptyl for use in the space program, it would have stopped the construction of an expensive facility that ultimately had no use. Discussions also included:

- ?? Advice from RASA that political tensions at the local/regional level made allocation of land impossible, resulted in the termination of construction of the solid rocket motor disposition facility (SRMDF) in Votkinsk. This news had significant implications for the

mobile ICBM elimination project, as well as for overall CTR fiscal integrity given the nearly \$100.0 million already invested in SRMDF design and site preparation. Alternatives to the SRMDF were broached and RASA eventually agreed to modify several open-burn stands in Russia to compensate for loss of the SRMDF.

- ?? The SOAE commitment amendment and review of the first JRIP;
- ?? Elimination schedules for each project; and
- ?? The performance of A&Es on proceeds of scrap metal disposal and testing to determine the content of intermodal tank containers (IMTCs).

The March Executive Review focused on negotiating the commitments for the mobile ICBM elimination project which were structured to limit CTR program risks while taking advantage of RASA's offer to refurbish open-burn stands.

The July Executive Review included a detailed review of every project in the SOAE program area, including assumptions, risks, milestones, and responsibilities. Additionally, RASA, MOD, and DoD completed negotiations on the SOAE Access Arrangements designed to ensure access to MOD sites for projects on which RASA is the CTR Executive Agent.

The following projects in this program objective area will require funding during FY 2004-2009:

- ?? Emergency Response Support Equipment;
- ?? Solid Propellant ICBM/SLBM and Mobile Launcher Elimination;
- ?? Liquid Propellant ICBM and Silo Elimination;
- ?? SLBM Launcher Elimination/SSBN Dismantlement;
- ?? Spent Naval Fuel Disposition (including storage at the shipyards pursuant to the revalidation/rescoping review discussed in Section II); and
- ?? Liquid Propellant SLBM Elimination.

The Heavy Bomber Elimination Equipment project and the Low Level Radioactive Waste Volume Reduction project have been completed. The Liquid Propellant Disposition Systems and the Solid Propellant Disposition Facility projects were terminated in FY 2003.

1.1.1 Emergency Response Support Equipment

FY 2005-FY 2009 Five-Year Plan, Purpose, and Resources: This project provides equipment to Russia for use in an emergency response train to respond should accidents occur during transportation of ballistic missiles. The equipment, including a rail-mounted crane, hydraulic tools, a hydro-abrasive cutter and transport system, concrete pulverizers, and an excavator, is centrally located in Krasnoyarsk and available to support SLBM and ICBM transportation and dismantlement.

The estimated cost for this project increased from \$9.3 million to \$11.0 million. This increase is due to a recalculation of logistics support requirements.

Description of CTR Activities Carried Out in FY 2003: Raytheon Technical Services Company (RTSC) conducted corrective and preventive maintenance for project equipment.

Location: Krasnoyarsk.

Program Management: The CLS contractor made six project site visits and performed 28 maintenance actions at equipment support bases on DoD-provided equipment.

A&E: This project was included in the December 2002 A&E summarized at Paragraph 1.1.6.

1.1.2 Solid Propellant ICBM/SLBM and Mobile Launcher Elimination

FY 2005-FY 2009 Five-Year Plan, Purpose, and Resources: This project 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. Infrastructure, including START fixed structures, at three SS-24 and up to nine SS-25 Strategic Rocket Forces (SRF) deployment bases will also be eliminated. Additionally, 78 SS-24 launch-associated railcars will be rendered strategically inoperable. This project will also eliminate SS-N-20 SLBMs through open burn.

The CTR Program will assist in the infrastructure upgrade, provide minimal equipment, and pay a unit cost for the elimination of SS-24/25 solid propellant missile systems. Realizing the risk associated with licensing, construction, and obtaining a permit to operate open burn facilities, DoD and RASA agreed that Russia would fund this effort and DoD would decrease the original scope of CTR assistance for infrastructure and support equipment. Missile buffer storage facilities will be built by CTR to support the prompt decommissioning of Russia's SS-24 and SS-25 missile systems. Contingency plans would use these facilities for storage of SRMs, if the motors cannot be burned at a suitable rate. DoD will not contract to fund storage of such SS-24 and SS-25 missiles or their motor cases with propellant beyond January 2005. The combination of removing propellant and eliminating missile motors, together with storage, will permit immediate destruction of rail and road mobile launchers.

The current schedule plans for the destruction of 288 SS-25, 56 SS-24, and 31 SS-N-20 missiles with prior year and FY 2005-FY 2009 FYDP funding. Additionally, 283 SS-25 road mobile launchers and 39 SS-24 rail mobile launchers will be destroyed in accordance with all relevant START Treaty provisions and agreements, including the START C or E Protocol. This is a decrease of 63 SS-25 missiles and 59 SS-25 road mobile launchers from the previous CTR Annual Report. This is also a decrease of 46 SS-N-20s since the previous report. When the elimination of the SLBM launchers on a second *Typhoon* SSBN is completed, the number of SS-N-20 missile eliminations could be increased to 61. The remaining SS-N-20 missiles are projected for elimination after 2009 since the elimination of launchers on a third *Typhoon* SSBN is not projected until after FY 2009. Fewer SS-25 missile and launcher eliminations are projected due to a number of factors. These include the following: (a) the need to negotiate new commitments by Russia in amendments to the controlling agreements for CTR assistance concerning solid propellant missile elimination projects, to increase Russia's stake in these

projects, define roles and responsibilities, and preclude ineffective and inefficient use of CTR funds; and (b) Russia's delay in bringing alternative SRM burn stands on line.

The estimated cost of this program has decreased from \$474.8 million to \$437.0 million. This decrease is based on fewer SS-25 missile and launcher eliminations.

Description of CTR Activities Carried Out in FY 2003: Four SS-N-20 missiles were disassembled at Zlatoust and open-burned at Biysk facilities by Parsons Delaware, Inc. Washington Group International (WGI) is the integrating contractor for SS-24 eliminations. The large SS-24 train shed in Bershet was eliminated. Perm SS-24 and SS-25 storage warehouses were designed by WGI and construction permits were issued in October 2003. Ninety percent of the SS-24 disassembly facility renovations were completed and 80% of the required disassembly equipment was procured. Renovation of the Bershet offloading facility was completed and nine missiles were offloaded from rail mobile launchers. Five rail mobile launchers were eliminated and eight launch-associated railcars were rendered strategically inoperable at Bryansk. Multiple contracts were awarded in support of SS-25 ICBM/launcher elimination. Bechtel National, Inc. (BNI) contracted to define the scope of future base decommissioning work. RTSC contracted to define the elimination process; design the required upgrades; specify the required equipment; provide the data for the Russian permits and licenses required for construction and renovation; and upgrade missile disassembly and elimination and launcher elimination facilities. BNI contracted to decommission one regiment at Nizhniy Tagil, one at Yoshkar-Ola, and one at Yur'ya.

Locations: Biysk, Bershet, Bryansk, Kemerovo, Khrizolitoviyy, Kostroma, Krasnoyarsk, Nenoksa, Nizhniy Tagil, Perm, Piban'shur, Plesetsk, Surovatikha, Votkinsk, Yoshkar-Ola, Yur'ya, and Zlatoust.

Program Management: DoD management and technical teams made 23 trips, the majority to further define scope and conduct site visits. In particular, a number of trips were made to terminate the design for the Russian proposed additional SS-24 storage facility at Gremyachinsk in order to relocate and integrate it with the plans for the SS-25 storage facility at the Perm NPO Kirov Plant. Items of interest from the trips include a location comparison for the SS-25 Road Mobile Launcher Elimination Facility, witnessing a first stage SS-N-20 motor burn at Biysk, and the inspection of possible shared infrastructure, including a boiler house, between the SS-24 Solid Propellant ICBM Elimination Facility and the SS-24/SS-25/Loaded Motor Case (LMC) Storage Facility at Perm.

Other trips supported pricing and contract negotiations. Projects that included contract negotiations were the SS-25 Integrated Missile and Launcher Elimination Operations, the SS-24/SS-25/LMC Storage Facility at the Perm Kirov Plant, the SS-25 Base Elimination project, and a change order on the SS-24 Solid Propellant ICBM and Rail Mobile Launcher Elimination project.

A trip was made in June to conduct the first SS-25 Missile and Launcher Elimination Integrated Operations meeting between DTRA, BNI, RTSC, WGI, the Russian Government, and Russian subcontractors. The meeting was intended to initiate coordination and proper communication among participants involved in the SS-25 elimination program.

Program management was supplemented by on-site U.S. contractors who maintained program offices at Perm, Moscow, Miass, and Biysk, as well as on-site project offices at Bryansk, Zlatoust, and Surovatikha. Periodic supervision and inspection visits were conducted at Perm, Bershet, Altai, and Nenoksa, where local firms were accomplishing subcontracted activities. Supervision of design work for planned facility construction at Perm, Piban'shur, Bershet, and Votkinsk, as well as for demolition work at Nizhniy Tagil, Novosibirsk, Kansk, Yur'ya, Barnaul, Irkutsk, Teykovo, Yoshkar-Ola, Vypolzovo, Krasnoyarsk, and Kemerovo was accomplished from the contractor's program offices. These design efforts were accomplished by local subcontractors. All local subcontractors reported to U.S. contractor management personnel, who provided management oversight and verified reporting. DTRA task order managers conducted regular site visits to the contractor offices and principal work sites to verify the status of work and provide technical guidance.

The CLS contractor made 17 site visits for this project and performed 92 maintenance actions on DoD-provided equipment. Additionally, the CLS contractor provided letter of verification (LOV) and transfer of custody (TOC) support for this project.

1.1.3 Liquid Propellant ICBM and Silo Elimination

FY 2005-FY 2009 Five-Year Plan, Purpose, and Resources: This project will eliminate SS-18 silos and destroy SS-17/18/19 ICBMs in accordance with the START C or E Protocol. The project will deactivate and dismantle 78 SS-18 ICBM silos, 12 associated launch control center (LCC) silos, and two training silos, including technical site restoration. Additional silos may be deactivated but not eliminated. This is a decrease of 52 launch silos, and 9 LCC silos from the FY 2004 CTR Annual Report. It is anticipated that eliminations will be completed in FY 2007.

Upgrades to the missile elimination and destruction facility at Surovatikha support neutralization, dismantlement, and destruction of liquid propellant ICBMs. Current projections anticipate the destruction of 98 non-deployed SS-17 ICBMs, 256 deployed/non-deployed SS-18 ICBMs, and 150 deployed/non-deployed SS-19 ICBMs and launch canisters. This is a decrease of 58 SS-18 and 25 SS-19 ICBMs from the previous CTR Annual Report and is based on revised estimates, which indicate that more of these systems will be retained by Russia.

DoD provided equipment to store and transport liquid missile propellant at Moshkovo, Ilyino, Mulyanka, Tambov, Turinskaya, Vanino, and Naro-Fominsk dismantlement sites. The equipment includes 125 flatbed railcars, 670 intermodal containers, and 6 cranes that require periodic recertification and maintenance. DoD will limit certification and maintenance of equipment to a level commensurate with fuel handling requirements based on anticipated ICBM elimination and destruction.

The estimated cost for this project has decreased from \$337.8 million to \$306.2 million. This decrease is based on fewer ICBM eliminations and a reevaluation of project costs.

Description of CTR Activities Carried Out in FY 2003: Eighteen SS-18 ICBMs were removed from silos, defueled, and shipped to a storage facility. Approximately 1,000 metric tons of propellant and 2,630 metric tons of oxidizer were shipped to storage facilities. Twenty-five

SS-17, eight SS-18, and three SS-19 ICBMs, twelve SS-18 ICBM silos, and one LCC silo were eliminated. Brown and Root International continues as the integrating contractor for this project.

Locations: Aleysk, Dombarovskiy, Dzerzhinsk, Kartaly, Krasnoyarsk, Perm, Piban'shur, Surovatikha, Uzhur, Yedrovo, Moshkovo, Ilyino, Mulyanka, Tambov, Turinskaya, and Vanino.

Program Management: DoD management and technical teams made five trips. The trips were conducted at the Missile Elimination and Dismantlement Facility (MEDF) in Surovatikha and MOD missile sites to continue the elimination program. Site visits were performed to observe construction progress at the MEDF, including rail spurs, access roads, a diesel fuel storage depot, and the sewage treatment plant. CTR-provided equipment was inspected when possible at the Surovatikha location. Trips also included convening an Award Fee Board for the award period, discussions on boiler maintenance, and witnessing silo elimination at Kartaly.

An on-site U.S. contractor maintained a continuous presence during FY 2003 at project sites in Aleysk, Kartaly, and Surovatikha. The contractor ensured that contractual requirements were met for silo elimination and restoration and for liquid propellant missile disassembly and elimination. Additionally, the CLS contractor conducted ten visits to project sites and 295 maintenance actions, and performed transfer of custody services for DoD-provided equipment.

A&E: During the period May 12-23, 2003, a DoD team conducted a review of equipment and related records supporting the Liquid Propellant Disposition Systems project in Moscow, Il'ino, Vanino, Turinskaya, Moshkovo, Mulyanka, and Rada, Russia.

Equipment Accountability: The objective of this audit was to account for all IMTCs and associated cranes and railcars provided for this CTR project. The audit team accounted for all major equipment items by physical observation, inventory, or document review.

Equipment Serviceability: The equipment observed appeared to be generally serviceable and in good working order, with the exception of one crane, which required hydraulic fluid suited to perform in extreme winter weather conditions.

Equipment Usage: The A&E team reported that less than half of the IMTCs appeared to have ever been used for their intended purpose. Based on a review of usage documentation for a portion of the containers at each site, it appeared that none of the MTCs had been used since 2001. On October 9, 2002, Russia requested maintenance on a portion of the IMTCs. Based on an analysis of missiles to be removed from silos and submarines, it was determined that it would be appropriate to recertify 80 intermodal tank containers and 40 flatbed railcars.

A&E Summary: The DoD team reported that all equipment physically examined during the review appeared to be in good working order, with the exception of one crane. Notwithstanding the apparent failure to fully utilize CTR-provided IMTCs, the equipment reviewed generally appeared that it was being used for intended CTR purposes.

Follow-on Technical Discussions: Members of the DoD A&E team, including technical representatives, met with RASA and MOD officials to discuss methodologies for testing the content of IMTCs. DoD asserted that the intended use of these containers was strictly for heptyl and amyl storage. Given these allowable uses, the DoD team stated an objective to develop a

mutually agreeable method that would determine if the content of a fuel IMTC is heptyl and whether the content of an oxidizer IMTC is amyl. Technical discussions followed and the two sides agreed to meet later in the year to demonstrate the proposed testing methods. These meetings will be held in January 2004 in Moscow and St. Petersburg.

1.1.4 SLBM Launcher Elimination/SSBN Dismantlement

FY 2005-FY 2009 Five-Year Plan, Purpose, and Resources: This project will assist Russia in eliminating approximately 628 SLBM launchers in accordance with the START C or E Protocol at five START-designated SLBM launcher elimination facilities and will provide assistance to dismantle 30 associated SSBNs and partially dismantle an additional 12 SSBNs. Two *Yankee* class, 35 *Delta* class, and 5 *Typhoon* class strategic SSBNs will be eliminated. This is a decrease of one *Delta IV* SSBN from the FY 2004 CTR Annual Report.

Russia will eliminate 80 SLBM launchers and six associated SSBNs using the DoD-provided equipment and infrastructure upgrades. In addition, DoD, through direct fixed-price contracts, will eliminate 548 launchers and dismantle 36 associated SSBNs. DoD support for elimination, dismantlement, and logistics equipment will continue beyond FY 2009.

The estimated cost for this project decreased from \$434.8 million to \$413.9 million. This is due to the decrease in planned SSBN elimination (one less hull) and cancellation of logistics support for the Nerpa shipyard. Due to DoD rescoping dismantlement of SSBN bow and stern, which will become a responsibility of Russia in 2005, there will be an adjustment to costs.

Description of CTR Activities Carried Out in FY 2003: Twelve SLBM launchers were eliminated and three SSBNs were dismantled. One additional SSBN was placed on contract for dismantlement at the State Machine Building Enterprise Zvezdochka. The on-shore defueling facilities (OSDFs) at State Machine Building Enterprise Zvezdochka and the Zvezda Far East Shipyard were certified and licensed for operation. Contracts were awarded to State Machine Building Enterprise Zvezdochka and Zvezda Far East Shipyard for construction of additional spent naval fuel cask transient storage facilities at the OSDFs at Zvezda and Zvezdochka.

Locations: Zvezdochka and SevMash (Severodvinsk), Nerpa (Murmansk), Zvezda (Bolshoi Kamen), and Ship Repair Facility 49 (Vilyuchinsk).

Program Management: DoD management and technical teams made ten trips. Teams conducted programmatic and technical discussions, received contract deliverables, completed tours of SRF 49, Zvezda, Nerpa, SevMash, and Zvezdochka shipyards and facilities, and assessed progress on submarine de-fueling and dismantlement. DoD teams met with RASA and contractors on several occasions to discuss the submarine dismantlement schedule and to negotiate contracts and contract modifications.

A DoD team attended the OSDF ribbon-cutting ceremony at the Zvezda shipyard. On a later mission, a DoD team traveled to the Zvezda shipyard to discuss plans for physical security upgrades for the OSDF and spent naval fuel (SNF) storage pads, and procurement of emergency support equipment.

Additionally, the CLS contractor conducted 20 visits to project sites, 504 maintenance actions, and LOV and TOC services for DoD-provided equipment.

A&E: During the period August 18-25, 2003, a DoD team conducted a review of equipment and related records supporting the SLBM Launcher Elimination/SSBN Dismantlement project in Nerpa, Zvezdochka, and Zvezda, Russia.

Equipment Accountability: The audit team accounted for all major equipment items by physical observation or document review. The team reported that all major equipment items were present and either in use or stored in an appropriate facility, with the exception of a Chevalier Grinder at Zvezdochka that could not be readily identified.

Equipment Serviceability: The team reported that most of the equipment currently being used appeared to be fully serviceable. A few of the items observed required maintenance, but service by the logistics contractor was reportedly responsive to the needs of the elimination sites.

Equipment Usage: All of the equipment audited was being put to good and practical use for intended purposes.

A&E Summary: The DoD team reported that accountability, serviceability, and usage of equipment examined appeared to be in good order and in accordance with applicable agreements. The team also reported that site personnel were fully prepared for the visit and were extremely cooperative, and ensured the team had access to all equipment records.

The visit timelines to the Far East sites were changed due to Russian training exercises in that region. Because of this change and lack of timely coordination between RASA and the shipyards, site access was initially a problem at all three sites. However, based on these extenuating circumstances and favorable access availability to the shipyards for DoD technical teams, delays in obtaining site access were not further pursued with the Russians. Once the site access issue was resolved, the A&E mission was completed successfully.

1.1.5 Spent Naval Fuel Disposition

FY 2005-FY 2009 Five-Year Plan, Purpose, and Resources: This project supports SLBM launcher elimination and associated SSBN dismantlement through dry storage of SNF removed when defueling SSBNs. The plan is to store SNF in storage/transportation containers (casks) from 15 of the 36 SSBNs that will be dismantled through direct contract. A means of transporting by rail the casks from the shipyard to a final storage/disposition location is included. Russia has taken responsibility for the storage and disposition of previously offloaded SNF. The revised plan is to procure 180 casks, 12 fewer than were in the FY 2004 CTR Annual Report, since one SSBN in last year's plan will not be dismantled.

The estimated cost for this project decreased from \$49.9 million to \$42.8 million. This decrease is due to the removal of funding for construction of an SNF storage facility at Mayak and the procurement of 12 fewer casks.

Description of CTR Activities Carried Out in FY 2003: SevMash Production Association certified the first cask. The factory subsequently began serial production and completed nine

additional casks. Atomspetstrans completed production of six SNF railcars, two of which received final certification. RTSC completed the feasibility and design components requiring approval from appropriate Russian government agencies. A contract modification to add design and process documents for cask handling and fuel preparation procedures was awarded.

Locations: SevMash (Severodvinsk), RTP ATOMFLOT (Murmansk), and Mayak Production Association (Ozersk).

Program Management: DoD management and technical teams made six trips. These trips included multiple site visits and tours of the Tver Railcar Factory, the SevMash Production Association at Severodvinsk, and the Mayak Production Association to review status of ongoing work and to conduct technical and programmatic discussions with various contractors.

The DoD teams also met with MinAtom officials on multiple trips to discuss the status of the Mayak Building 301 design contract, cask fabrication, and SNF railcar fabrication. Discussions also included the Russian request for DoD to provide two escort railcars equipped with satellite communication and positioning systems for SNF disposition use. Finally, new security guidelines were reviewed that require one escort railcar to accompany each SNF train.

Site access to the Mayak Production Association was denied to the DoD team on several occasions. Russian representatives explained that Mayak failed to inform MinAtom of its contract. The issue was discussed at the SOAE program management review where Russian representatives assured DoD that problems would be resolved prior to future visits. DoD is not concerned with this issue, as site access is not necessary to complete the design phase and DoD has rescoped this project by deleting reconstruction of the storage facility.

1.1.6 Liquid Propellant SLBM Elimination

FY 2005-FY 2009 Five-Year Plan, Purpose, and Resources: This project will assist in destroying approximately 634 liquid propellant SS-N-6, SS-N-8, SS-N-18, and SS-N-23 SLBMs from the Russian Northern and Pacific Fleets. This represents eight fewer SLBMs than were in the FY 2004 CTR Annual Report due to the net reduction of one *Delta IV* class SSBN that will not be eliminated (24 fewer SS-N-23s), and the launch to destruction of two SS-N-8s. This also includes elimination of 8 SS-N-23s not previously planned using U.S.-provided equipment. The destruction process includes shipping, defueling, neutralization, and cutting into pieces all proliferable components of SLBMs. This project will continue beyond FY 2009.

The estimated cost for this project has decreased from \$50.7 million to \$49.6 million. This decrease is due to the reduced number of SS-N-23 SLBMs projected to be eliminated.

Description of CTR Activities Carried Out in FY 2003: Eighty-eight SLBMs were eliminated and dismantled at Krasnoyarsk and Sergiev Posad, bringing the total number of SLBMs eliminated and dismantled under the program to 422.

Locations: Revda Base, Yuzhnorechensk, Sergiev Posad Design Institute, and Krasnoyarsk KrasMash facility.

Program Management: DoD management and technical teams made five trips. On multiple trips, teams conducted project reviews of SLBM and SS-N-23 elimination efforts, including programmatic and technical discussions with RASA and Russian contractors. Topics included the SS-N-23 missile shipment and elimination schedule; shipment of the wastewater treatment plant and plant electrical requirements; and roadway repairs in Yuzhnorechensk.

A DoD team traveled to Sergiev Posad to review and approve the receipt of contract deliverables and discuss issues related to the payment of contractor invoices. The team also conducted technical and programmatic discussions related to the transportation and elimination of SS-N-8 SLBMs and received contractor deliverables. An on-site U.S. contractor maintained a continuous presence at Krasnoyarsk to ensure that contractual requirements were met for liquid propellant SLBM elimination. Additionally, the CLS contractor conducted nine visits to project sites, 51 maintenance actions on CTR equipment, and certification and transfer of custody services for DoD-provided equipment.

A&E: During the period December 9-11, 2002, a DoD team conducted a review of equipment and related records supporting the Liquid Propellant SLBM Elimination project in Sergiev Posad and Krasnoyarsk, Russia, and the Emergency Support Equipment project in Krasnoyarsk, Russia.

Equipment Accountability: The audit team accounted for all major equipment items by physical observation, inventory, and review of transfer of custody documentation. The team reported that site personnel were fully prepared for the visit and were extremely cooperative and ensured that the A&E team had access to all equipment and records. All of the equipment was maintained under adequate control in well-secured areas.

Equipment Serviceability: The equipment observed appeared to be fully serviceable.

Equipment Usage: Most of the equipment audited was being put to good and practical use in the capacity for which it was intended. The team observed a baler at Sergiev Posad that was not being used, and site personnel indicated that it was no longer needed at that location. DoD management is currently considering alternatives for the baler.

A&E Summary: The DoD team reported that accountability, serviceability, and usage of equipment examined appeared to be in good order and in accordance with applicable agreements. The team also reported that RASA was very cooperative and fully prepared to ensure DoD had access to all equipment and records.

1.1.7 Liquid Propellant Disposition Systems (LPDS) (Project Terminated)

This project was to facilitate liquid propellant ICBM/SLBM elimination. However, in February 2002, upon learning that Russia had diverted the fuel and oxidizer to its space program, DoD terminated the contract for the oxidizer processing units and stopped work on the fuel disposition systems contract. DoD has completed a thorough review of the reusable components of the fuel disposition systems. In August 2003 DoD informed Russia that it intended to remove the boilers and hydrogen generators from all three units. On October 6, 2003, work began to remove these components, which will be stored until a new CTR use or buyer is identified. DoD plans to complete this work in FY 2004, at which time the balance of the fuel disposition systems

will be turned over to Russia for salvage or disposition. DoD declined Russia's request to leave the disposition system intact in case a future requirement should emerge. In accordance with the SOAE Agreement, proceeds from Russia's sale or other disposition of the remaining equipment shall be used by the CTR Program in Russia and will be subject to the A&E process.

Location: Krasnoyarsk.

Program Management: DoD management and technical teams made five trips. On several trips, DoD management conducted program reviews, technical and programmatic discussions, and facility tours and inspections. A team also discussed work status to accomplish facility decontamination with the on-site contractor.

A DoD team traveled to Luxembourg and held discussions with the NATO Maintenance and Supply Agency concerning the potential to use liquid propellant disposition equipment in its conventional demilitarization projects in Ukraine. The NATO representative had particular interest in the mobile oxidizer processing system for mélange disposition in Ukraine and other FSU countries.

DoD teams also met with RASA representatives to discuss disposition of the liquid propellant disposition facility (LPDF). RASA representatives expressed an interest in using the facility in a joint venture with a U.S. company. DoD management explained that this was not an option. Additionally, RASA indicated that in two or three years Russia may be dismantling proton rockets, which are fueled by heptyl, and pointed out that the LPDF could be used to eliminate this fuel. The DoD team responded that it was unwilling to delay action on the LPDF based on speculation that an unspecified amount of fuel might be available in two to three years. DoD does not foresee supporting future Russian requests for assistance with elimination of liquid fuel.

An on-site U.S. contractor maintained a continuous presence at the LPDS facility in Krasnoyarsk until the end of March 2003, at which time the Thiokol contract was completed. Raytheon Technical Services Company will provide custodial services for the liquid propellant disposition facility until the high value components are removed. The CLS contractor conducted 17 visits to project sites, and performed 99 maintenance actions, LOV, and TOC services for DoD-provided equipment.

1.1.8 Solid Propellant Disposition Facility (SPDF) (Project Terminated)

The Solid Propellant Disposition Facility was intended to provide a low-pressure contained burn system to remove the propellant from solid rocket motors. DoD was advised by RASA that it is not possible to acquire the necessary land to construct the SPDF. The project completed the design phase, reviewed all design documentation for completeness, and placed all documentation in reserve for potential future use. Russia is investing its own funds to convert two open burn facilities to semi-closed burn facilities and complete an existing closed burn facility.

Location: Votkinsk.

Program Management: DoD management and technical teams made one trip after the January 2003 announcement that the project would be terminated. The team met with the Russian contractor and held technical discussions to resolve final design issues. The team also met with RASA and Udmurt Republic Government representatives in Moscow and Izhevsk concerning land allocation for the SRMDF. However, the temporary land allocation was revoked and a final allocation was never approved.

The CLS contractor made one site visit for this project to perform an annual physical inventory for USG property control.

1.1.9 Heavy Bomber Elimination Equipment (Completed Project)

This project, which provided support to dismantle heavy bombers in Russia, has been completed. Logistics support was terminated in April 2000, and some of the equipment was transferred to Krasnoyarsk and Sergiev Posad to support SLBM dismantlement, and to Zvezdochka for SLBM launcher elimination/SSBN dismantlement. All remaining equipment was transferred to other CTR projects by the end of October 2002, after which the project was closed and logistics support discontinued.

Location: Engels Air Base.

Program Management: The CLS contractor performed eight maintenance actions on DoD-provided equipment.

1.1.10 Low Level Radioactive Waste (LLRW) Volume Reduction (Completed Project)

This project provided facilities to reduce the volume of liquid and solid LLRW at Zvezdochka and solid LLRW at Zvezda shipyards. Japan is providing the liquid LLRW volume reduction capability at Zvezda. This waste results from elimination of SLBM launchers and dismantlement of SSBNs at these two START-designated elimination facilities. The LLRW facility at Zvezdochka was commissioned in October 2000 and the LLRW facility at Zvezda was commissioned in August 2001. This project is now complete.

Locations: Zvezdochka (Severodvinsk) and Zvezda (Bolshoi Kamen) shipyards.

Program Management: None, this is a completed project.

1.2 CHEMICAL WEAPONS DESTRUCTION (CWD) PROGRAM–RUSSIA

In accordance with the CWD Implementing Agreement, DoD is assisting Russia in the safe, secure, and environmentally sound destruction of its chemical weapons stockpile. The CWDF and the Chemical Weapons Production Facility Demilitarization projects continue to support this effort. The Chemical Weapons Analytical Monitoring project was completed in FY 2001.

Program Management: DoD technical and management teams made four trips. A team met with representatives of RMA to deliver signed original copies of two amendments to the CWD Implementing Agreement. The team also held high-level discussions with RMA officials

regarding the Shchuch'ye CWD facility project implementation. Three trips were to attend the January and July Russia Executive Reviews and the March follow up, as summarized below.

In addition, the CLS contractor and its subcontractors made trips to CWD project sites, performed maintenance actions, and provided transfer of custody and letters of verification services. These actions are detailed in the Program Management section for the applicable project.

Russia Executive Reviews

Meetings were held with officials from RMA, which serves as the Russia CTR Executive Agent for the CWDF Program. In January, two amendments to the CWD Implementing Agreement were negotiated, which were then signed by both sides in March 2003. At the March meeting the CWDF project was reviewed in detail with the new Director General of RMA. DoD asserted that RMA needed to resolve the congressional condition to develop a complete practical plan for nerve agent destruction at Shchuch'ye, including plans for all industrial infrastructure. At the July meeting there was a detailed discussion of how to build a practical plan that satisfies the request of the Organization for the Prohibition of Chemical Weapons (OPCW) and Russian environmental laws. Timely Russian signing of a \$60.3 million "plus-up" amendment using FY 2001 funding on September 23, 2003, included commitments by Russia to provide a practical plan by March 2004 for destroying its nerve agent stockpile and completion of the infrastructure to support the CWDF.

1.2.1 Chemical Weapons Destruction Facility (CWDF)

FY 2005-FY 2009 Five-Year Plan, Purpose, and Resources: The U.S. has agreed to build a CWDF for organophosphorus (nerve) agent-filled munitions. The project includes process development; process/facility design; construction; equipment acquisition and installation; systems integration; training; and facility start-up.

The FY 2002 NDAA replaced the prior, permanent prohibition on using CTR Program funds to construct the CWDF with authority to spend funds subject to Secretary of Defense certification that Russia had met six conditions. Congress granted the President authority to waive the six conditions in the FY 2003 Defense Appropriations Act and the FY 2004 NDAA. On January 10, 2003, and December 6, 2003, the President recertified that waiving the conditions described in Section 1305 of the FY 2000 NDAA was important to the national security interests of the United States. On March 18, 2003, DoD concluded with RMA an amendment to the CWD Implementing Agreement that establishes a legally binding commitment for Russia to destroy at Shchuch'ye all of its nerve agent weapons.

The CWDF will be located near the town of Shchuch'ye. The facility is being designed to destroy Russia's nerve agent-filled, man-portable, tube and rocket artillery of caliber up to 220mm, as well as bulk-filled rocket (540mm) and missile warheads. The total nerve agent currently stored at the CW storage sites is about 5,449 metric tons in 1.9 million warheads at Shchuch'ye and 5,515 metric tons in 2.1 million warheads at Kizner. The CTR Program will construct one of two identical buildings in which the nerve agent will be removed from munitions and neutralized, and the drained munitions thermally decontaminated. CTR assistance

will also build additional facilities to treat the neutralized materials, manufacture the chemical used to neutralize Vx nerve agent, and safely store process wastes.

Russia and the international community will build a similar building for processing warheads and destroying agent, as well as necessary infrastructure to support both buildings. The entire complex will be able to destroy 1,700 metric tons of nerve agents per year. With this capacity and ideal processing, it will take 6.5 years to destroy Russia's ground-delivered nerve agent-filled weapons. The current construction schedule plans for initial operations (demonstration with live agent) in January 2008 and transfer of the facilities to Russia in September 2008, based on a revised construction schedule reflecting an actual start date of March 2003.

In FY 2003 DoD began construction of the fire station and foundations for several additional buildings, and commenced purchase of long-lead equipment. Russian progress on industrial and operations support infrastructure construction continued. All Russian construction responsibilities required for integration into the CWDF are scheduled before Main Destruction Building initial operations.

Prior to the Presidential waiver of the conditions in Section 1305 of the FY 2000 NDAA, the program was prohibited from using FY 2000 or later funds for planning, design, or construction of the CWDF. Consequently, during FY 2000 through FY 2002, limited progress was made on the facility. Upon conclusion of the amendment to the Implementing Agreement in March 2003, DoD began construction of the fire station and foundations for several additional buildings and commenced purchase of long-lead equipment, and began a bottom-up program re-baseline. (Prior to the Presidential waiver, it was impossible to re-baseline the originally envisioned U.S. program because there were no reasonable assumptions upon which the construction schedule could be based.) The re-baseline, completed in October 2003, establishes an accelerated construction schedule—from the previously planned 90 months to 66 months—which maintains the goal of transfer of custody in FY 2008. However, the new baseline also identifies risk that could delay TOC until July 2009.

The cost increase associated with the new baseline is \$151.9 million. A significant portion of the cost increase is to cover the identified schedule risk that could add as much as ten months to the effort. Another major factor has been changed site conditions; new requirements have also changed the earlier estimate. For example, new office and temporary housing for an increased subcontractor workforce and changes in the electrical code. The balance of the cost increase results from a variety of smaller factors: higher USG costs associated with increased oversight and reporting, increased labor and contractor overhead rates, lower dollar exchange rates, etc. The total estimated cost of this project has increased from \$887.3 million to \$1,039.2 million. DoD has funded \$1,026.7 million of this amount through reprogramming from other projects. The additional \$12.5 million will be reprogrammed in FY 2004 through a renotification to Congress.

Description of CTR Activities Carried Out in FY 2003: Engineering management services continued to be provided by Parsons Delaware, Inc. with major subcontractors: Science Applications International Corporation (SAIC), WGI, EG&G, El Dorado, and Illinois Institute of Technology Research Institute. In Destruction Process Line development, design documentation

was prepared for demilitarization machines 1, 2, and 3; material handling equipment; and the metal parts furnace. Fabrication of demilitarization machines 1 and 2 is complete and factory testing is ongoing in preparation for operational and reliability, availability, and maintainability (RAM) testing. Support equipment for demilitarization machine testing was installed, including the design and procurement of mock-up munitions. Installation of a temporary access road into the CWDF site; temporary and permanent dewatering network; joint construction management office; temporary electrical distribution network throughout the site; temporary on-site access roads; and test piles for Buildings 0102 (Administration Building), 101B (Bituminization Building) and 0101 (Main Destruction Building) construction were completed. Building foundation concrete activities have begun on each of the buildings. The maintenance of the drainage network, temporary access roads, and the extension of the temporary electrical distribution network continued. Overall design is 78% complete. Phase 1 was completed and Phase 2 of environmental monitoring testing began.

Location: Shchuch'ye.

Program Management: In-country personnel from the office of the U.S. Army Program Manager for Chemical Demilitarization and the U.S. Army Corps of Engineers, and those assigned to the Chemical Weapons Destruction Support Office (CWDSO) include about 82 in Moscow, 64 in Shchuch'ye, and 23 in Volgograd. Program office personnel conducted 31 trips in support of this project.

DoD project managers and contractor personnel visited the State Scientific Research Institute of Organic Chemistry and Technology (GosNIIOKhT) and the Planovy Test Facility to support the scale-up of the Russian two-stage chemical agent destruction process and destruction process line development.

DoD project managers and contractor personnel have daily, on-site presence at Shchuch'ye to direct pre-construction and construction activities. The contractor personnel provide weekly status reports to the program manager for follow-up and consideration.

In addition to the CWDSO oversight, the CLS contractor conducted five site visits to perform certification and transfer of custody services for DoD-provided equipment in FY 2003.

1.2.2 Chemical Weapons Production Facility Demilitarization

FY 2005-FY 2009 Five-Year Plan, Purpose, and Resources: This project will demilitarize former nerve agent weapons production facilities at Joint Stock Company OAO Khimprom, Volgograd, and at Plant #4, OAO Khimprom, Novocheboksarsk. The CTR demilitarization effort will decontaminate, dismantle, and destroy specialized equipment and special features related to the production, transfer, and storage of chemical agents/weapons and their precursors as outlined in the Chemical Weapons Convention (CWC). Demilitarization operations on buildings declared under the CWC are conducted after Russian conversion or destruction plans are approved by the OPCW.

Phase I (concept plan, documentation, and demilitarization of pilot project buildings) and demilitarization of Phase II facilities at Volgograd are complete. Demilitarization of Phase III facilities at Volgograd began in FY 2003 and will be completed in FY 2004.

Phase I at Novocheboksarsk consisted of plans preparation followed by the removal and destruction of specialized munitions equipment in a munitions preparation building. Phase II consists of pre-demilitarization activities, to include design, fabrication, and installation of three thermal treatment systems to support the demilitarization of the Vx production and munitions filling complex, and is scheduled for completion in FY 2004. Phase III will consist of the dismantlement and decontamination (through utilization of thermal treatment systems from Phase II) of all specialized equipment, standard equipment, and interior building structures within Building 350, and will begin in FY 2004 and end in FY 2006. Phase IV (demolition of Building 350 and waste disposal) will be initiated in FY 2006 and completed in FY 2007. The provision of the thermal treatment systems during Phase II is being performed by Parsons Delaware, Inc., and all other contract efforts are being awarded to Independent Plant #4, OAO Khimprom, Novocheboksarsk.

The estimated cost for this project remains \$50.7 million.

Description of CTR Activities Carried Out in FY 2003: Volgograd: The 1st Stage Phase III (demilitarization of two agent production buildings) was completed. The 2nd Stage Phase III for demilitarization of six remaining buildings began. Novocheboksarsk: The Phase II contract, which consists of the design, fabrication, and installation of thermal treatment systems for demilitarization of Buildings 350 and 352 at Novocheboksarsk was awarded to Parsons Delaware, Inc. The Tennessee Valley Authority provided project management and technical support.

Locations: Volgograd and Novocheboksarsk.

Program Management: DoD management and technical teams made six trips. A DoD team traveled to Moscow to attend a kickoff meeting with contractor and RMA representatives for demilitarization work at Independent Plant #4, OAO Khimprom, Novocheboksarsk. This meeting included discussions related to roles, responsibilities, project scope and schedule, and site access.

Several trips were taken to perform status reviews related to the design, procurement, installation, and prove-out of three thermal treatment units and an associated pollution abatement system to be used to decontaminate dismantled equipment, building structural materials, and used decontaminating solutions.

A DoD team conducted a site tour of the OAO Khimprom, Volgograd, chemical weapons (CW) production facility. During the tour, several safety hazards were observed including congested working areas, open holes in the grating from removal of storage vessels, and a lack of personal protective equipment on some workers. The contractor later addressed these concerns.

Teams also conducted two site tours of Plant #4 at Novocheboksarsk to gather data to determine the scope and develop cost estimates for project Phase III demilitarization efforts. These tours included collection of documentation and information on the process piping, vessels, structures, and equipment.

1.2.3 Chemical Agent Analytical Monitoring (Completed Project)

In accordance with the CWD Implementing Agreement, this project provided an analytical monitoring capability to support the Russian CWD program. This capability was achieved through the renovation of a fixed-site central chemical analytical laboratory (CAL) at the GosNIIOKhT in Moscow, and through the purchase of three mobile analytical laboratories.

Locations: Moscow, Saratov, and Planovy.

Program Management: A DoD technical team visited the CAL and was afforded unrestricted movement and access throughout the facility. The team also observed routine chemical analysis conducted by a dozen scientists. Additionally, the CLS contractor conducted three visits to project sites, six maintenance actions, and certification and transfer of custody services for DoD-provided equipment.

A&E: During the period January 20-23, 2003, a DoD team conducted a review of training materials and equipment of the CAL at the Moscow GosNIIOKhT. Additionally, the team conducted a review of two mobile laboratories at GosNIIOKhT and a sub-team conducted an A&E of equipment at the Radiological, Bacteriological, and Chemical Defense Military Institute in Saratov, Russia.

Equipment Accountability: The audit team visually examined virtually all of the equipment assigned to the locations noted above. Minor discrepancies with the inventory listing were noted at Saratov and the inventory was updated accordingly.

Equipment Serviceability: The majority of CAL analytical equipment appeared to be in good working order. However, contractor maintenance support on this equipment is not provided and a few computers and one copier were not functioning at the time of the A&E. The equipment at Saratov appeared to be in good working order.

Equipment Usage: On-site A&E did not indicate use other than for the intended purpose. The team observed ongoing work in several labs at the CAL and Saratov. The team noted that the computer systems and copiers were being put to good use and found the Saratov site to be busy and actively training students.

A&E Summary: The A&E was conducted successfully. The analytical equipment was properly accounted for and was observed to be in excellent condition and in use for intended purposes. The team also noted the outstanding cooperation of local escorts.

1.3 STRATEGIC NUCLEAR ARMS ELIMINATION (SNAE) PROGRAM—UKRAINE

Assistance in accordance with the SNAE Implementing Agreement includes elimination of Tu-22M Backfire and Tu-142 nuclear-capable bombers, Kh-22 nuclear air-to-surface missiles (ASMs), and non-fueled ICBMs. DoD has informed Ukraine it will not provide an SS-24 Propellant Disposition Facility to remove propellant from LMCs by means of water washout; however, DoD is prepared to support the elimination of 163 SS-24 LMCs either by open detonation or open burning.

Program Management: A DoD management team made one trip involving the entire SNAE program. On this trip, DoD senior leadership held meetings with the U.S. Ambassador and high-level officials at MOD. Discussions centered on the future of CTR programs in Ukraine and the status of various agreements, including the “Sensitive Information Sharing” Agreement and the U.S.-Ukraine CTR Umbrella Agreement.

The CLS contractor and its subcontractors made trips to SNAE project sites, performed maintenance actions, and provided transfer of custody and letter of verification services. These actions are detailed in the Program Management section for the applicable project.

A&E: During the period July 15-23, 2003, a DoD team conducted a review of training materials and equipment for the SNAE, Weapons of Mass Destruction Infrastructure Elimination (WMDIE), and Defense Conversion programs at MOD sites in Kiev, Belaya Tserkov, Dnepropetrovsk, Khmelnytskyi, Lyubashevka, Mikhailiyenki, Pavlograd, Pervomaysk, Poltava, Priluki, Uman, Vinnitsya, and Zherebkovo, Ukraine.

Equipment Accountability: The audit team accounted for a majority of the equipment provided for each of these programs by visual inspection. Other equipment items were identified through photographic evidence. However, as expected due to the re-apportioning of equipment from one project to another and the determination that much of the equipment is no longer required for projects throughout Ukraine, the team noted that not all CTR-provided equipment was accounted for during this A&E.

Equipment Serviceability: The audit team reported that, in general, all equipment in service was well maintained.

Equipment Usage: The team noted that most of the equipment physically observed in operation was being used for its intended purpose. Equipment located in areas where CTR work has been completed was sitting idle.

A&E Summary: Visual inspection of the requested equipment enhances DoD’s confidence that all U.S.-provided equipment, materials, and services are in generally good working order and, within reason, are being used for intended purposes.

Cooperative Equipment Disposition Team (CEDT): DoD and Ukraine have recognized that, as SNAE and WMDIE projects evolve or are completed, decisions are required regarding disposition of equipment supporting CTR projects. The CEDT was organized to serve as an advisory, partnership-based forum that provides recommendations on equipment disposition decisions. In this forum, DoD works in concert with integrating contractors and Ukrainian officials to allocate equipment among CTR projects in Ukraine or remove the equipment from CTR accountability. Over the past year, the CEDT has met periodically and developed a comprehensive set of procedures and recommendations to dispose of most of the almost 3,000 equipment items provided to support completed CTR projects in Ukraine. The equipment disposition recommendations consist of the following general categories:

- ?? Transfer to another active CTR-related project;
- ?? Transfer to an equipment pool to support potential future projects;

- ?? Transfer to the American Embassy for in-country requirements;
- ?? Transfer from contractor-acquired status to government-furnished status for further disposition; and
- ?? Transfer to Ukraine, take out of stock, and cease logistics support.

DoD has coordinated recommendations with Ukraine, and the equipment will be transferred or disposed of accordingly.

CEDT Program Management: DoD teams made four trips to conduct CEDT meetings in Ukraine. These meetings included Government of Ukraine officials and U.S. contractors who played key roles in the redistribution of DoD-provided equipment in Ukraine. These sessions were quite productive and contributed greatly to the development of equipment disposition recommendations.

Additionally, the CLS contractor and its subcontractors made eight site visits and performed 523 maintenance actions for equipment attributable to the CEDT.

1.3.1 SS-24 Missile Disassembly, Storage, and Elimination

FY 2005-FY 2009 Five-Year Plan, Purpose, and Resources: The 163 first, second, and third stage missile motors, also known as loaded motor cases, from disassembled SS-24 ICBMs require storage in previously constructed or renovated storage sites. The current decision is to terminate this project at the end of 2004. If agreement can be reached on the elimination of the LMCs, DoD will consider funding storage costs until all motors are eliminated.

This project provided the services and facilities to store SS-24 missiles until disassembled and to eliminate the non-motor START-accountable missile components. All missiles have been disassembled, and the non-motor START-accountable SS-24 components were eliminated in accordance with the START C or E Protocol.

The estimated cost for this project decreased from \$107.7 million to \$96.4 million. This decrease is due to termination of this project at the end of FY 2004 and a significant rescoping of the storage contract on more favorable terms to CTR. This savings is in addition to the \$92.0 million cost savings from cancellation of the Propellant Disposition Facility (PDF) project. (See 1.3.4 below.)

Description of CTR Activities Carried Out in FY 2003: The contractor, WGI, stored 163 LMCs, and eliminated the last six sets of START-accountable components (less the LMCs).

Locations: Mikhailiyenki, Pervomaysk, and Pavlograd.

Program Management: DoD management and technical teams made five trips. On each trip, these teams and the integrating contractor reviewed the progress of the contract for the elimination of START accountable components and storage of missile motors. Reviews included discussions related to schedule, technical issues, contract statement of work, and projected future costs. The teams also made site visits to the Pavlograd Mechanical Plant, the Pavlograd Chemical Plant, and missile storage warehouse facilities on several occasions.

An on-site U.S. contractor provided oversight for the missile disassembly and phased elimination effort. Activities and concerns were conveyed to project management through bi-weekly reports on general activities and monthly reports on equipment.

In addition, the CLS contractor conducted 48 visits to project sites, 795 maintenance actions, and certification and transfer of custody services on DoD-provided equipment.

1.3.2 SS-24 Missile Motor Elimination

FY 2005-FY 2009 Five-Year Plan, Purpose, and Resources: This is a new project that is contingent on Ukraine agreeing to means of disposal other than the original “water washout” method that proved too fiscally and technologically risky. If a decision is reached on an alternative methodology to eliminate the missile motors, this project would also fund continued storage of the missile motors until eliminated.

The estimated cost of this project cannot be determined until an alternative method for elimination is selected. However, a portion of the funds (\$17.3 million) from terminated projects has been allocated to this project.

Description of CTR Activities Carried Out in FY 2003: DoD informed Ukraine that it would consider supporting elimination of SS-24 missile motors through open burn/open detonation.

Program Management: None.

1.3.3 Bomber and Air-Launched Cruise Missile (ALCM) Elimination

FY 2005-FY 2009 Five-Year Plan, Purpose, and Resources: This project is currently eliminating at least 40 Tu-22M Backfire nuclear-capable bombers and 225 Kh-22 nuclear ASMs. Equipment will be removed and then the bombers and missiles will be defueled, neutralized, and eliminated. DoD has approved the Ukraine request to eliminate at least two Tu-142 Bear-variant aircraft. A decision has been made not to assist in the elimination of Kh-22 ASM fuel and oxidizer (samin and melange). This project previously eliminated 38 heavy bombers and 483 Kh-55 ALCMs.

The estimated cost of this project remains \$32.4 million.

Description of CTR Activities Carried Out in FY 2003: RTSC eliminated 24 Tu-22M bombers, 141 Kh-22 ASMs, as well as associated bomber engines, auxiliary power units, ASM rotary launchers, and external pylons.

Locations: Khmelnytskyi, Poltava, Nikolayev, Belaya Tserkov, and Ozernoye airbases.

Program Management: DoD management and technical teams made 11 trips. On each of these missions, the DoD teams held technical and programmatic discussions with the integrating contractor and MOD representatives concerning Kh-22 Kitchen ASM and Tu-22M bomber elimination. Discussions with the integrating contractor included reviews of project schedules, work breakdown structure, project management plans, and contract deliverables.

During multiple trips, DoD teams traveled to Ozernoye to verify Kh-22 ASM elimination work, including the destruction of 141 ASM nozzles and 141 ASM guidance systems, and to verify infrastructure improvements and the first Tu-22M bomber elimination at this site. Teams also traveled to Vinnitsia to discuss Kh-22 ASM melange incineration and to view equipment that was used to incinerate melange. Subsequently, as part of the CTR revalidation/rescoping review, DoD decided not to assist with elimination of the melange. The teams verified that all of the fuel mixture composed of diesel fuel and detselene extracted from KH-55 ALCMs was turned over to USG control for use in diesel engines for CTR work in Ukraine. Additionally, teams traveled to Poltava and Nikolayev to verify Tu-22M bomber elimination work.

An on-site U.S. contractor provided oversight at each location where bomber and ASM decommissioning and dismantlement efforts are performed. Monthly reports highlight equipment-related issues to the project manager for review and action.

Finally, the CLS contractor conducted 146 visits to project sites, 896 maintenance actions, certification, and transfer of custody services for DoD-provided equipment.

1.3.4 SS-24 Propellant Disposition Facility (PDF) (Project Terminated)

FY 2005-FY 2009 Five-Year Plan, Purpose, and Resources: This project previously planned to assist in the elimination of SS-24 ICBMs by providing facilities and services to remove and dispose of solid propellant from 163 SS-24 first, second, and third stage missile motors and to eliminate the empty motor cases in accordance with the START C or E Protocol. High-pressure water washout (hydro-mining) was the technology planned to remove propellant from the missile motors. This project has been terminated as a result of the CTR revalidation/rescoping review.

Phase I constructed a pilot plant to prove the feasibility of using hydro-mining techniques to remove the propellant from each stage of the SS-24 prior to the termination of this project.

The estimated cost decreased from \$128.3 million to \$36.3 million. This reduction is due to the termination of the project.

Description of CTR Activities Carried Out in FY 2003: To establish the safety margins of the process, water impact tests (also known as Derringer Tests) continued. It was expected that a greater than ten times safety margin (based on operating pressure) could be established for all of the four different propellant formulations. A technical review board determined the necessity for additional inert testing. In order to reduce handling risks and potential catastrophic equipment interferences with the LMCs, the technical review board agreed that dry fit-ups of the first, second, and third stage LMCs would be done with the Skid 6 Hydraulic Mining Washout Equipment. In parallel with the pilot plant operations, the Pavlograd Chemical Plant with Thiokol was to begin exploring the feasibility of converting extracted propellant into commercial grade mining explosives. Additional testing was conducted at the beginning of FY 2003 and it was determined that even more testing would be required during design to construct the facility.

On May 14, 2003, the decision was made to cancel the water-washout/conversion project and the contract for this project with WGI. This project was terminated “for the convenience of the U.S. Government” (pursuant to rights reserved under the contract) on May 14, 2003. Later in

May 2003 DoD informed Ukraine that it was terminating the contract for water-washout/conversion, but remained prepared to provide cost-effective assistance for the removal of propellant from the LMCs by means other than water washout.

Location: Pavlograd.

Program Management: DoD management and technical teams made four trips. Project status reviews were conducted on each trip including discussions related to schedule, technical issues, contract statement of work, and the test series schedule. DoD management and the National Space Agency of Ukraine also discussed provisions of the pending implementing agreement, relating to the use of proceeds generated from the sale of explosives resulting from program activities and the custody transfer of project equipment following program completion.

On several trips, teams toured various facilities supporting the pilot plant including the central control room and the public information center and viewed a variety of established pilot plant equipment. DoD management also witnessed a successful explosive emulsion test.

An on-site U.S. contractor provided oversight for the PDF construction efforts and conveyed topics of interest to the project manager through the submission of bi-weekly reports.

Finally, the CLS contractor conducted three site visits, 42 maintenance actions, and certification and transfer of custody support for DoD-provided equipment. DoD had significant concerns about the technical risks and increase in the estimated cost that led to its project termination.

1.3.5 Non-Deployed ICBM Elimination Equipment (Completed Project)

In accordance with the SNAE Implementing Agreement, this project provided equipment to assist Ukraine in eliminating non-deployed ICBMs.

Location: Mikhailiyenki Arsenal, Mikhailiyenki.

Program Management: None. This project is complete.

1.3.6 Emergency Response Support Equipment (Completed Project)

In accordance with the SNAE Implementing Agreement, this project provided equipment for two emergency response units to support ICBM transportation and dismantlement activities related to strategic nuclear forces in Ukraine.

Locations: Kiev, Uman, Pervomaysk, Khmel'nitskiy, and Mikhailiyenki.

Program Management: None. This project is complete.

1.3.7 SS-19 Silo Elimination (Completed Project)

In accordance with the SNAE Implementing Agreement, this project, formerly reported as the SS-19 Integrating Contract, provided the equipment and services of an integrating

contractor required to manage the removal of missiles; transportation of missiles and propellant; and silo elimination, site dismantlement, and re-grading of 130 SS-19 ICBM silos, 13 ICBM LCC silos, and two SS-19 training silos in Khmelnytskyi and Pervomaysk. Equipment from this project has been transferred to the Bomber and ALCM Elimination and SS-24 Silo Elimination projects to maximize cost effectiveness.

Locations: Khmelnytskyi, Kiev, Uman, and Pervomaysk.

Program Management: None. This project is complete.

1.3.8 SS-19 Neutralization and Dismantlement Facility (Completed Project)

In accordance with the SNAE Implementing Agreement, this project assisted Ukraine to neutralize, dismantle, and eliminate components of SS-19 missiles that had been deployed in silos. At completion, all components of 111 SS-19 missiles, 111 SS-19 missile transport and launch canisters, and the guidance/warhead dispensing units from 22 additional SS-19 missiles had been eliminated. Also, 133 SS-19 Aggregate Instrumentation Blocks were eliminated. Initial objectives of this project were completed in March 2001. In April 2002 this project was expanded to include elimination of some of the 32 non-deployed SS-19 missiles, three SS-17 missiles, components of one SS-18 training missile, and 1,454 SS-18 missile pyrotechnic sets. Only two non-deployed SS-19 missiles were eliminated because Ukraine had transferred the remaining non-deployed SS-19s to Russia and DoD directed termination of this project after the SS-18 missile pyrotechnic sets were eliminated in FY 2003.

Locations: Dnepropetrovsk, Pavlograd, Kiev, Pervomaysk, Uman, and Mikhailiyenki.

Program Management: DoD management and technical teams made four trips. On several trips, technical discussions with DoD contractors and MOD officials covered progress on non-deployed missile elimination contracts and the conversion of an SS-18 missile to a museum piece, which is located in the Military Aviation Museum in Kharkiv.

1.3.9 SS-24 Silo Elimination (Completed Project)

In accordance with the SNAE Implementing Agreement, this project assisted Ukraine to eliminate all SS-24 ICBM silo launchers by December 4, 2001, in accordance with START requirements. This project also eliminated 46 SS-24 missile launch silos and four LCC silos, dismantled missile launch and control center sites, and performed site demolition and technical restoration through October 31, 2002. Subsequently, work was completed by BNI on the last LCC silo by the end of first quarter FY 2003.

Location: Pervomaysk.

Program Management: DoD management and technical teams made four trips. Teams participated in technical meetings with the integrating contractor to discuss Contract Data Requirements Lists and to develop a process to close the contract. The teams also discussed a number of issues related to plans for equipment disposition and movement of equipment to other projects in Ukraine.

DoD teams verified the elimination of specified facilities at the Bandurka site and the movement of two fuelers to Pervomaysk. Additionally, DoD teams reviewed the status of equipment elimination at Mikhailyenki and reviewed all equipment in the equipment yard at Pervomaysk. A team also participated in the closeout ceremony for SS-24 ICBM silo elimination work in Pervomaysk.

BNI, the on-site U.S. contractor, provided oversight for the silo elimination effort. Activities and concerns were conveyed to project management through bi-weekly reports on general activities and monthly reports on equipment. Additionally, the CLS contractor, RTSC, conducted 89 visits to project sites, 1,178 maintenance actions, and certification and transfer of custody services for DoD-provided equipment.

1.4 WEAPONS OF MASS DESTRUCTION INFRASTRUCTURE ELIMINATION (WMDIE) PROGRAM–UKRAINE

In accordance with the WMDIE Implementing Agreement, the National Nuclear Storage Site Elimination project will destroy infrastructure associated with WMD and assist in preventing proliferation of associated materials, equipment, and technologies. The Liquid Missile Propellant and Storage Facilities Elimination and the Airbase Infrastructure Elimination projects are being terminated. The Unified Fill Facility (UFF)/Nuclear Weapons Storage Area (NWSA) Elimination project has been completed.

Program Management: DoD management and technical teams made one trip for the overall WMDIE program. DoD senior leadership traveled to Ukraine and held meetings with the U.S. Ambassador and high-level officials at MOD. Discussions centered on the future of CTR programs in Ukraine and the status of various agreements, including the “Sensitive Information Sharing” Agreement, and the U.S.-Ukraine CTR Umbrella Agreement. Finally, the CLS contractor conducted 70 site visits and 291 maintenance actions and provided TOC support for DoD-provided equipment.

A&E: A comprehensive A&E of Ukraine projects was performed July 15-23, 2003. Assistance from the WMDIE program was included in this A&E. As the majority of assistance was provided under SNAE projects, the results of the A&E are reported under Paragraph 1.3.

1.4.1 National Nuclear Storage Site Elimination

FY 2005-FY 2009 Five-Year Plan, Purpose, and Resources: This project was previously planned to demilitarize Feodosia NWSA and Raduga National Stockpile Site (NSS). Demilitarization activities at Raduga NSS disabled two hardened bunkers through the removal of blast doors and ventilation shafts, and the elimination of more than 30 support structures. This activity was completed in FY 2004. On December 15, 2003, Ukraine sent a letter to DoD withdrawing their request for assistance in demilitarizing the Feodosia NWSA. In the same letter, Ukraine informed DoD that a list of additional sites will be provided and CTR assistance will be requested to prevent a security compromise of information related to active sites.

The estimated cost for this project increased from \$3.7 million to \$14.2 million. This increase is due to downscoping of other WMDIE projects and all remaining funds were moved to

this project. A revised cost estimate will be provided after a decision is made on demilitarization of additional sites.

Description of CTR Activities Carried Out in FY 2003: Raduga NSS elimination continued through a contract with BNI. DoD continued development of the Feodosia demilitarization project and initiated planning for three additional NWSA projects (that Ukraine subsequently withdrew).

Location: Zherebkovo (Raduga), Feodosia.

Program Management: DoD management and technical teams made eight trips. On several trips, DoD teams reviewed project status to include a mid-point project review for the Raduga NSS conducted in January 2003. As part of these reviews, teams observed work performed to cover former weapons storage bunkers and viewed a variety of government furnished equipment in use for CTR-related work.

Teams traveled to NSSs at Delyatin (Ivano-Frankovsk) and Makarov on one occasion and to the NSS at Feodosia on two occasions for initial project fact finding and to gather information for cost estimating purposes. Additionally, a team traveled to Tsybulevo for purposes of cost data collection. However, the team was prevented from entering the site by an ongoing demonstration of protestors blocking the entrance.

The on-site U.S. contractor provided oversight for the elimination work. The contractor provided bi-weekly status reports and monthly cost performance reports for program management review and action.

1.4.2 Liquid Missile Propellant and Storage Facilities Elimination (Project Terminated)

FY 2005-FY 2009 Five-Year Plan, Purpose, and Resources: This project previously planned to provide the services and equipment required to eliminate residual amounts of liquid propellant and to dismantle equipment and infrastructure at former ICBM and ASM liquid propellant storage and handling facilities at eight locations. DoD, as a result of the CTR revalidation/rescoping review, directed that this project be terminated after two sites currently under contract are completed by the end of the first quarter of FY 2004.

The estimated cost of this project decreased from \$11.4 million to \$3.5 million. This reduction is based on the decision to terminate this project after the first two sites are completed.

Description of CTR Activities Carried Out in FY 2003: The contract was awarded in the first quarter of FY 2003 to BNI. The incinerators used for this project were tested and inspected under the contract for the Unified Fill Facility and Nuclear Weapons Storage Area. The incinerators met all required Ukrainian environmental standards. Work was initiated at both sites.

Locations: Two liquid fuel storage sites in Ukraine.

Program Management: DoD management and technical teams made four trips. A DoD team attended the Heptyl Infrastructure Elimination—Phase II project kickoff meeting in Kiev.

As part of this meeting, a variety of technical and programmatic topics were discussed, including project schedule, equipment usage and requirements, and contract deliverables.

Other trips included the evaluation of work status and review and acceptance of contract deliverables. Teams traveled to Luibeshvka on several occasions to review project equipment and observe hazardous and non-hazardous waste burial sites. Teams also met with MOD officials to work through minor permitting issues.

Additionally, the on-site U.S. contractor completed physical and environmental surveys of eight sites and developed a report for DoD that supported Phase II plans. Bi-weekly status reports and monthly cost performance reports are provided for program management review and action.

1.4.3 Airbase Infrastructure Elimination (AIE) (Project Terminated)

FY 2005-FY 2009 Five-Year Plan, Purpose, and Resources: This project previously planned to eliminate infrastructure that sustained former strategic bomber operations at Priluki, Uzin, and Belaya Tserkov airbases. DoD, as a result of the CTR revalidation/rescoping review, terminated this project in FY 2003.

The estimated cost for this project decreased from \$7.7 million to \$0.8 million. This decrease is due to termination of the project.

Description of CTR Activities Carried Out in FY 2003: A contract was awarded and later terminated with RTSC.

Locations: Priluki, Uzin, and Belaya Tserkov.

Program Management: DoD management and technical teams made six trips. On multiple trips, DoD teams met with contractor and MOD representatives to review proposed AIE work and to discuss the draft statement of work, proposed schedule, and project budget. Teams also discussed the availability of CTR-provided equipment released from other projects in Ukraine that may be used for AIE objectives. Once AIE work was underway, DoD teams met with the integrating contractor to discuss technical and programmatic issues including logistical support requirements.

1.4.4 UFFs/NWSA Elimination (Completed Project)

This project supported the demilitarization of two liquid missile propellant UFFs associated with the SS-19 ICBM system, two NWSAs associated with the SS-19 and SS-24 systems, and the dismantlement of infrastructure associated with seven regiments of SS-19 ICBM silos at Khmel'nitskiy and Pervomaysk.

Locations: Khmel'nitskiy and Pervomaysk.

Program Management: No program management actions were performed on this completed project.

1.5 WEAPONS OF MASS DESTRUCTION INFRASTRUCTURE ELIMINATION (WMDIE) PROGRAM–KAZAKHSTAN

In accordance with the WMDIE Implementing Agreement, projects were developed to destroy WMD associated infrastructure and prevent the proliferation of WMD materials, technology and expertise. The BWPP Program falls under this agreement. Due to issues regarding declaring the site to the OPCW, the Pavlodar Chemical Weapons Production Facility Demilitarization project was not initiated and is not included in this report.

Projects planned for implementation under this program are:

- ?? Nuclear Weapons Storage Site Elimination; and
- ?? Liquid Missile Propellant and Storage Facilities Elimination.

1.5.1 Nuclear Weapons Storage Site Elimination

FY 2005-FY 2009 Five-Year Plan, Purpose, and Resources: Under this project, DoD plans to demilitarize a former nuclear weapons storage site. Demilitarization activities will be analogous to the demilitarization efforts at Raduga NSS in Ukraine. Activities will include disabling hardened bunkers through the removal of blast doors and ventilation shafts and the elimination of support structures. Work is projected to be completed in FY 2006.

The estimated cost of this project remains \$1.5 million.

Description of CTR Activities Carried Out in FY 2003: None. Waiting to receive official agreement from Kazakhstan to proceed.

1.5.2 Liquid Missile Propellant and Storage Facilities Elimination

FY 2005-FY 2009 Five-Year Plan, Purpose, and Resources: This project is being considered for rescoping. It supports the Kazakhstan MOD effort to eliminate liquid propellant for ICBMs using a U.S. supplier incinerator and dismantle equipment and infrastructure at liquid propellant storage and handling facilities. Estimated project completion is in FY 2005.

The estimated cost of this project increased from \$4.9 million to \$5.1 million. This increase is for CLS support of incinerators that were procured in another project.

Description of CTR Activities Carried Out in FY 2003: None. Awaiting completion of technical discussions with Kazakhstan and a decision on rescoping.

Program Management: The CLS contractor conducted two site visits and performed 18 maintenance actions on CTR provided equipment.

1.6 BIOLOGICAL WEAPONS PROLIFERATION PREVENTION (BWPP)–FSU

1.6.1 Biological Weapons Infrastructure Elimination

FY 2005-FY 2009 Five-Year Plan, Purpose, and Resources: In 1996 the U.S. discovered the Stepnogorsk war readiness anthrax production plant in Kazakhstan. This biological weapons program left an enduring legacy of facilities, technology, very dangerous pathogens (bacterial and viral), and expertise across the FSU states. Subsequently, the U.S. located several more large facilities containing the infrastructure needed to perform research on, or capable of producing and weaponizing, very dangerous pathogens. Typically these facilities were located near scientific institutes capable of performing the research or overseeing production.

In 1999 the State Research Center of Virology and Biotechnology (Vector) requested assistance in dismantling its former BW research and production facilities as part of a Defense Conversion project. Vector also identified other portions of the research center for future dismantlement. The SRCAM at Obolensk and the All-Russian Research Institute of Phytopathology located in Golitsino have both expressed an interest in eliminating excess infrastructure and equipment that formerly supported the Soviet BW program. Dismantlement work at these and other Russian sites will continue as new project agreements are completed and placed into effect.

The Kazakhstan Science Center for Quarantine and Zoonotic Disease has stated an interest in consolidating regional field stations, as well as eliminating excess infrastructure. This effort will be linked to the BW Threat Agent Detection and Response project.

To plan efficiently and effectively for BWPP, DoD is assessing all known former BW facilities and institutes where DoD is being provided access. In addition, there is an ongoing effort to identify BW facilities and institutes not yet known to the U.S. These assessments provide detailed vulnerability and threat analyses for each institute and facility. DoD uses these analyses to develop implementation plans for reducing the BW proliferation threats and for prioritizing facility dismantlement efforts.

The estimated cost of the BW Infrastructure Elimination project decreased from \$69.9 million to \$22.8 million. This reduction is due to this project being revised to include large-scale infrastructure elimination only. Any facility eliminations due to consolidation of lab space or pathogen storage will fall under the Biosecurity and Biosafety project area.

Description of CTR Activities Carried Out in FY 2003: DoD continued contracting with BNI for work in non-Russian FSU and recently added Raytheon Technical Services Company for efforts in Russia. RTSC and BNI serve as the BWPP integrating contractors to develop and integrate dismantlement projects at FSU BW institutes. The combined Biological Weapons Production Facility Dismantlement/Defense Conversion project at Vector continued. Development started for Biological Weapons Infrastructure Elimination projects in Building 1 at Obolensk, and at Pokrov and Golitsino. At Stepnogorsk all equipment was removed from Buildings 221 and 600, and preparatory demolition work commenced in preparation for award of a new contract to demolish the two buildings. Initial assessment of Biokombinat in Georgia was completed to support future demolition planning.

Program Management: DoD management and technical teams made five trips. A team visited the Biokombinat Production Facility in Tbilisi, Georgia, to conduct an asset inventory, tour the effluent treatment facility, observe the laboratory's quality control procedures, and tour the perimeter of the grounds. The team determined that most of the facility was significantly damaged due to lack of care over the past decade. The DTRA BWPP program manager filed a report that includes recommendations for future work at the facility.

A DoD management and technical team traveled to Stepnogorsk three times to review ongoing dismantlement efforts, discuss potential new contracts, and tour the facility. The team reviewed a series of previous contract actions for completeness and accuracy, and noted no deficiencies.

DoD teams made site visits to Vector and performed on-site reviews, toured facilities, confirmed project status, and identified required next steps for the ongoing Bifido production facility project. DoD teams highlighted minor concerns including BiAlgam's (Vector's subsidiary company in charge of Bifido) difficulty in obtaining certain equipment items with all required installation parts. However, RTSC, ISTC and BiAlgam are working to correct these problems and to revise the project's schedule and initial operational capability date. Additionally, DoD provides on-site U.S. contractors who visit project sites about ten days per month. They assist project management with environmental analysis, design, safety procedures, implementation assistance, and project support. These contractors provide bi-weekly status reports and monthly cost and performance reports.

A&E: During the period September 8-15, 2003, a DoD team conducted a review of equipment and related records supporting the Environmental Monitoring Lab under the WMD Biological Weapons Production Facility Dismantlement project in Stepnogorsk, Kazakhstan.

Equipment Accountability: The audit team completed a 100% inventory of the Environmental Monitoring Lab equipment. No discrepancies were noted.

Equipment Serviceability: The team reported that the equipment visually audited appeared to be generally well maintained and in good working order.

Equipment Usage: The team reported that all assistance provided was being used for its intended purpose.

A&E Summary: Visual inspection of the requested equipment and site security enhancements increases DoD's confidence that the assistance provided is generally in good working order and being used for its intended purpose.

1.7 NUKUS CHEMICAL RESEARCH INSTITUTE (CRI) DEMILITARIZATION– UZBEKISTAN (COMPLETED PROGRAM)

In accordance with the Chemical Weapons Proliferation Prevention Implementing Agreement, this project assisted in the demilitarization of the former Soviet chemical weapons research, development, and testing capabilities within the Nukus CRI.

Location: Nukus CRI.

Program Management: No program management actions were reported during FY 2003. In October 2003 DoD delivered the final project report to Uzbekistan and also permanently released some of the CTR equipment to Uzbekistan.

Figure 2 An estimate of the total amount in millions that will be required by the United States to achieve Objective 1 of the CTR Program.

Implementing Agreement / Project	Prior Year	FY 2004	FY 2005	FY 2006 FY 2009	Total
<i>Strategic Offensive Arms Elimination (Russia)</i>					
Emergency Response Support Equipment	\$8.6	\$0.4	\$0.4	\$1.6	\$11.0
Solid Propellant ICBM/SLBM and Mobile Launcher Elimination	\$194.1	\$30.2	\$29.1	\$183.6	\$437.0
Liquid Propellant ICBM and Silo Elimination	\$226.8	\$14.9	\$17.0	\$47.5	\$306.2
SLBM Launcher Elimination/SSBN Dismantlement	\$303.8	\$9.7	\$10.2	\$90.2	\$413.9
Spent Naval Fuel Disposition	\$31.5	\$7.6	\$0.4	\$3.3	\$42.8
Liquid Propellant SLBM Elimination	\$36.2	\$3.8	\$1.4	\$8.2	\$49.6
Completed/Terminated Projects	\$263.0				\$263.0
<i>Chemical Weapons Destruction (Russia)</i>					
Chemical Weapons Destruction Facility	\$530.0	\$190.3	\$155.2	\$151.2	\$1,026.7
CW Production Facility Demilitarization	\$37.5	\$10.0	\$3.2		\$50.7
Completed Projects	\$30.2				\$30.2
<i>Strategic Nuclear Arms Elimination (Ukraine)</i>					
SS-24 Missile Disassembly, Storage, and Elimination	\$96.4				\$96.4
SS-24 Missile Motor Elimination	\$12.4	\$4.9			\$17.3
Bomber & ALCM Elimination	\$32.4				\$32.4
SS-24 Propellant Disposition Facility	\$36.3				\$36.3
Completed Projects	\$333.9				\$333.9
<i>WMD Infrastructure Elimination (Ukraine)</i>					
National Nuclear Storage Site Elimination	\$14.2				\$14.2
Liquid Missile Propellant and Storage Facility Elimination	\$3.5				\$3.5
Airbase Infrastructure Elimination	\$0.8				\$0.8
Completed Projects	\$15.3				\$15.3
<i>WMD Infrastructure Elimination (Kazakhstan)</i>					
Nuclear Weapons Storage Security Elimination	\$1.5				\$1.5
Liquid Missile Propellant and Storage facility Elimination	\$5.1				\$5.1
Completed Projects	\$27.5				\$27.5
<i>BW Proliferation (FSU)</i>					
BW Infrastructure Elimination	\$12.4	\$4.3	\$3.7	\$2.4	\$22.8
Budget	\$2,253.4	\$276.1	\$220.6	\$488.0	\$3,238.1
* Estimated Program FYDP Total					

Objective 2: Consolidate and Secure FSU WMD and Related Technology and Materials

2.1 NUCLEAR WEAPONS STORAGE SECURITY (NWSS) PROGRAM–RUSSIA

In accordance with the NWSS Implementing Agreement, this program supports U.S. proliferation prevention objectives by enhancing the security, safety, and control of nuclear weapons during storage.

Congress has been notified previously that the sensitive nature of Russia's nuclear warhead storage activities and locations has resulted in the use of non-standard A&E of assistance. In 1997, DoD and the MOD concluded "Special Arrangements" which provide for the limited audit of equipment through alternative means, including data on locations (by site designator) of equipment provided, photographs, documentation, letters from MOD attesting to intended use, and examination of sample equipment.

In addition, DoD and MOD are developing an unclassified database to assist this process by tracking equipment on a site-by-site basis segregated into west and east regions. The database will not only provide DoD with a means for efficiently conducting these limited audits across multiple project areas, but will also allow DoD and MOD to more effectively plan comprehensive security enhancements at the individual site level and minimize disruptions to MOD weapons security operations.

Over time, DoD will conduct limited audits on all equipment provided under these projects. Such supporting data used in this capacity is either provided by MOD, project-generated, or directly observed.

Program Management: DoD management and technical teams made four trips to support the entire NWSS program. DoD and MOD representatives, including program executives, met to discuss broad-based program issues. Three of these trips involved participation in the Russia Executive Reviews, which are summarized below. Additionally, the NWSS program manager conducts bi-weekly phone meetings with his MOD counterparts to discuss the status of the ongoing efforts and to resolve concerns.

The CLS contractor and its subcontractors conducted visits to manufacturing facilities and MOD sites where there are no nuclear weapons stored, performed maintenance actions, and provided transfer of custody and letter of verification services to confirm that equipment was received by the responsible authority. These actions are detailed in the Program Management section for the applicable project.

Audit #1: During the period March 11-21, 2003, a DoD team conducted an audit of Automated Inventory Control & Management System (AICMS), Storage Site Support, and Site Security Enhancements related equipment at Moscow and Abramovo/Sergiev Posad, Russia. Additionally, MOD teams were deployed to two nuclear weapons storage sites, one in the western region of Russia and one in the eastern region, to photograph CTR-provided equipment in accordance with the NWSS Special Arrangements.

Equipment Accountability: The A&E team was able to visually inspect 100% of the requested AICMS, Quick Fix, Storage Site Support, and Site Security Enhancements equipment located at Abramovo/Sergiev Posad. Additionally, the team reviewed documents and photographs provided by MOD that were taken at the two requested NWSS sites. One unique identifier was supplied to each of the MOD teams by the DoD team for use in photographing equipment during the site visits. Photographs of the fencing and other sub-components illustrated that the equipment is installed at the sites and is in proper operational configuration.

One of the key controls performed by the A&E team is to reconcile the negatives against the number of pictures provided for their review. While photographs for this A&E were given to the A&E team in time to facilitate their review, the associated negatives were not delivered to the team until the day of the out brief. MOD asserted that, due to the small size of the negatives, they had a very difficult time eliminating sensitive items that were inadvertently included in the photographs. To remedy this concern, DoD has provided software to help MOD expedite this process in the future.

Article 2 of the Special Arrangements for the conduct of A&Es at Nuclear Weapons Storage Sites states, "Within a 60-day period from the day of equipment transfer, MOD will provide to DoD a list of all the equipment with the region of its location (East or West). This list will be renewed at least once a year or more frequently in the event of a transfer of a significant quantity of equipment." However, MOD has not complied with this requirement, but has provided sporadic, incomplete updates of the equipment inventories for the identified sites. MOD does not have a consolidated system to accurately track DoD-provided equipment located at the identified sites, and because DoD has very limited access to MOD NWSS sites this represents a significant accountability concern that MOD needs to remedy. The NWSS technical team is working with MOD to develop a solution to this concern by utilizing the Maximo database, which is used by the CLS contractor to track DoD-provided equipment.

Equipment Serviceability: A majority of the equipment visually audited was fully serviceable and well maintained, and photographs of the fencing and other sub-components indicated the same. Through discussions with MOD personnel and review of the equipment via photographs and physical inspection, the team concluded that the equipment is fully serviceable and in good working order with one notable exception.

During a review of equipment at Abramovo the A&E team noted that a number of new generators provided to support the Y2K project had been improperly stored and were beginning to rust. Given the power failures anticipated as a result of Y2K did not occur, DoD management is evaluating alternative uses for these generators and is working with MOD to ensure that DoD-provided equipment is properly stored and safeguarded.

Equipment Usage: Based on the review of photographs, physical site inspection, and the certification provided by MOD officials, the DoD team verified that, with the exception of the generators described above, the CTR provided equipment is being used for its intended purpose.

Audit Summary: The team reported that, in general, cooperation and support from MOD was excellent. DoD management is working with MOD to resolve the concerns described above.

Audit #2: During the period September 22 to October 3, 2003, a DoD team conducted reviews of requested Personnel Reliability and Safety, Storage Site Support, and Site Security Enhancements related equipment at Moscow and Abramovo/Sergiev Posad, Russia. Additionally, MOD teams were deployed to two nuclear weapons storage sites in the western region of Russia to photograph CTR provided equipment in accordance with the NWSS Special Arrangements.

Equipment Accountability: The A&E team was able to visually inspect all requested Personnel Reliability and Safety, Site Support, and Site Security Enhancements equipment located at Abramovo/Sergiev Posad. The team collected and reviewed documentation and photographs provided by MOD for equipment located at the two requested NWSS sites. The parties agreed to use a supercontainer as the common characteristic at each site. Photos at one of the sites did not include a supercontainer because there were none at that location.

A portion of the serial numbers was unreadable on photos taken at one of the sites due to the photographer's lack of familiarity with the newly purchased cameras. The DoD team chief decided to accept these photos after ensuring the camera features were fully understood by both parties.

Additionally, as requested in the 30-day notification cable by DoD, MOD provided a listing of the current locations of all polygraphs and alcohol monitors (breathalyzers) purchased under the Personnel Reliability and Safety project.

Equipment Serviceability: All equipment visually audited was fully serviceable and in good working order. Facilities that held equipment appeared to be well maintained and secure.

Equipment Usage: Based on the review of photographs, physical site inspection, document review, and the certification provided by MOD officials, the DoD team verified that all CTR provided equipment was in good working order and was being used for its intended purpose.

Audit Summary: All equipment physically examined during the review appeared to be in excellent condition. MOD officials provided the A&E team with all necessary documentation as well as a statement signed by senior MOD officials that the equipment was being used for its intended purpose.

Russia Executive Reviews

During the January, March, and July 2003 sessions a DoD team met with representatives from MOD's 12th Main Directorate to discuss new amendments to the NWSS Implementing Agreement, to finalize the site access protocol arrangement, and to conduct a detailed review of the assumptions, risks, and responsibilities for each project under the Nuclear Weapons Safety & Security Program and incorporating these ideas into the JRIP. The amendments defined legally binding commitments to replace previous good faith agreements. Discussions also included an assertion by DoD that since Russia was now using the Aleysk site for the storage of conventional weapons, DoD-provided security systems should be removed because they were no longer being

used for their intended purpose – security of nuclear weapons. Removal of security upgrade equipment from Aleysk was tabled for future discussion.

The following projects are included in the Implementation Plan:

- ?? Automated Inventory Control & Management System;
- ?? Guard Force Equipment and Training;
- ?? Nuclear Weapons Storage Site Support; and
- ?? Site Security Enhancements.

The Security Assessment, Training, and Logistics project was completed in FY 2002.

2.1.1 Automated Inventory Control & Management System (AICMS)

FY 2005-FY 2009 Five-Year Plan, Purpose, and Resources: This project is intended to enhance MOD's capability to account for and track strategic and tactical nuclear weapons scheduled for dismantlement. The operational configuration will provide hardware, off-the-shelf software, and facilities for a fully integrated system at 18 sites (2 central control points, 2 central facilities, 4 regional facilities, and ten field facilities). One additional site, the Security Assessment and Training Center (SATC) Proof of Concept Facility, was completed in FY 2003. This facility will be used for training, testing, and demonstration only, and has no system operational capabilities.

From 1995 through 2001 \$19.5 million in hardware and software to support AICMS was procured and transferred to MOD. Using this hardware and software, a simplified distributed database architecture was developed and agreed to by MOD. The architecture calls for two common designs: one for the central control points and one for all other sites. The communications requirements among AICMS sites will be provided by MOD.

To simplify certification at individual sites, a proof of concept consisting of installation of hardware and software in an approved modular facility was conducted at the SATC. The AICMS initial operational capability will be achieved when required hardware and software is installed at all 18 AICMS facilities, initial training and data entry is completed, and the system is certified to meet MOD standards. This project is scheduled to be completed in FY 2005.

The estimated cost for this project remains \$50.2 million.

Description of CTR Activities Carried Out in FY 2003: The proof of concept modular facility at the SATC was completed by Black & Veatch International. MOD identified all 18 AICMS nodes to receive modular facilities. Authorization to begin construction was received and the ground was broken for Central Control Point-1. Transfer of custody of the first five modular facilities was completed.

Locations: A concept test facility at Sergiev Posad and 18 operational sites throughout Russia including a central control point in Moscow.

Program Management: DoD management and technical teams made five trips. On these trips, DoD teams held technical and programmatic discussions related to AICMS implementation. Discussions included design, construction, and permitting for Central Control Point-1, reviews of MOD training plans and resource assignments, facility implementation timelines and sequence of work, and site access protocols.

Teams also traveled to the SATC to observe MOD progress installing the proof of concept modular facility, and later to attend the ribbon cutting ceremony for this facility. At the SATC, DoD teams observed installed computer hardware as well as emergency diesel generator operation to validate adequate load capacity and proximity to AICMS buildings.

A U.S. contractor responsible for the installation of the AICMS nodes maintains an in-country presence. The contractor monitors the actions of the subcontractors, meets on a weekly basis with the Russian MOD (the contractor had approximately 52 meetings with MOD during FY 2003), and provides regular project status reports to include monthly cost and performance reports. Finally, the CLS contractor made 14 site visits in support of this project and performed transfer of custody services for DoD-provided equipment.

2.1.2 Guard Force Equipment and Training

FY 2005-FY 2009 Five-Year Plan, Purpose, and Resources: This project provides specialized equipment, training aids, associated training, and logistics support to enhance the capability of MOD's guard force to deny access to nuclear weapons storage areas. Small Arms Training Systems (SATS) and live-fire shooting ranges (pop-up targets) have been procured. Hand-held and base radios with associated support items (repeaters with antennas, additional batteries, and chargers) were also procured. This project will be completed in FY 2004.

Sixty SATS with modified weapons and three authoring stations to create simulator scenarios have been procured through Firearms Training Systems, Inc. Instructor training (for system installation, operation, and maintenance) has been provided. Eighteen months of logistics/maintenance support will be provided, with the possibility of extending the support an additional 6 months. The procurement of live-fire shooting ranges from Caswell International Inc. includes 12 sets for outdoor operation, 30 pop-up target mechanisms per range, spare components, and instructor training for system installation, operation, and maintenance.

The estimated cost of this project remains \$20.6 million.

Description of CTR Activities Carried Out in FY 2003: The last 16 SATS systems were shipped, delivered, and turned over to MOD. The SATS systems were certified, with 27 systems delivered to weapons storage areas and 5 systems installed at weapons storage areas. Training in installation, operation, and maintenance of the SATS system was completed. The procurement and delivery of 1,200 hand-held and base guard force radios were completed. The 12 Live-Fire Shooting Ranges were shipped to Russia, with one system turned over to MOD. The remaining systems will be turned over to MOD in FY 2004.

Locations: The SATS, along with 12 Live-Fire Shooting Ranges and other miscellaneous Guard Force equipment, will be distributed to nuclear weapons storage sites throughout Russia.

This equipment is subject to the special audit arrangements and, therefore, will be captured in the site-by-site database.

Program Management: DoD management and technical teams made six trips. DoD teams traveled to MOD and contractor facilities in Moscow and Sergiev Posad to conduct technical discussions concerning installation and training for the SATS and Caswell Live Fire Shooting Ranges and to monitor training for MOD personnel related to these two systems. A team also attended the opening ceremony for the SATS training facility at the SATC for which the Russians demonstrated the system ten times. Additionally, teams held programmatic discussions related to the contractual status of the SATS system, site access for non-physical security equipment, and the status of pending agreement amendments and protocols. A DoD technical team also participated in one week training concerning theoretical and practical uses of the dosimetry systems conducted by a USG contractor with MOD at the SATC. Additionally, the CLS contractor made 15 visits in support of this project and performed 28 maintenance actions and transfer of custody services for DoD-provided equipment.

2.1.3 Nuclear Weapons Storage Site Support

FY 2005-FY 2009 Five-Year Plan, Purpose, and Resources: This project will provide support equipment for nuclear weapons storage sites and has established a Safety Enhancement Center (SEC). Support equipment will include firefighting, site preparation and maintenance, environmental control, and safety equipment. All equipment is stand-alone and will not require integration with existing nuclear weapons safety and security, command and control equipment. The support equipment was delivered and turned over to MOD in FY 2002. Additional equipment and services have been requested by MOD; these requests are currently under review. Procurement of any additional site support equipment is expected to be complete in FY 2004.

The SEC is addressing MOD's safety concerns regarding aging equipment located near nuclear weapons, such as boilers, piping, and weapons handling equipment. The SEC supports field inspections and laboratory analysis to certify the continued operation of field equipment that supports movement and storage of nuclear weapons destined for dismantlement. The SEC also provides MOD with the capability to extend the service life of this equipment. The U.S. Army European Research Office is procuring and installing equipment, designing and renovating the laboratory, and conducting training. Project support of the SEC will continue through FY 2007.

The estimated cost of this project remains \$60.4 million.

Description of CTR Activities Carried Out in FY 2003: DoD continued to review the MOD request for additional equipment, made progress on the development of a Logistics Information Management System, and conducted training.

Locations: The SEC is in St. Petersburg, within Russia's Scientific Research Institute for the Safety of Technical Systems. Other support equipment will be used at nuclear weapons storage sites throughout Russia. Equipment provided for Y2K support is in use throughout Russia at designated MOD sites.

Program Management: DoD management and technical teams made four trips. A DoD team met with representatives of MOD and contractors to discuss the status and remaining work associated with the SEC and conduct a tour of the SEC fixed laboratory and mobile team components of the SEC. The team also received a demonstration of the Portable Integrated Video System by MOD. Further discussions were held related to cost estimates associated with the Transition to Support Plan, the Portable Integrated Video System replacement, and Laboratory Information Management System development. Additionally, the U.S. contractor consulting on this effort had approximately 26 meetings with MOD during FY 2003.

Teams discussed MOD requests and justification for additional safety and support equipment including fire trucks, dump trucks, mobile cranes, and installation of previously procured heaters/boilers.

Finally, the CLS contractor made one visit in support of this project and performed transfer of custody services for DoD-provided equipment.

2.1.4 Site Security Enhancements

FY 2005-FY 2009 Five-Year Plan, Purpose, and Resources: This project will enhance the safety and security of Russian nuclear weapons storage sites. Russian MOD nuclear weapons storage sites include both national stockpile sites and operational storage sites of the Russian Navy, Air Force, and SRF. DOE is providing comprehensive security enhancements at some SRF and all Navy sites. Permanent storage locations that contain either strategic or tactical nuclear weapons will receive security enhancements. This project also includes the upgrade of security at some temporary storage locations, such as road to rail transfer points.

MOD provided a database, pursuant to A&E Special Arrangements, depicting approximately 52 sites that have received CTR equipment. Previously, the plan was based upon full security upgrades at 52 weapons storage sites. However, that number has been reduced in accordance with National Security Council guidance, for sites scheduled for upgrade by DOE, and the number of sites eliminated through MOD's consolidation efforts. An amendment to the implementing agreement added this text, "When requesting assistance to enhance physical protection systems of active nuclear weapons storage sites, MOD shall identify to DoD which of those sites will close within five years from the date of the request by MOD for assistance for such sites and which of those sites are long-term storage sites." DoD's revised estimate is that security upgrades will be completed by this project at more than 32 sites.

DoD plans to enhance security at these sites by installing security systems based on vulnerability assessments. Comprehensive security upgrades will include portions, or all, of DoD's objective suite of equipment. Vulnerability assessments will also be conducted to determine security enhancements for temporary storage sites. The goal to expeditiously provide full enhancement of security equipment at MOD nuclear weapons storage areas continues to be dependent upon MOD identification of and DoD access to weapons storage sites. Once MOD identifies the sites, the plan is to perform vulnerability assessments to determine specific requirements for upgrades, develop security designs to address those vulnerabilities, and then install equipment deemed necessary to bring security standards consistent with those in place at U.S. nuclear weapons storage facilities.

The estimated cost of this project decreased from \$748.2 million to \$669.7 million through the end of the FYDP. This decrease is due to a delay by Russia in signing the site access arrangement, which caused site work to be reprogrammed for later years. In addition, the revalidation/rescoping review recognized that additional Russian Navy and SRF nuclear weapons storage sites are to receive security enhancements by DOE and therefore can be dropped from the CTR program plan.

Description of CTR Activities Carried Out in FY 2003: Site access procedures were completed and both MOD and DoD signed the protocols, which enabled DoD personnel to make the first site visits to MOD nuclear weapons storage sites. DoD visited four sites during July 2003. The procurement of urgently needed security equipment was initiated by BNI and is 95% complete. Items procured include: 66 ionscans (hand-held explosive detectors), 132 inspection mirrors, 330 megaphones, 63 rapidly deployable sensors, 119 portable lighting sets, 1,320 rechargeable flashlights, 1,190 locks, 119 3-meter extension ladders, 357 weed cutters, 119 repair kits, and 63 hand-held metal detectors. DoD completed vulnerability assessments for nine MOD nuclear weapons storage sites and began the site designs for comprehensive upgrades at those sites. DoD also contracted for the completion of a vulnerability assessment at a tenth site.

Locations: Currently, 123 Quick Fix sets have been procured and transferred to MOD custody. DOE will install the fencing, if not already installed, at sites where they will provide the comprehensive security upgrades. Long-term enhancement equipment has not yet been provided, but will be distributed and used throughout Russia. Following installation, this equipment will be subject to the special audit arrangements and captured, along with equipment already provided, in the site-by-site database. At least one Quick Fix equipment set is located at each of the 24 sites in the west and 19 sites in the east.

Program Management: DoD management and technical teams made eight trips. DoD teams met with MOD on numerous visits to discuss temporary nuclear weapons storage sites, command and control configuration for the security upgrades, lighting concepts for storage sites, removal of equipment from Aleysk, turnover of SATC to MOD, disposition of non-selected equipment that had been tested at SATC, possible DoD assistance to MOD in maintaining its A&E database, and site access.

DoD management, MOD officials, and contractor personnel met on two occasions to discuss site access procedures and protocols, site upgrade schedules, clarify business plans, the suite of equipment for site upgrades, and vulnerability assessments.

DoD also participated in the fifth semi-annual meeting of the Joint Coordination Group, which included representatives from DOE, the Russian MOD, Navy, and the Ministry of Foreign Affairs (MFA) for coordination on Site Security Enhancements to Russian NWSS sites. Discussions included the division of labor between DoD and DOE for security enhancements to specific sites, comprehensive training, and sustainment requirements.

In addition, a DoD technical team reviewed vulnerability assessments for nine NWSS sites that were prepared by the Russian subcontractor. The technical team developed additional recommendations for inclusion in the final vulnerability assessment reports. The DoD team held discussions with MOD concerning the possibility of replacing Access Control Point, Central

Command Post, and Guard Facilities with modular buildings. MOD had concerns about whether the modular buildings would meet structural hardening requirements to repel high velocity ammunition and shrapnel, but agreed to pursue the matter further. Discussions also included introduction of delay and denial technologies that would provide additional time for on-duty security response teams to provide a blocking force or engage the enemy and defeat an aggressive action. Technical discussions also included obtaining site access for U.S. personnel to conduct computer training at the SATC. This is designed to provide automated tracking of assistance/equipment provided to MOD located at NWSS sites.

During July 2003 a DoD team visited MOD NWSS sites for the first time. At W-1, W-2, W-30, and W-41 the team was taken to three or four vantage points where they could observe the most vulnerable areas of the outer perimeter, entry control points, access control points for bunkers, and Guard Force buildings as identified in the vulnerability assessments. The team was able to view site conditions to verify the completeness of the vulnerability assessments. During each site visit the team was shown the proposed location of any AICMS, SATS, and/or CTR-provided firing ranges scheduled for installation. Based on these site visits, the contractor received payment for the vulnerability assessments.

A U.S. contractor responsible for the installation of the site security upgrades maintains an in-country presence. The contractor monitors subcontractors, meets on a weekly basis with the Russian MOD, and provides regular project status reports to include monthly cost and performance reports (the U.S. contractor had approximately 52 meetings with MOD during FY 2003). Additionally, the CLS contractor made 14 visits in support of this project and performed transfer of custody services for DoD-provided equipment.

2.1.5 Security Assessment, Training, and Logistics (Completed Project)

This project established and outfitted the SATC, used for security equipment comparisons, tests, integration of comprehensive suites of appropriate equipment, checkout and processing of procured equipment, and training for MOD personnel to maintain and operate selected equipment. This project is complete, but the facility will support other CTR projects.

Location: Sergiev Posad.

Program Management: This is a completed project and no program management actions were taken during FY 2003.

2.2 NUCLEAR WEAPONS TRANSPORTATION SECURITY (NWTS) PROGRAM—RUSSIA

In accordance with the NWTS Implementing Agreement, this program supports U.S. proliferation prevention objectives by enhancing the security, safety, and control of nuclear weapons during shipment. The Supercontainers and Emergency Support Equipment projects are complete. Ongoing projects include:

?? Nuclear Weapons Transportation;

?? Railcar Maintenance and Procurement; and

?? Transportation Safety Enhancements.

The NWTS Implementing Agreement does not address alternative A&E methods, although much of the equipment provided under this agreement is also located at sensitive MOD locations. This equipment is by nature transportable, and therefore the equipment is shipped to non-sensitive locations where DoD conducts A&Es. In addition, the DoD/MOD unclassified database under development to track equipment provided under the NWSS program will also be used to assist the management and accountability of equipment in the NWTS program.

The CLS contractor and its subcontractors made trips to NWTS project sites to perform transfer of custody and letters of verification services. These actions are detailed in the Program Management section for the applicable projects.

Program Management: DoD management and technical teams made four trips in support of the NWTS program. During one trip DoD and MOD representatives, including program executives, met to discuss broad-based program issues. The other two trips were made to participate in the Russia Executive Review sessions. Details of these meetings are summarized under the NWSS Program Summary at Paragraph 2.1.

2.2.1 Nuclear Weapons Transportation

FY 2005-FY 2009 Five-Year Plan, Purpose, and Resources: This project assists MOD in shipping nuclear warheads to more secure sites or to dismantlement locations. Weapons shipments are expected to remain at 70-72 trains per year through FY 2009.

The estimated cost for this project increased from \$162.8 million to \$188.7 million. A 12% increase in the tariff rate in February 2003 is the reason for this revised estimate.

Description of CTR Activities Carried Out in FY 2003: RTSC, the integrating agent for this project, supported the movement of 69 train shipments.

Locations: The weapons movement services provided under this effort are conducted throughout Russia, but are managed centrally from Moscow.

Program Management: DoD management and technical teams made two trips and discussed potential funding shortfalls for Nuclear Weapons Transportation with MOD officials and contractors. These concerns were ultimately resolved with no impact on shipment schedules. Teams also discussed potential approaches to reducing Nuclear Weapons Transportation shipment costs without negatively impacting the shipment of warheads. RTSC conducted approximately 32 meetings with MOD to discuss weapons shipping issues. Additionally, to meet minimum contract acceptance criteria for payment of service, the Provision of Services to Facilitate the Transportation of Nuclear Weapons Implementing Arrangement provides for facilitating agents who conduct independent oversight of the warhead movements and verify transportation invoices prior to payment to the Ministry of Railways. Payments are based on kilometers traveled and use of published railroad tariffs. The DoD revalidation/rescoping review determined that more reliable means of verification are necessary

for this project. The FY 2004 amendment to the NWTIS Implementing Agreement will require information from MOD on origin and destination of shipments.

2.2.2 Railcar Maintenance and Procurement

FY 2005-FY 2009 Five-Year Plan, Purpose, and Resources: This project supports Ministry of Railways certification requirements to perform depot and capital maintenance for 200 nuclear weapons cargo railcars. Sandia National Laboratory is the integrating agent and Tver Railcar Factory is the Russian contractor providing maintenance and certification of railcars. This project will fund cargo railcar service life extension to the maximum extent feasible to maintain 100 heated railcars in service. When service life extension is no longer feasible, this project will procure replacement cargo railcars to maintain the number of railcars required to be in service (currently estimated at 100). This project will procure 15 guard railcars to replace guard railcars recently retired due to service life expiration. The guard railcars will be capable of monitoring security systems in nuclear weapons cargo railcars and transporting security force personnel.

The estimated cost for this project remains \$45.3 million.

Description of CTR Activities Carried Out in FY 2003: The Tver Railcar Factory maintained and certified 29 weapons and cargo railcars.

Locations: Certification maintenance is performed at the Tver Railcar Factory. The railcars are distributed to garrisons associated with nuclear weapons storage sites and are in use throughout Russia.

Program Management: DoD management and technical teams made two trips. Teams discussed requirements for railcar procurement to replace existing guard railcars that are no longer serviceable. Discussions included detailed reviews of DOE-procured 15T91 railcars proposed for use as replacement.

Additionally, a DoD team traveled to Sergiev Posad and confirmed that the Vindicator-equipped guard railcars were approximately 40 years old and were no longer serviceable. Vindicator is a security system. The team also traveled to the Torzhok Railcar facility, observed the DOE-procured railcar, and confirmed that this railcar meets MOD requirements for a replacement guard railcar.

A&E: During the period June 2-6, 2003, a DoD team conducted a review of service maintenance documentation and equipment related to the Railcar Maintenance and Procurement project at the Tver Railcar Factory near Sergiev Posad, Russia.

Equipment Accountability: In the 30-day notification cable for this A&E, DoD provided a list of 20 cargo railcars and requested that MOD present at least ten to the A&E team for inspection. The A&E team successfully completed a physical inventory of ten cargo railcars, each of which was included on the list of 20 requested in the notification cable. The team was also presented with the logbooks for each of the ten cargo railcars observed.

Equipment Serviceability: The audit team reported that, of the ten railcars observed, one had completed depot-level repairs and was due to return to service at the conclusion of the A&E. Of the remaining nine, two were due capital-level repairs and the other seven were due depot-level maintenance.

Equipment Usage: The DoD team reported, upon review of logbooks, that the A&E did not indicate use other than for intended purposes.

A&E Summary: Accountability, documentation, usage, and serviceability of all equipment observed were in good order.

2.2.3 Transportation Safety Enhancements

FY 2005-FY 2009 Five-Year Plan, Purpose, and Resources: This project will enhance MOD's accident mitigation capability in support of transportation of nuclear weapons to dismantlement sites. Emergency response (ER) vehicles are the key element of this project. Each vehicle contains hydraulic cutting tools, pneumatic jacks, and safety gear. Meteorological, radiation detection and monitoring, and communications equipment is also included. This project will be completed in FY 2005.

The estimated cost for this project remains \$17.3 million.

Description of CTR Activities Carried Out in FY 2003: Procured and delivered six Russian-made (Kamaz) transport trucks for the transport of emergency support equipment modules to respond to potential accidents or emergencies.

Locations: St. Petersburg, Sergiev Posad, and throughout Russia.

Program Management: DoD management and technical teams made three trips. Prior to the DoD rescoping assessment, teams discussed potential requirements for future work elements associated with an MOD requirement for an Underwater ER Diving Center, additional Pomoshnik ER vehicles, ER portable shelters (tents), and Emergency Support Equipment (ESE) Module transport trucks. DoD has determined that any equipment required after delivery of ER portable shelters and other on contract equipment, will be an MOD responsibility. Discussions also related to project cost and implementation and included the development of a transition plan to gradually transfer maintenance and logistics responsibility to MOD. Additionally, the CLS contractor and its subcontractors made four trips to project sites and provided transfer of custody and letter of verification support for DoD-provided equipment.

A&E: During the period June 2-6, 2003, a DoD team conducted a review of equipment as well as training and transfer documentation related to the Transportation Safety Enhancements project at Sergiev Posad and St. Petersburg, Russia.

Equipment Accountability: The A&E team successfully completed a physical inventory of the high-value items making up the Information Analysis System (IAS) in St. Petersburg. The team also reviewed hand receipts and transfer documents for IAS equipment that had been transferred to locations other than St. Petersburg. In the 30-day notification cable, DoD

requested a demonstration to show the operability of the IAS. However, MOD did not provide the demonstration, citing security-related concerns.

Equipment Serviceability: The Abnormal Event Lifting Beams (AELBs) were found to be in excellent condition with all spare parts on hand. The IAS equipment appeared to be well maintained, including equipment that had been deployed to a field environment.

Equipment Usage: The audit team did not report evidence of use other than for intended purposes. The AELBs were in pristine condition, while the IAS equipment exhibited evidence of use consistent with both field and mobile operational environments. However, IAS functionality could not be verified, as the MOD did not provide the DoD requested demonstration of the system's operability.

A&E Summary: Accountability, documentation, usage, training, and serviceability of all equipment observed were in good order. During July 2003 program leadership conducted follow-up discussions with MOD officials related to the IAS equipment demonstration denial. In direct response to this conversation, MOD officials provided a demonstration of the IAS to DoD officials on October 20, 2003.

2.2.4 Supercontainers and Emergency Support Equipment (ESE) (Completed Projects)

These projects assist Russia to safely and securely transport nuclear warheads from operational sites to secure storage and dismantlement facilities. The supercontainers provide ballistic, thermal, and abnormal event protection to warheads during transport. The ESE equipment augments Russia's capability to respond to and effectively mitigate the consequences of a nuclear weapons transportation accident.

Locations: Supercontainers are distributed throughout Russia within five operational regions of responsibility. The ESE equipment is contained in five identical transport modules distributed to five regional emergency response centers throughout Russia. Both supercontainers and ESE are centrally managed by the 12th Main Directorate.

Program Management: As these are completed projects, no program management visits were conducted.

A&E: During the period June 2-6, 2003, a DoD team conducted a review of service maintenance documentation and equipment related to the Supercontainers project at the Tver Railcar Factory near Sergiev Posad, Russia.

Equipment Accountability: In the 30-day notification cable for this A&E, DoD provided a list of 25 supercontainers and requested that MOD present at least 15 to the A&E team for inspection. The A&E team successfully completed a physical inventory of 15 supercontainers, each of which was on the list of 25 requested in the notification cable. The team was also presented with documentation indicating the location of each of the 150 supercontainers.

Additionally, the team observed two AELBs at Sergiev Posad along with spare parts kits and training documentation for personnel trained and certified to use the AELBs.

Equipment Serviceability: The audit team did not report any serviceability concerns related to the supercontainers.

Equipment Usage: The audit team did not indicate evidence of use other than for intended purposes.

A&E Summary: Accountability, documentation, usage, training, and serviceability of all equipment observed were in good order.

2.3 FISSILE MATERIAL STORAGE FACILITY (FMSF) PROGRAM—RUSSIA

In accordance with the FMSF Construction Implementing Agreement, the FMSF will provide centralized, safe, secure, and ecologically sound storage for fissile material removed from nuclear weapons. The project supports U.S. proliferation prevention objectives through enhanced MC&A and transparency, which requires confidence that the stored weapons grade fissile material is safe and secure, and that the fissile material declared excess to military needs will not be reused for nuclear weapons. This report has separated the facility construction and transparency into two separate projects.

2.3.1 Fissile Material Storage Facility (FMSF) Construction—Russia

FY 2005-FY 2009 Five-Year Plan, Purpose, and Resources: The FMSF was originally designed to accelerate nuclear warhead dismantlement by furnishing fissile material storage. The FMSF at Mayak, Russia, will provide a capability to store 25,344 containers of fissile material. The design incorporated the required support buildings and a receiving/storage building. The U.S. Army Corps of Engineers (USACE) managed the design and construction of the FMSF. BNI was the integrating contractor for the facilities. USACE, BNI, and the Russian design and construction firms (VNIPIET and South Urals Construction Company, respectively) jointly developed the construction schedule, which was reviewed and approved by DoD and MinAtom representatives during the semiannual Joint Senior Implementing Group meetings. USACE and BNI had a daily presence at the construction site until completion on December 11, 2003. These personnel inspected the work to verify that it satisfied the construction specifications. Systems start-up and testing continued from October 1 to December 11, 2003. Russia commissioned the FMSF on December 11, 2003, and will operate/maintain the facility.

The estimated cost for this project decreased from \$360.2 million to \$309.1 million. This decrease is primarily due to transferring transparency costs previously reported in this project to a new transparency project.

Description of CTR Activities Carried Out in FY 2003: Essentially all construction work and equipment installation is complete.

Location: Mayak.

Program Management: DoD management and technical teams made 13 trips. On many trips, DoD management met with MinAtom and Mayak officials, and U.S. and Russian contractors to discuss construction progress, goals, and objectives, and potential issues jeopardizing the project completion schedule. DoD teams also met with MinAtom officials

regarding actions and documentation ensuring that the facility is safe, secure, ecologically sound, operationally ready, is able to sustain operations, and has a public outreach program prior to facility turnover. Collaborative management teams composed of CTR government and contractor personnel with Russian representatives were developed to ensure project completion in accordance with program objectives. Several trips also involved inspection of CTR-provided equipment and recorded hours of equipment use.

On multiple trips, recurring issues were discussed related to VAT. The Russian construction contractor paid VAT in excess of \$2.0 million to vendors for purchases related to the FMSF construction. As a contractor for this project, it should have been exempt from the payment of VAT; however, the contractor had failed to file for the VAT exemption and was unable to obtain a rebate from MinAtom. As a result, BNI expended additional effort to find other vendors to furnish some equipment to complete the facility.

Additionally, issues related to site access to the Dalnya Dacha region were discussed on numerous trips. DoD asserted early in 2003 it could complete the project earlier if allowed access for up to 25 team members in the Dalnya Dacha region. However, MinAtom continued to limit access to the region to ten DoD representatives pursuant to the 1996 access agreement.

Three of the program management trips were to attend the January, March, and July 2003 Russia Executive Reviews. Discussion included the Transparency Protocol that would formalize DoD's right to test the content of containers located in the FMSF, including ways to optimize the time of the inspectors in order to minimize the total DoD monitoring time at the facility and means to complete the facility more efficiently.

The USACE and the U.S. integrating contractor provided on-site project management and monitored the daily construction activities. Detailed weekly and monthly reports were provided to DoD.

DoD Concerns with the Absence of a Transparency Agreement

DoD continues to negotiate with Russia to finalize a transparency agreement that will increase confidence that the material stored in the FMSF is weapons origin plutonium or highly-enriched uranium. The Russian commitment to transparency stems from the Clinton-Yeltsin Joint Statement on the Transparency and Irreversibility of the Process of Reducing Nuclear Weapons of May 10, 1995. This joint statement promised that, "The United States of America and the Russian Federation will negotiate agreements to increase the transparency and irreversibility of nuclear arms reduction..." In December 2003 DoD received comments on the most recent version of the draft transparency protocol. Differences remain regarding the number of monitoring visits per year and the time the monitors may be on-site during each visit, as well as how to measure the mass of the fissile material. Deputy Secretary Wolfowitz wrote to MinAtom chief Rumyantsev in December 2003 to urge rapid conclusion of the transparency agreement. DoD will continue to press at senior levels for successful resolution of the agreement.

2.3.2 Fissile Material Storage Facility (FMSF) Transparency—Russia

FY 2005-FY 2009 Five-Year Plan, Purpose, and Resources: The U.S. and Russia are negotiating a protocol to the FMSF Construction Implementing Agreement that permits the U.S. to monitor what is loaded in the FMSF. The Fissile Material Storage Facility Transparency project supports U.S. proliferation prevention objectives by contributing to the confidence that the fissile material stored at the FMSF is an eligible weapon-grade fissile material, storage is secure, and that the fissile material will not be reused for nuclear weapons. The specific goal of this project is to have a certified Inventory Sampling Measurement System (ISMS) operational at FMSF within two years after the signing of the transparency protocol. The monitoring regime will measure the nuclear emissions of the material in DoD-provided fissile material containers to provide confidence that the stored material is plutonium or enriched uranium. The USG draft protocol permits such a measurement system to be used by U.S. monitors during monitoring visits to the FMSF. BNI has supported this effort. An integrating contractor will be used to develop and install the ISMS. Four DOE laboratories have also supported this project.

The cost for the negotiations and demonstration of a system to perform the measurements, as well as design, fabrication, and implementation of this system, will be determined after the Protocol for the system is signed. Prior year funds in the amount of \$22.8 million were transferred to this project from the FMSF Construction project.

Description of CTR Activities for Transparency in FY 2003: ISMS Functional Specification and Technical Statement of Work was completed and a comprehensive review by the Authentication, Peer, and Vulnerability Assessment teams was conducted. The sampling strategy for the Transparency Regime based on a statistical methodology was developed. A concept of operations for monitor during inspections was developed. Several alternatives for measuring highly enriched uranium were researched. An alternative method for using gamma measurements to determine mass was also studied. Development on an electronic pulser (will be used to calibrate/authenticate the ISMS) to replace large spent nuclear material sources was begun.

Program Management: None.

2.3.3 Fissile Material Containers (FMCs)—Russia (Completed Project)

Under the FMC Implementing Agreement, this project provided FMCs for storage of fissile material removed from dismantled nuclear weapons during movement and periods of interim and long-term storage. Production of 32,696 FMCs has been completed, and MinAtom has received 26,456 FMCs to support loading of the Mayak FMSF. Russia declined acceptance of the final 6,240 FMCs stating that they were not required. Of these, 3,712 have been identified for alternative use by other USG programs, while the remaining 2,528 await assignment.

Locations: Mayak, Russia and Barstow, California.

Program Management: The CLS contractor conducted seven visits and performed eight maintenance actions in support of this program.

Unresolved Prior Year Concern: In FY 1999 MinAtom representatives refused to permit an A&E of FMCs. In FY 2000 an A&E of this project was again denied by MinAtom pending new approved Administrative Arrangements for the conduct of A&Es. Similarly, a request to conduct an A&E in FY 2001 was denied by Russia. MinAtom maintains that existing October 1995 administrative arrangements for the conduct of A&E activity must be revised because of provisions in the protocol extending the U.S.-Russia CTR Umbrella Agreement. DoD does not agree with this interpretation. However, DoD is focusing on robust monitoring of the material in the FMCs stored in the FMSF. DoD is negotiating revised guidelines for the A&E of the FMSF in conjunction with negotiating the transparency protocol.

2.4 WEAPONS OF MASS DESTRUCTION INFRASTRUCTURE ELIMINATION (WMDIE) PROGRAM–KAZAKHSTAN

In accordance with the WMDIE Implementing Agreement, the CTR Program will assist Kazakhstan in implementing measures to prevent the proliferation of materials, equipment, and technologies related to WMD.

2.4.1 Fissile and Radioactive Material Proliferation Prevention

FY 2005-FY 2009 Five-Year Plan, Purpose, and Resources: In the summer of 2000 hundreds of radiological sources were found in an unprotected environment. This project assisted Kazakhstan in recovering, creating an inventory, and packaging the sources and transporting them to secure storage. This activity plan is classified.

The estimated cost for this project increased from \$13.5 million to \$14.3 million. This increase will support the classified activity.

Description of CTR Activities Carried Out in FY 2003: This radioactive material project was completed. Teams conducted contract negotiations, discussed contract modifications, monitored contract performance, and considered programmatic impacts of the WMDIE plus-up amendment.

Location: Various.

Program Management: DoD management and technical teams made six trips. Teams held technical and programmatic discussions related to ongoing and new proposed projects. Discussions included prioritization of project objectives, potential scope of work, and policy issues. Teams also conducted site visits and facility tours to review work in progress and gather information related to new proposed work.

Finally, the CLS contractor conducted a site visit and performed four maintenance actions for DoD-provided equipment.

2.5 BIOLOGICAL WEAPONS PROLIFERATION PREVENTION (BWPP) PROGRAM–FSU

Currently, all BW projects in Russia fall under the ISTC Agreement and the ISTC Funding Memorandum of Agreement. The WMDIE Kazakhstan Implementing Agreement

provides the means to implement BW projects in Kazakhstan. DoD has a Biological Threat Reduction Implementing Agreement (BTRIA) with Uzbekistan and concluded a BTRIA with Georgia in December 2002. DoD is in the final stages of negotiating a BTRIA with Ukraine.

Program Management: DoD management and technical teams made nine trips in support of the entire BWPP FSU program. DoD teams traveled to Kazakhstan and Uzbekistan to discuss future anticipated work, conducted walking tours of three Uzbek and two Kazakh institutes and collected notes and photos for future reference. These teams also conducted overviews of ongoing threat and vulnerability analysis and data collection efforts, as well as emergency upgrade recommendations provided by BNI.

A DoD team traveled to Georgia and met with the Georgian interagency working group on biological threats and individual ministries to conduct a briefing on program execution following the June 2003 Implementing Agreement ratification by the Georgian Parliament. The team then visited four Biological Research and Production Centers in Tbilisi to gauge general conditions and the current level of operations, to determine where dangerous pathogen collections are located, and to assess the possibilities for engagement under the CTR BWPP Program. In addition, the team began initial threat and vulnerability assessments for the National Center for Disease Control of Georgia.

2.5.1 Biosecurity and Biosafety

FY 2005-FY 2009 Five-Year Plan, Purpose, and Resources: This project provides security and safety upgrades at institutes engaged only in legitimate dangerous pathogen research. Through this project, DoD helps to prevent the proliferation of BW materials and technologies and ensure the safe and secure storage and handling of dangerous biological pathogens used for legitimate research at pathogen repositories and in laboratories. 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.

The Biosecurity and Biosafety project provides the following benefits to the U.S.:

- ?? Promotes U.S. standards for biosecurity and biosafety;
- ?? Attempts to counter both insider and outsider threats;
- ?? Consolidates and secures, or eliminates, dangerous pathogen collections at biological research institutes; and
- ?? Reduces the risk of accidental pathogen release and increases safety for U.S. and other cooperating personnel.

The USG estimates that there are approximately 40 FSU institutes that were part of the Soviet BW program. DoD works to consolidate the dangerous pathogens and secure the minimum number of pathogen collections necessary for ongoing research and public health needs. The following institutes have requested support for security enhancements: Vector in Novosibirsk, SRCAM in Obolensk, the All Russian Research Institute for Animal Protection in Vladimir, the Russian Scientific Institute of Phytopathology in Golitsino, and the Pokrov

Biologics Plant—all in Russia; the Scientific Research Agricultural Institute in Otar, Kazakhstan; The Kazakh Science Center for Quarantine and Zoonotic Diseases in Almaty, Kazakhstan; the Center for Prophylaxis and Quarantine of Most Hazardous Infections in Tashkent, Uzbekistan; the Research Institute of Virology in Tashkent, Uzbekistan; the Uzbek Scientific Research Institute of the Veterinary in Samarkand, Uzbekistan; the National Center for Disease Control of Georgia in Tbilisi; the Biokombinat Veterinary Vaccine Production Facility in Tbilisi; and the Eliava Institute of Bacteriophage, Microbiology and Virology in Tbilisi, Georgia. All of these sites will receive emergency security and safety upgrades. Portions of some sites will receive comprehensive security upgrades with inventory controls consistent with strategic planning and policy guidance. Initial discussions are ongoing with other FSU facilities. Additionally, DoD has added three Uzbek and four Kazakh biological research sites and approximately 40 sentinel station sites for engagement in FY 2004.

The estimated cost increased from \$182.9 million to \$212.0 million. This increase is a result of the added sites mentioned above, additional emphasis on the BWPP Program, adding CTR logistics support/CTR transportation services support requirements, and reallocation of priorities within the BWPP to allow for increased Biosecurity and Biosafety projects in Kazakhstan, Uzbekistan, and Georgia, and potentially in Ukraine in FY 2004.

Description of CTR Activities Carried Out in FY 2003: BNI continued as the integrating contractor for the BWPP Program during FY 2003 and assessed four Russian institutes (Vector, Golitsino, Obolensk, and Pokrov); three Uzbek institutes (Samarkand, Tashkent Virology, and Tashkent Quarantine) and two Kazakh sites (Otar and Almaty) by completing threat and vulnerability assessments, data collection analyses, and first drafts of long-term threat reduction plans. Additionally, emergency security and safety upgrades were completed at the Kazakhstan and Uzbekistan sites. A threat and vulnerability assessment was initiated at Golitsino, and emergency security upgrades, data collection and analysis, and Phase I security upgrades were carried out for Vector, Obolensk and Pokrov. BNI was awarded a new contract to support all BWPP work at non-Russia FSU sites currently engaged or tasked for engagement on September 11, 2003. Raytheon Technical Services Company was awarded the new contract for all BWPP work in Russia on September 30, 2003.

Locations: Novosibirsk, Obolensk, Almaty, Otar, Tashkent, Tbilisi, and Samarkand.

Program Management: DoD management and technical teams made seven trips. A DoD team traveled to Koltsovo and Obolensk to review the development status of the follow-on Phase 2 Biosecurity projects at Vector and Obolensk facilities. The team also inspected the installation of closed circuit television cameras and the Building #6 monitoring station at Vector over the course of several trips and found that the work meets all requirements. DoD teams also traveled to the Samarkand Veterinary Institute, the Scientific Research Agricultural Institute, and the Kazakh Science Center for Quarantine and Zoonotic Diseases to review threat and vulnerability analysis work being performed by the contractor.

In May, a DoD team attended a dual-program workshop sponsored by the Center for Nonproliferation Studies of the Monterey Institute in Almaty, Kazakhstan. The programs focused on bio-weapons proliferation prevention and biosecurity training. Teams also traveled to three biological plants in the Moscow area including the SRCAM, the All Russia Institute of

Phytopathology (Golitsino), and the Pokrov Biologics Plant to discuss physical security, biosafety, personnel reliability, and the status and progress of various projects.

A DoD technical team met with officials at the Georgian National Center for Disease Control to document and review biosafety and biosecurity procedures. The team also worked with resident scientists to develop future research projects and discuss existing relationships between the Georgian National Center for Disease Control and U.S. scientists and institutions. The technical team also purchased and installed new padlocks on the pathogen repository gate, inoculation room gate, and basement exit.

Additionally, a DoD technical team visited the Eliava Institute of Bacteriophage, Microbiology and Virology in Tbilisi, Georgia, to review and document security and safety concerns at the institute. The team noted that a myriad of upgrades were needed to enhance the physical security of the institute.

In November 2002 a DoD team participated in the annual program review on Biosecurity/Biosafety in Garmisch, Germany with contractors and representatives of the former Soviet biological institutes. The meetings included a review of the status of current projects, receipt of contract deliverables, and discussions on lessons learned, new training opportunities, implementation procedures, and ways to improve project execution.

DoD provides on-site U.S. contractors who visit project sites about ten days per month. They assist project management with environmental analysis, design, safety procedures, implementation assistance, and project support. These contractors provide bi-weekly status reports and monthly cost and performance reports.

A&E: During the period September 8-15, 2003, a DoD team conducted a review of equipment, related records, and security system functionality supporting the BW Site Security program in Almaty and Otar, Kazakhstan.

Equipment Accountability: The audit team accounted for all major equipment items by physical observation/testing or document review. Site personnel provided thorough documentation accounting for all CTR equipment provided.

Equipment Serviceability: The team reported that the equipment visually audited appeared to be generally well maintained and in good working order. However, the team observed and documented some security concerns at both Otar and Almaty.

At both sites, the team observed some minor gaps between the perimeter security wall and the razor wire, small holes within the wall, and places where bricks had previously been repaired that now appeared to be deteriorating. The team also noted deficiencies in the perimeter lighting and insufficient clear zones surrounding the perimeter wall. Additionally, at Almaty, the team noted that the electrical power supply was unreliable and generally insufficient to effectively illuminate the perimeter wall.

These concerns have been relayed to the DoD technical management team. The technical team is addressing them in follow-on contract efforts.

Equipment Usage: The team reported that all assistance provided was being used for its intended purpose.

A&E Summary: Visual inspection and/or documentation review of the requested equipment and site security enhancements increases DoD's confidence that the assistance provided is generally in good working order and being used for its intended purpose.

2.6 CHEMICAL WEAPONS DESTRUCTION (CWD) PROGRAM-RUSSIA

2.6.1 Chemical Weapons Site Security Program–Russia (Completed Project)

Pursuant to the Chemical Weapons Destruction Implementing Agreement, this project supports U.S. objectives for the proliferation prevention of Russian chemical weapons and associated capabilities through identification and implementation of security system improvements at the Planovy and Kizner CW storage sites. These security improvements will help reduce the risk of unauthorized access to, theft of, and proliferation of Russian CW and associated technologies to terrorists or rogue states.

Locations: Kizner and the Planovy CW storage facilities.

Program Management: No program management actions were reported.

Figure 3 An estimate of the total amount in millions that will be required by the U.S. to achieve Objective 2 of the CTR Program.

Implementing Agreement / Project	Prior Year	FY 2004	FY 2005	FY 2006 - FY 2009	Total
<i>Nuclear Weapons Storage Security (Russia)</i>					
Automated Inventory Control & Management System	\$50.2				\$50.2
Guard Force Equipment and Training	\$20.6				\$20.6
Nuclear Weapons Storage Site Support	\$60.4				\$60.4
Site Security Enhancements	\$233.0	\$47.9	\$48.6	\$340.2	\$669.7
Completed Projects	\$27.2				\$27.2
<i>Nuclear Weapons Transportation Security (Russia)</i>					
Nuclear Weapons Transportation	\$50.0	\$14.0	\$17.5	\$107.2	\$188.7
Railcar Maintenance and Procurement	\$10.1	\$3.3	\$8.8	\$23.1	\$45.3
Weapons Transportation Safety Enhancements	\$11.4	\$5.9			\$17.3
Completed Projects	\$33.4				\$33.4
<i>Fissile Material Storage Facility (Russia)</i>					
Fissile Material Storage Facility Construction	\$309.1				\$309.1
Fissile Material Storage Facility Transparency	\$22.8				\$22.8
<i>WMD Infrastructure Elimination (Kazakhstan)</i>					
Fissile and Radioactive Material Proliferation Prevention	\$14.3				\$14.3
<i>BW Proliferation Prevention (FSU)</i>					
Biosecurity & Biosafety	\$65.6	\$11.2	\$24.7	\$110.5	\$212.0
<i>Chemical Weapons Destruction (Russia)</i>					
Completed Projects	\$20.0				\$20.0
Budget	\$928.1	\$82.3	\$99.6	\$581.0	\$1691.0
* Estimated Program FYDP Total					

Objective 3: Increase Transparency and Encourage Higher Standards of Conduct

3.1 NUCLEAR WEAPONS STORAGE SECURITY (NWSS) PROGRAM–RUSSIA

In accordance with the NWSS Implementing Agreement, this program area enhances MOD's personnel reliability program by providing a capability for drug and alcohol screening and evaluation of personnel who have access to nuclear weapons. It also improves the safety of those personnel by providing dosimeters for radiation and radon detection.

3.1.1 Personnel Reliability and Safety

FY 2005-FY 2009 Five-Year Plan, Purpose, and Resources: This project enhances MOD's capability for drug and alcohol screening and evaluation of personnel who have access to nuclear weapons, and improves their safety. Under the personnel reliability effort, DoD provides portable drug and alcohol testing equipment, test consumables, and a fixed laboratory. The fixed laboratory urinalysis equipment supports evidentiary-level drug screening and confirmation. Laboratory equipment training was provided to ensure a comprehensive understanding of lab operation and procedures. Test consumables (e.g., test cups) are to be provided through FY 2005.

Under the safety effort, DoD provided MOD with 5,700 radiation dosimeters, 57 reading systems, and associated support equipment to monitor accumulated whole-body ionizing radiation in personnel working directly with nuclear weapons. Replenishment of consumables will continue through FY 2005.

The estimated cost for this project remains \$11.9 million.

Description of CTR Activities Carried Out in FY 2003: Kellogg Brown and Root Services (KBRS) was awarded a contract to provide MOD program development assistance and to purchase additional breathalyzers, polygraphs, urinalysis test cups, and medical stress testing equipment/components. Associated contractual efforts are ongoing. Also, Raytheon/Alpha Pribor was awarded a contract to resolve a Personnel Reliability Program (PRP) laboratory ventilation system problem and to integrate the lab ventilation and fire suppression systems. Both contracts were successfully completed. Vendor dosimeter training was provided for MOD personnel.

Location: PRP Fixed Lab at Sergiev Posad, Russia. Other equipment distributed, and in use, throughout Russia.

A&E: This project was included in the September 2003 NWSS A&E, which is summarized under Objective 2 at Paragraph 2.1.

Program Management: DoD management and technical teams made three trips.

A DoD team toured the Progressive Biomedical Laboratory in Moscow and reviewed procedures used by the lab for detecting alcohol and drug abuse. DoD management also

inspected the progress of improvements to the ventilation system for the PRP Urinalysis Laboratory at the SATC. A DoD team traveled to Russia to visit the PRP Fixed Lab located at the SATC at Sergiev Posad and contractor facilities. KBRS conducted about 12 meetings with MOD on PRP-related issues. The DoD team witnessed operational demonstrations of the repaired PRP lab ventilation system and the integrated fire alarm-ventilation system; monitored installation of a nitrogen bottle assembly; and monitored fixed lab equipment training. The DoD team noted all primary lab equipment appeared to be present and operational. Teams also held discussions with MOD relating to program development and selection and acquisition of additional equipment and consumables (e.g., polygraphs, breathalyzers, test cups, and medical stress testing equipment).

Finally, the CLS contractor made 13 visits to project sites, performed 41 maintenance actions on CTR equipment, and conducted certification and transfer of custody services for DoD-provided equipment.

3.2 BIOLOGICAL WEAPONS PROLIFERATION PREVENTION (BWPP) PROGRAM–FSU

The Cooperative Biological Research (CBR) project engages former BW scientists in peaceful pursuits in order to prevent the proliferation of BW expertise to terrorist groups and rogue states. The CBR project helps to:

- ?? Prevent proliferation of FSU BW scientific expertise and preempts potential “brain drain” of scientists to rogue states;
- ?? Increase transparency at FSU biological institutes and encourages higher standards of openness, ethics, and conduct at the scientist level;
- ?? Provide U.S. access to this scientific expertise to enhance preparedness against biological threats;
- ?? Provide opportunities for transfer of BW pathogens for additional study in the U.S. to improve public health and for forensics reference; and
- ?? Refocus research priorities and projects at FSU BW institutes on peaceful purposes.

3.2.1 Cooperative Biological Research–FSU

FY 2005-FY 2009 Five-Year Plan, Purpose, and Resources: Under the CBR project, DoD works with institutes and scientists employed in legitimate research to develop CBR projects involving dangerous pathogens for prophylactic, preventive, or other peaceful purposes.

Eleven CBR projects are underway with three other projects (two in Uzbekistan and one in Kazakhstan) in final stages of Project Agreement development and approval. DoD-assigned projects include:

- ?? Designing of Experimental Aerosol DNA-Vaccine Preparation Against Hantaviral Infection;
- ?? Development of Liposomal Forms of Specific Immunoglobulins A for Urgent Prophylaxis and Treatment of Highly Dangerous Infections;

- ?? Study of the Genomic Structure of Crimean-Congo Hemorrhagic Fever Virus Isolates Circulating in the Southern Regions of New Independent States Countries;
- ?? Studying of the Role of *Yersinia pestis* Lipopolysaccharides (LPS) Structural Organization in the Development of Immune Preparations;
- ?? Experimental Study of Antiviral Activity of Glycyrrhizic Acid Derivatives against Marburg and Ebola Viruses;
- ?? Development of Methods for Therapy of Chronic Melioidosis with Burkholderia Specific Immunogens;
- ?? A Sampler for the Detection and Express Identification of Airborne Microorganisms;
- ?? Development of Immunofiltration and Immunoenzyme Express Diagnostic Test-Kits for the determination of infectious diseases; and
- ?? Monitoring of Anthrax Infection.

In addition, high priority smallpox projects that are jointly funded and managed by DoD and the Department of Health and Human Services include:

- ?? Conservation of genetic material and study of genomic structure of different Variola virus strains;
- ?? Search for Antivirals for Treating and Prevention of Orthopoxviral Infections Including Smallpox; and
- ?? Combinatorial Antibody Libraries to Orthopoxviruses.

The estimated cost for this project increased from \$102.5 million to \$192.6 million. This increase supports expansion of the program to encompass all states of the FSU and identification of additional institutes with capabilities and expertise of interest.

Description of CTR Activities Carried Out in FY 2003: Follow-on contracts were awarded to the National Academy of Sciences and the CRDF. DoD managed 11 ongoing projects, signed a contract with CRDF to manage three new approved CBR projects – two in Uzbekistan and one in Kazakhstan, and is actively developing new projects.

Locations: Novosibirsk (Vector), Obolensk (SRCAM), Moscow, Kazan, Kirov, Pushchino, Pokrov, St. Petersburg, Almaty, Tashkent, and Serpukhov.

Program Management: DoD provides on-site U.S. contractors who visit project sites about ten days per month. They assess the legitimacy of work ongoing at the institutes and assist project management with environmental analysis, design, safety procedures, implementation assistance, and project support. U.S. contractors provide bi-weekly status reports and monthly cost and performance reports. DoD management and technical teams made six trips. On several trips, DoD teams traveled to Moscow, Pokrov, Golitsino, Obolensk, Kazan, St. Petersburg, Novosibirsk, and Serpukhov to conduct CBR project programmatic discussions and site visits.

The teams met with CRDF, ISTC, SRCAM, Vector, Research Center for Molecular Diagnostic Testing (RCMDT), Serpukhov (RCT&HRB), and SRIHPB representatives to review

projects ongoing at their respective locations. DoD teams also conducted multiple tours at various institutions, often involving programmatic discussions.

The DoD program manager attended a conference in Boston, Massachusetts, to discuss the future of biosciences in Russia and to deliver a presentation on the CTR BWPP Program. He also discussed the CBR project as well as CTR's biosafety and biosecurity and infrastructure elimination projects.

DCAA Audits of ISTC Projects

At the request of CTR management, DCAA completed audits of six ISTC research projects and an audit of SRCAM at Obolensk, Russia. DTRA and the CRDF provided technical support representatives to assist the DCAA audit teams. The audits are summarized below.

Obolensk Audit, State Research Center for Applied Microbiology, July 2003

- ?? The scope of this audit included Institute accounting, administrative procedures, and a review of the bankruptcy and how it will affect ISTC projects and the Institute.
- ?? The Institute is bankrupt and is subject to oversight of an outside arbitrator. The proposed strategy for the future is to downsize the Institute, make it more energy efficient, streamline processes, and contain costs. Management was working with the arbitrator and the Ministry of Health to create this downsized facility within three to five months. The audit team found that the Institute could fail if the recovery plan is not carried forward successfully in as short a time frame as possible. They recommended that the Institute's USG customers stay engaged with the Institute on matters relating to the bankruptcy. Further, the U.S. customers should monitor biosafety and biosecurity at the Institute to ensure that these important matters are not overlooked in the transition.
- ?? Institute space is very underutilized, and the waste treatment system is antiquated and needs extensive downsizing; therefore, the cost to sterilize large amounts of waste and the high utility costs of the excess space considerably add to the Institute's debt. The internal local area network (LAN) appears reliable; however, Internet connections are slow and unreliable. The audit team recommended resizing the waste treatment infrastructure, limiting the production of heat to the occupied buildings used for research, and upgrading the hot and cold water piping system to significantly reduce energy expenses and future debt. Additionally, the LAN should be connected to a reliable high-speed Internet capability so that online research and collaboration can take place.
- ?? Neither ISTC nor the Institute has an Institute-wide inventory list of ISTC purchased equipment. The audit team could not reconcile ISTC project equipment inventory lists with those maintained by Institute project managers. This was referred to the ISTC for corrective action.

May 2003 ISTC Project Audits

The following projects (by DOS numbering system) were included in these audits:

- ?? Project 1197p at SRCAM “Studying of the Role of *Yersinia pestis* Lipopolysaccharides Structural Organization in the Development of Immune Preparations;”
- ?? Project 1813p at SRCAM “Designing of Experimental Aerosol DNA-Vaccine Preparation Against Hantaviral Infection;”
- ?? Project 1291-2p at Vector “Study of the Genomic Structure of Crimean-Congo Hemorrhagic Fever virus Isolates Circulating in the Southern Regions of New Independent States Countries;”
- ?? Project 1979p at Vector “Modernization and Development of the Plant for Medicinal and Prophylactic Bifido-Containing Sour Dairy Products;”
- ?? Project CSP-7 at Vector “Vector Telecommunications Infrastructure for Providing Productive Work on the ISTC Projects;” and
- ?? Project 1699 at Vector “Security System Design for Safeguarding Biological Material at the State Research Center of Virology and Biotechnology.”

Audit objectives included a review of the adequacy of accounting and supporting documentation for project costs. No exceptions to allowable cost were found in the audits.

The audits also included a review of the following:

- ?? Reliability of timekeeping records;
- ?? Adequacy of controls over project equipment; and
- ?? Management monitoring of project resources and compliance with applicable laws, regulations, and project agreements.

Audit objectives included a review of the adequacy of accounting and supporting documentation for project costs. Inclusion of VAT is the only exception to allowable cost found in the audit. This concern is summarized as follows.

Typically, purchases in Russia are subject to a 20% VAT. Neither the ISTC nor the Institutes performing the ISTC projects have been granted VAT exemptions by Russian tax authorities. The audit teams reported that VAT for each ISTC project has been remitted to Russian vendors and recorded as a separate expense line-item for reimbursement by USG funding. For example, \$136,802.32 of VAT was included in the final accounting reports for project 1699p. In effect, this unallowable VAT was charged to the USG-funded ISTC project in violation of the provisions of the project agreement. DOS has oversight responsibility for ISTC projects; accordingly, the VAT issues have been referred to it for resolution. Additionally, DoD is working to quantify VAT paid on all DoD funded ISTC projects. DoD will work collaboratively with DOS to obtain a rebate of previously paid VAT and develop safeguards to ensure that no additional VAT is paid on DoD funded projects.

The audit team reported the following technical evaluations of these projects:

- ?? Project 1197p at SRCAM has gone well, with five publications and one in process. Also the project has contributed unique new data to our knowledge of *Yersinia*.

- ?? Project 1813p at SRCAM has been unable to generate or express the Puumala virus DNA vaccine candidate.
 - ?? The aerosol formulations, so far, have not resulted in a DNA vaccine formulation that gives an immune response in mice.
 - ?? Some useful information on what not to do with DNA vaccines has been generated. Several meeting abstracts but no publications were written.
- ?? Project 1291-2p at Vector has been very successful, with good productivity and some novel findings. For example, Russian strains of Crimean Congo Hemorrhagic Fever are related but differ from strains circulating elsewhere.
- ?? Project 1979p at Vector has been successful in that the necessary aseptic conditions have been implemented to the process system, and system engineering and project management skills have been greatly enhanced.
- ?? Project CSP-7 at Vector was well designed, installed, and managed and has created a communication infrastructure that will give long-term benefit to Vector and its collaborator.
- ?? Project 1699p at Vector successfully provided an installed modern integrated physical security system that provides a safe and secure work environment for scientific research and production facilities within the research area of Vector.

DoD is monitoring the solvency of Russian BW laboratories and is working to transfer biological strains and nucleic acids from Russia to the U.S., and conclude an implementing agreement with Russia.

Concern with the Solvency of BW Labs

The USG is concerned about the solvency of the FSU laboratories supported by CTR funds through the ISTC. For example, as noted in the DCAA audit summary above, SRCAM is in bankruptcy. If these laboratories cease operations, the diversion of human capital could threaten the United States. The concern is how best to help these institutions become viable entities that support CTR objectives. Possibilities under consideration include providing small laboratories and infrastructure upgrades in conjunction with dismantling their large existing laboratories to increase the effectiveness of the operations and lower operating costs.

To address these concerns DoD is participating in an Interagency Working Group including members from DTRA, OSD Policy, DOS, and others to evaluate each institute. Factors for evaluation include each facility's safety, security, potential to develop commercial products, etc. The intent is to develop a coordinated course of action for the USG.

Exchange of Biological Strains and Nucleic Acids Between Russia and the U.S.

The CBR program was established to promote collaboration between scientists in the U.S. and former BW scientists from the FSU. Much of the progress in biological research comes from looking at the unique properties of an organism in a collection and relating its molecular properties with the changes in behavior or phenotype of the strain. In addition, the foundation of

peer-reviewed science is the ability to reproduce the work of another scientist to validate the work and to move forward. Without transfer of biological samples and material from biological organisms, none of the above can occur.

ISTC project #1215, "Monitoring of Anthrax Infection," is a current effort on which difficulties have been encountered in transferring strains from Russia to the U.S. There were initial transfers of strains to the U.S. in 2000, and the Centers for Disease Control (CDC) and SRCAM signed a bilateral strain exchange agreement in May 2001. However, Russia's Department of Export Control blocked SRCAM from complying with this agreement and subsequent requests for transfer. In April 2003 Russia finally agreed to release the data upon receipt of letters from the collaborating institutions, DoD, and either DOS or Department of Commerce. As of the end of October 2003 these letters were transmitted to Russia. CDC is currently assessing which DNA data is required and will coordinate this request with Russia and SRCAM.

DoD is also having difficulties obtaining strains of Crimean-Congo Hemorrhagic Fever Virus (ISTC project #1291) and Variola Virus (Smallpox DNA) (ISTC project #1987) from Institutes in Russia. Although these problems are more at the institute level, they are reacting to pressure from the Russian government. Also, the CDC is not determining the sequences DoD has requested from the anthrax strain. The report has been recently released and DoD will begin evaluating it early in CY 2004. CDC is working to get smallpox DNA transferred to its laboratory and U.S. Army Medical Research Institute of Infectious Diseases is working to get Crimean-Congo Hemorrhagic Fever Virus strains.

Inefficiencies Caused by Absence of an Implementing Agreement with Russia

The BWPP Program has no CTR implementing agreement with Russia. The CTR Program relies on the MOA between the U.S. and the ISTC to implement projects. Although this agreement provides protections, exemptions, and A&E rights equivalent to those in the U.S.-Russia CTR Umbrella Agreement, the ISTC is better suited for cooperative biological research projects. The ISTC is an inefficient mechanism for implementing engineering projects and has limited the types of projects DoD is willing to initiate in Russia. DoD will continue to pursue a BW implementing agreement with Russia.

Figure 4 An estimate of the total amount in millions that will be required by the U.S. to achieve Objective 3 of the CTR Program.

Implementing Agreement / Project	Prior Year	FY 2004	FY 2005	FY 2006 - FY 2009	Total
<i>Nuclear Weapons Storage Security (Russia)</i>					
Personnel Reliability and Safety	\$11.7	\$0.1	\$0.1		\$11.9
<i>BW Proliferation Prevention (FSU)</i>					
Cooperative Biological Research	\$43.3	\$36.6	\$13.1	\$99.6	\$192.6
Budget	\$55.0	\$36.7	\$13.2	\$99.6	\$204.5
* Estimated Program FYDP Total					

Objective 4: Support Defense and Military Cooperation with the Objective of Preventing Proliferation

4.1 BIOLOGICAL WEAPONS PROLIFERATION PREVENTION (BWPP) PROGRAM-FSU

Currently, all projects in Russia fall under the ISTC Agreement and the ISTC Funding Memorandum of Agreement. Projects in other FSU states may also be initiated under the ISTC agreements. The WMDIE Kazakhstan Implementing Agreement provides another means to implement BW projects in Kazakhstan. The U.S. has signed an umbrella agreement and DoD signed an implementing agreement with Uzbekistan and Georgia. DoD is negotiating a similar implementing agreement with Ukraine.

4.1.1 BW Threat Agent Detection and Response

Five-Year Plan, Purpose, and Resources: This new project 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 pathogen collections from existing sentinel stations and safely and securely transporting them to central labs for consolidation. These actions will help prevent the proliferation of dangerous pathogens by integrating host nation scientists and institutes with expertise in BW research and production into the ethical international scientific community. The focus of monitoring and consolidation efforts will be on dangerous pathogens posing particular risks for theft, diversion, accidental release, or use by terrorists. This project will continue through FY 2009. The strengthened network will include:

- ?? Secure central reference labs to rapidly diagnose viral and bacterial diseases (human and animal) equipped with modern diagnostics capabilities that meet biosafety standards;
- ?? Sentinel stations to detect suspicious outbreaks among human and animal populations;
- ?? Communications and data storage systems to manage and rapidly disseminate the data generated by the surveillance system and reduce the need to store dangerous pathogen strains at field stations;
- ?? Mobile epidemiological response teams to investigate possible outbreaks, determine their origin, and assess how to prevent their recurrence;
- ?? Safe, secure, and efficient pathogen transportation capabilities that follow DoD standards of biosafety and biosecurity; and
- ?? Training of personnel in biosecurity, biosafety diagnostics, and epidemiology.

This project will access medical intelligence; consolidate pathogen collections into central labs; modernize diagnostic capabilities to minimize the need for pathogen retention at vulnerable field stations; and develop a network of trained, ethical scientists to prevent, deter, and contain a bioattack. This project may also enhance Russia's smallpox vaccine production capacity to deter and counter smallpox terror threats outside the U.S. The vaccine production facility is notional only and will not be implemented until an implementing agreement is concluded with Russia.

The estimated cost of this project increased from \$103.0 million to \$122.9 million. This increase is due to the expansion of the program to include Georgia.

Description of CTR Activities Carried Out in FY 2003: BNI was awarded a contract for execution of all BWPP work outside of Russia.

Program Management: DoD management and technical teams made five trips. On several trips, DoD teams traveled to ministry offices in Georgia, Kazakhstan, and Uzbekistan to meet with principals of various ministries and to conduct presentations to various institutes related to the BW Threat Agent Detection and Response (TADR) project. DoD conducted several 1-2 hour briefings with each nation's key ministries outlining DoD's intent to establish an integrated, secure, and sustainable disease surveillance system. The teams also held technical and programmatic discussions related to infrastructure challenges, TADR program requirements, the CTR implementation strategy, and the vital role each director will play in TADR's success.

A DoD team also traveled to Atlanta to meet with principals of the CDC International Surveillance Team. Meetings were held to review and discuss their proposal for assistance with the TADR project in Central Asia. Programmatic and technical topics included proposed laboratory equipment and budget as well as potential infrastructure challenges for this project.

4.2 WEAPONS OF MASS DESTRUCTION PROLIFERATION PREVENTION INITIATIVE PROGRAM—FSU, EXCEPT RUSSIA

The WMD-PPI seeks to bolster non-Russian FSU states' ability to prevent proliferation of WMD across their borders.

FY 2005-FY 2009 Five-Year Plan, Purpose, and Resources: In accordance with the Border Security Assistance Implementing Agreement with Uzbekistan, and other agreements with Azerbaijan, Kazakhstan, and Ukraine, 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. Agreements for this initiative are being concluded with Azerbaijan, Kazakhstan, and Uzbekistan (amendment). These include selected Defense, Interior, National Guard, Border Guard, and Customs organizations of approved non-Russian recipient states. Logistics support will be required for several years while the program assists the recipient states in developing a local logistics capability. DoD is coordinating closely with DOS, DOE, U. S. Coast Guard, and the Department of Commerce in their related programs. Increased efforts by terrorists to secure WMD and WMD components, materials, and expertise have demonstrated a need to improve the security of the non-Russian FSU states' borders, to improve the ability of these states to investigate WMD-related thefts and smuggling, and to secure WMD materials within their borders.

DoD will provide equipment, installation, training, and other support to the State Customs Service of Uzbekistan. This will enhance Uzbekistan's ability to monitor its borders for the illegal transport of fissile and radioactive material by providing radiation detection equipment and related training at key ports of entry. DoD will work closely with DOE, which will assume the long-term sustainment of monitoring equipment installed by DoD.

The estimated cost for this project increased from \$178.0 million to \$274.1 million. The increase funds this program at approximately \$40.0 million per year through the FYDP.

Description of CTR Activities Carried Out in FY 2003: DoD teams took trips to Azerbaijan, Kazakhstan, Ukraine, and Uzbekistan to propose implementing agreements or amendments to existing agreements under which the WMD-PPI would be implemented and to begin assessing the recipient state's needs and requirements.

Program Management: DoD management and technical teams, comprised of OUSD(P) and DTRA members, made five trips. A team traveled to Uzbekistan and held discussions with Border Guards and government officials regarding additional portal monitoring assistance and negotiation of an implementing agreement amendment. Several equipment and procedural problems were noted that will be addressed in conjunction with the proposed follow-on project.

DoD conducted the first trip dedicated to the development of a CTR WMD-PPI initiative in Ukraine. The team met with Border Guards, Customs, and MFA to discuss the need to negotiate an implementing agreement and began the process of determining requirements.

DoD made two trips to Azerbaijan and met with the Deputy Prime Minister and MFA, MOD, Navy, and Border Guard personnel to discuss the program, table the implementing agreement and to perform a technical assessment of requirements. During these trips, DoD also visited Kazakhstan twice and met with MFA, MOD, Navy, and Border Guard personnel to perform a technical assessment of requirements and table the implementing agreement.

Additionally, a DoD team traveled to Brunswick, Georgia, to observe U.S. Customs training operations. Information gained during this trip will be applied to the development of new WMD-PPI projects in Uzbekistan, Ukraine, Kazakhstan, and Azerbaijan.

4.3 DEFENSE AND MILITARY CONTACTS

FY 2005-FY 2009 Five-Year Plan, Purpose, and Resources: In accordance with the Defense and Military Contacts instruments identified in Appendix A, this project responds to DoD's goal to expand contacts between defense establishments to promote U.S. defense objectives in the FSU states. In Russia, these objectives include stemming the proliferation of Russian WMD, supporting implementation of the new strategic framework, and enhancing the U.S.-Russia partnership. In the non-Russian FSU states, these objectives include stemming the proliferation of WMD and increasing U.S. access by strengthening defense partnerships.

Future events will include exchange visits between the Secretary of Defense, the Chairman of the Joint Chiefs of Staff, and their FSU states counterparts, bi-annual meetings of the Bilateral Defense Consultations, exchange visits of the states' senior officials, exchange visits between the Director of the Defense Intelligence Agency and the FSU Chiefs of Military Intelligence, exchange visits of defense delegations, and exchange visits between the U.S. Combatant Commanders and key military leaders.

Other activities include visits of senior and mid-level officers; visits between naval, air, and ground units; bilateral exercises; and ship visits. Through conferences, seminars, familiarization visits, traveling contact teams, and combined military exercises, DoD has

advanced counterproliferation objectives as well as democratic military institutions within the FSU states while furthering U.S. national security interests.

The estimated cost for this project decreased from \$175.4 million to \$107.1 million. This decrease reflects an alignment of FY 2005 and out-year funds to the FY 2003 execution level.

Description of CTR Activities Carried Out in FY 2003: A total of 300 events were conducted. Highlights included Bilateral Defense Consultations, a defense assessment and implementation plan in Azerbaijan, and assessment of the 11th Brigade as follow up to the “train and equip” program in Georgia, a mountainous terrain exercise exchange with Kazakhstan, an Arctic search and rescue exercise with Russia, and the Rough and Ready Exercise with Ukraine.

4.4 DEFENSE CONVERSION

In accordance with the Defense Conversion Implementing Agreements, projects supporting this program are designed to facilitate the conversion of the industrial and scientific infrastructure that supported WMD and WMD component production to non-military commercial activities. DoD recognizes the statutory prohibition placed on these programs and is closing out these projects utilizing funds appropriated prior to the prohibition.

4.4.1 Defense Conversion–Russia

Under the Defense Conversion Implementing Agreement for Russia, projects supporting this program are designed to facilitate the conversion of the Russian industrial and scientific infrastructure that supported WMD and WMD-component production to non-military commercial activities.

4.4.1.1 Defense Industry Conversion–Russia

This project provides support to facilitate the conversion of the Russian industrial infrastructure that supported WMD and WMD component production to non-military commercial activities.

Location: Moscow.

Program Management: The CLS contractor conducted two site visits to perform transfer of custody services.

4.4.1.2 Housing Conversion–Russia (Completed Project)

This program provided support to accelerate the demobilization of WMD officers by providing housing production technologies and forming joint ventures between former Russian WMD production plants to facilitate transition to non-military civilian and commercial activities.

Location: Moscow.

Program Management: None.

4.4.2 Defense Conversion–Ukraine

Under the Defense Conversion Implementing Agreement for Ukraine, DoD is providing assistance in the conversion of its defense industry and reorientation of military technologies and capabilities into civilian activities. The agreement also provides housing for demobilized SRF officers and their families.

4.4.2.1 Defense Industry Conversion–Ukraine

This project provides support to facilitate the conversion of Ukrainian industrial infrastructure that supported WMD and WMD component production to non-military commercial activities.

Locations: Kiev and Kharkiv.

Program Management: None.

A&E: This project was included in the July 2003 A&E summarized at Paragraph 1.3.

4.4.2.2 Housing for Demobilized SS-19 SRF–Ukraine (Completed Project)

In accordance with the SNAE Implementing Agreement, the objective of this project was to provide housing for the officers of 13 demobilized SRF Regiments.

Locations: Pervomaysk and Khmelnytskyi.

Program Management: This project is completed; no management activity occurred.

4.4.3 Defense Conversion–Kazakhstan

This program was established to facilitate conversion of the industrial and scientific infrastructure that supported WMD production to non-military commercial purposes. DoD is providing assistance to enhance opportunities for civilian economic growth to five former military-industrial communities through a community-based economic revitalization program.

Locations: Astana, Almaty, Alatau Village, Aktau, Kurchatov, and Pavlodar.

Program Management: None.

4.5 EXPORT CONTROL (TRANSFERRED TO DOS)

In accordance with Export Control Implementing Agreements with Ukraine, Kazakhstan, and Georgia, these programs provided assistance to strengthen FSU states' export control efforts, enabling them to more effectively control the export of materials and technology to aid in the prevention of proliferation of WMD and related technologies. Responsibility for these programs was transitioned to DOS in October 1997, with the exception of the right to perform A&Es, which remains with DoD. Therefore, these projects will be excluded from future versions of the CTR Annual Report except for the result of A&Es performed by DoD.

4.6 SCIENCE AND TECHNOLOGY CENTERS (STCS)

DOS oversees all STC activities, including those activities supported by DoD CTR funding. Audits of STC activities are conducted in accordance with applicable agreements and with generally accepted auditing standards; *Government Auditing Standards*, issued by the Comptroller General of the United States; and Office of Management and Budget Circular A-133, *Audits of Institutions of Higher Education and Other Nonprofit Institutions*. Auditing the financial aspects of the STCs, both internally and for specific projects, and monitoring the technical progress of projects funded by the STCs are key management activities.

The public accounting firm of Deloitte Touche Tohmatsu reported no significant negative findings in its audit report of the ISTC's comparative financial statements for calendar years 1999 and 2000. Additionally, the public accounting firm of Lubbock Fine audited the Financial Statements of the Science and Technology Center-Ukraine for the year ended December 31, 2000, and reported that it was free of material misstatement. ISTC project managers provide quarterly project updates and meet with DTRA managers who also regularly visit project sites.

DoD provides an on-site partner coordinator and senior project manager to facilitate CTR Partner Projects, visits with Russian institutes, and interaction with Russian scientists. This individual acts as a point of contact for ISTC associated projects, travel, and official U.S. visits, and facilitates CTR special and time-sensitive requests. Status updates for individual tasks were provided as necessary. Project and proposal reviews were performed as required by ISTC, with comments provided to ISTC and DoD.

The STCs are monitored through several mechanisms. The DOS sits on the Boards of Governors and votes the U.S. position on project funding based on interagency review of proposed projects. The Board of Governors meetings are held quarterly for the ISTC and semi-annually for the STCU. During project execution, the ISTC and STCU conduct oversight activities to ensure that funds are used as approved by their Boards of Governors. Each active ISTC/STCU project receives an on-site monitoring visit at least once a year. In addition, each active project is subject to ISTC/STCU audit. The audit reports were documented in the ISTC and STCU annual reports. Copies of these reports were forwarded to DoD for review.

4.7 DEFENSE ENTERPRISE FUND (DEF)

In accordance with the CTR Act of 1993, Section 1204, the DEF is a privately managed venture capital fund formed to promote the conversion of FSU defense-related industries into non-military commercial businesses. The DEF makes investments in carefully chosen joint ventures between the enterprises and Western partners. This activity is neither managed by DoD nor subject to A&Es applicable to other CTR activities. Accountability for assistance provided through the DEF is provided through the ongoing business relationships established by the DEF, annual financial audits of the DEF by an independent auditor, and regular visits and reviews by the CTR program manager. Ernst & Young LLP, independent certified public accountants, audit the DEF's financial statements. The audited consolidated financial statements for the years ended September 30, 2002 and 2001 were forwarded to DoD for review upon completion.

Program Management: A management team traveled to Russia and Kazakhstan to review the status of the DEF's investment enterprises (KKI, Nursat, Rusnet, and Ramec) and prepare for their sale. The team toured facilities and evaluated the status of the investment enterprises. Generally, the management team had positive news, reporting improved business conditions and asserting that the sale of each investment should not be a significant concern. DoD management conducted a second trip to Kazakhstan to discuss the status of the sale of each DEF investment. Discussions included a review of pending offers to purchase Nursat and KKI.

4.8 GOVERNMENT-TO-GOVERNMENT COMMUNICATIONS LINK (GGCL)–UKRAINE (COMPLETED PROJECT)

In accordance with the GGCL Implementing Agreement, this project provides a communication link between Ukraine's MOD and the USG to support START and Intermediate Nuclear Forces (INF) Treaty arms reduction activities.

Location: Verification Center in Kiev.

Program Management: This is a completed project, and no program management trips were conducted. However, receipt of required START and INF Treaty reports throughout the year confirmed that DoD-provided equipment was being used for its intended purpose.

4.9 GOVERNMENT-TO-GOVERNMENT COMMUNICATIONS LINK (GGCL)–KAZAKHSTAN (COMPLETED PROJECT)

In accordance with the GGCL Implementing Agreement, DoD provided a communication link between MOD Kazakhstan and the USG to support START and INF Treaty arms reduction activities.

Location: Almaty.

Program Management: This is a completed project; however, receipt of required START and INF Treaty reports throughout the year confirmed that DoD-provided equipment was being used for its intended purpose.

Figure 5 An estimate of the total amount in millions that will be required by the U.S. to achieve Objective 4 of the CTR Program.

Implementing Agreement / Project	Prior Year	FY 2004	FY 2005	FY 2006 - FY 2009	Total
<i>BW Proliferation Prevention (FSU)</i>					
BW Threat Agent Detection and Response	\$16.3	\$2.1	\$13.5	\$91.0	\$122.9
<i>WMD Proliferation Prevention</i>					
WMD Proliferation Prevention Initiative - (Non-Russia FSU)	\$39.8	\$29.4	\$40.0	\$164.9	\$274.1
<i>Defense and Military Contacts</i>					
Defense & Military Contacts	\$58.2	\$8.9	\$8.0	\$32.0	\$107.1
Budget	\$114.3	\$40.4	\$61.5	\$287.9	\$504.1
* Estimated Program FYDP Total					

Other Program Support

This program area assists in the overall implementation of the CTR Program in areas that are not unique to established projects, such as supporting negotiations leading to the conclusion of an implementing agreement. Other program support includes implementation of the A&E program, in accordance with the appropriate umbrella and implementing agreements with recipient states, and overall program management and administration costs.

Audits and Examinations (A&Es)

FY 2005-FY 2009 Five-Year Plan, Purpose, and Resources: The objective of the A&E program is to ensure that assistance provided under the DoD CTR Program legislation is accounted for and used efficiently and effectively for its intended purpose. In accordance with the applicable portions of CTR umbrella and implementing agreements, the USG has the right to examine the use of any material, training, or other services provided under these agreements. A&Es may continue for a period of three years after expiration of the respective umbrella agreements with Kazakhstan, Georgia, Moldova, and Uzbekistan. For Ukraine, A&Es may continue through expiration of the U.S.-Ukraine CTR Umbrella Agreement. A&Es can be performed for CTR projects in Russia for three years after expiration of the umbrella agreement.

The estimated cost for this project remains \$5.8 million.

Description of CTR Activities Carried Out in FY 2003: DoD conducted 19 A&Es: 14 in Russia, 3 in Ukraine, and 2 in Kazakhstan. Through FY 2003, the U.S. has conducted 145 A&Es in the recipient states.

Program Management/Administration

FY 2005-FY 2009 Five-Year Plan, Purpose, and Resources: Program management and administration funding supports CTR requirements that are not unique to established projects. For example, this effort includes assistance for development of technical requirements during the initial stage of project development before appropriate implementing agreements are signed. Such activities include CTR Program delegation and technical team travel expenses, translator/interpreter support, contracted SETA, and CTR Program personnel at U.S. embassies in recipient states.

The estimated cost for this project decreased from \$223.1 million to \$222.2 million. This decrease is due to revised inflation rates.

Description of CTR Activities Carried Out in FY 2003: Contracted SETA support through an incrementally funded contract was provided by the Threat Reduction Support Center (TRSC) team, which included: Science Applications International Corporation, the prime contractor and TRSC manager; and subcontractors: Radian, Inc.; Teledyne Brown Engineering, Inc.; ACS Defense, Inc.; Automation Research Systems, Limited; and ASET International Services Corporation. SETA provided engineering and technical expertise; supported the development of independent government cost estimates; provided logistics, transportation, and export control management expertise; developed draft issue papers, briefings, and reports to

senior management; provided financial management experience; and provided technical and analytical support for source selection boards.

DoD maintained a forward presence in U.S. embassies in Russia, Ukraine, Kazakhstan, and Uzbekistan to provide direct in-country support for CTR Program implementation.

Figure 6 An estimate of the total amount in millions that will be required by the U.S. to achieve Other Program Support for the CTR Program.

Implementing Agreement / Project	Prior Year	FY 2004	FY 2005	FY 2006 - FY 2009	Total*
Audits and Examinations	\$2.8	\$0.5	\$0.5	\$2.0	\$5.8
Program Management/Administration	\$133.1	\$12.6	\$13.8	\$62.7	\$222.2
Budget	\$135.9	\$13.1	\$14.3	\$64.7	\$228.0
* Estimated Program FYDP Total					

Figure 7 Summary of CTR Program FYDP funding by objective in millions.

Objective	Prior Year	FY 2004	FY 2005	FY06-FY09	Total
1. Dismantle former Soviet Union WMD and Associated Infrastructure	\$2,253.4	\$276.1	\$220.6	\$488.0	\$3,238.1
2. Consolidate and secure FSU WMD and related technology and materials	\$928.1	\$82.3	\$99.6	\$581.0	\$1,691.0
3. Increase transparency and encourage higher standards of conduct	\$55.0	\$36.7	\$13.2	\$99.6	\$204.5
4. Support defense and military cooperation with objective of preventing proliferation	\$114.3	\$40.4	\$61.5	\$287.9	\$504.1
Other Program Support	\$135.9	\$13.1	\$14.3	\$64.7	\$228.0
CTR Programs that are complete or require no additional funding	\$794.7				\$794.7
Total Budget	\$4,281.4	\$448.6	\$409.2	\$1,521.2	\$6,660.4
* Estimated Program FYDP Total					

CTR Accountability Actions by Project for FY 2003

The CTR Accountability Actions by Project for FY 2003 Grid on the following pages summarizes activities undertaken by the CTR Program to ensure that assistance is used for its intended purpose and to determine whether the projects are implemented efficiently and effectively. This grid also highlights significant items of concern by project.

Key to CTR Accountability Actions by Project for FY 2003 Grid:

- * Each Defense & Military Contacts event includes USG participation and has a designated event Officer responsible for costs and activities. These events are not counted as CTR Management Actions on this summary table as they are military exchanges as opposed to contract and project management activities.
- ** CTR program managers (PMs) travel to FSU locations to review all aspects of project status, provide support to OSD Policy, review/accept deliverables, negotiate contracts, meet with executive agents and U.S. contractors, etc. PMs made 163 trips to the FSU during FY 2003. Many trips supported multiple objectives and have been counted against more than one program/project.
- *** CLS site visits are made to perform corrective/preventive maintenance actions and/or provide letter of verification and transfer of custody support.
- **** A&Es, PM trips, and CLS actions shown in the program (***bold, italic***) rows were performed for the benefit of each project under the given program.

CTR ACCOUNTABILITY ACTIONS BY PROJECT FOR FY 2003

Paragraph Reference	Program / Project****	A&E(s)		PM Trips **	CLS		U.S. On-Site Support	Concerns
		Planned	Completed		Visits***	Maintenance Actions		
	RUSSIA							
	<i>Strategic Offensive Arms Elimination - Russia</i>			7				
1.1.1	Emergency Response Support Equipment	1	1		6	28		
1.1.2	Solid Propellant ICBM/SLBM and Mobile Launcher Elimination			23	17	92	Y	
1.1.3	Liquid Propellant ICBM and Silo Elimination	1	1	5	10	295	Y	
1.1.4	SLBM Launcher Elimination/SSBN Dismantlement	1	1	10	20	504		
1.1.5	Spent Naval Fuel Disposition			6				
1.1.6	Liquid Propellant SLBM Elimination	1	1	5	9	51	Y	
1.1.7	Liquid Propellant Disposition Systems			5	17	99	Y	
1.1.8	Solid Propellant Disposition Facility			1	1			
1.1.9	Heavy Bomber Elimination Equipment					8		
1.1.10	Low Level Radioactive Waste Volume Reduction							
2.1, 3.1	<i>Nuclear Weapons Storage Security - Russia</i>			4				<i>The Russian MOD has not complied with requirements to provide inventories with the location of assistance provided.</i>
2.1.1	Automated Inventory Control & Management System (AICMS)	1	1	5	14			
2.1.2	Guard Force Equipment and Training			6	15	28		
2.1.3	Nuclear Weapons Storage Site Support	2	2	4	1			Improperly stored, rusting generators were noted during the March A&E mission.
2.1.4	Site Security Enhancements	2	2	8	14			
2.1.5	Security Assessment, Training, and Logistics							
3.1.1	Personnel Reliability and Safety	1	1	3	13	41		
2.2	<i>Nuclear Weapons Transportation Security - Russia</i>			4				
2.2.1	Nuclear Weapons Transportation			2				
2.2.2	Railcar Maintenance and Procurement	1	1	2				
2.2.3	Transportation Safety Enhancements	1	1	3	4			
2.2.4	Supercontainers	1	1					
2.2.4	Emergency Support Equipment	1						
2.3, 2.3.1	<i>Fissile Material Storage Facility - Russia</i>			13			Y	<i>Absence of a transparency agreement with the Russian Government.</i>

Paragraph Reference	Program / Project****	A&E(s)		PM Trips **	CLS		U.S. On-Site Support	Concerns
		Planned	Completed		Visits***	Maintenance Actions		
2.3.2	Fissile Material Storage Facility Transparency - Russia							
2.3.3	<i>Fissile Material Containers - Russia</i>				7	8		<i>DoD cannot perform audits due to the absence of Agreements with the Russian MinAtom. DoD is pursuing guidelines to audit containers at the FMSF.</i>
1.2	<i>Chemical Weapons Destruction - Russia</i>			4				
1.2.1	Chemical Weapons Destruction Facility				5		Y	
1.2.2	Chemical Weapons Production Facility Demilitarization			6				
1.2.3	Chemical Agent Analytical Monitoring	1	1	1	3	6		
2.6	Chemical Weapons Site Security							
4.4.1	<i>Defense Conversion - Russia</i>							
4.4.1.1	Industry Conversion				2			
4.4.1.2	Housing Conversion							
	Russia Total	15	14	127	158	1,160		
	UKRAINE							
	CEDT			4	8	523		
1.3	<i>Strategic Nuclear Arms Elimination - Ukraine</i>	<i>1</i>	<i>1</i>	<i>1</i>				
1.3.1	SS-24 Missile Disassembly, Storage, and Elimination			5	48	795	Y	
1.3.2	SS-24 Missile Motor Elimination							
1.3.3	Bomber & ALCM Elimination			11	146	896	Y	
1.3.4	SS-24 Propellant Disposition Facility			4	3	42	Y	
1.3.5	Non-Deployed ICBM Elimination Equipment							
1.3.6	Emergency Response Support Equipment							
1.3.7	SS-19 Silo Elimination							
1.3.8	SS-19 Neutralization and Dismantlement Facility			4				
1.3.9	SS-24 Silo Elimination			4	89	1,178	Y	
4.8	<i>Government-to-Government Communications Links - Ukraine</i>							
1.4	<i>WMD Infrastructure Elimination - Ukraine</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>70</i>	<i>291</i>		
1.4.1	National Nuclear Storage Site Elimination			8			Y	
1.4.2	Liquid Missile Propellant and Storage Facility Elimination			4			Y	

Paragraph Reference	Program / Project****	A&E(s)		PM Trips **	CLS		U.S. On-Site Support	Concerns
		Planned	Completed		Visits***	Maintenance Actions		
1.4.3	Airbase Infrastructure Elimination			6				
1.4.4	UFF/NWSA Elimination							
4.5	Export Control – Ukraine							
4.4.2	Defense Conversion - Ukraine	1	1					
4.4.2.1	Industry Conversion							
4.4.2.2	Housing Conversion							
	Ukraine Total	3	3	52	364	3,725		
	KAZAKHSTAN							
4.9	Government-to-Government Communications Links – Kazakhstan							
1.5, 2.4	Weapons of Mass Destruction Infrastructure Elimination – Kazakhstan							
1.5.1	Nuclear Weapons Storage Site Elimination							
1.5.2	Liquid Missile Propellant and Storage Facility Elimination				2	18		
2.4.1	Fissile and Radioactive Materials Prevention of Proliferation			6	1	4		
4.5	Export Control - Kazakhstan							
4.4.3	Defense Conversion - Kazakhstan							
	Kazakhstan Total	0	0	6	3	22		
	UZBEKISTAN							
1.7	Nukus Chem Research Institute Demilitarization – Uzbekistan							
	Uzbekistan Total							
	GEORGIA							
4.5	Export Control – Georgia							
	Georgia Total							
	Former Soviet Union							
2.5, 3.2, 4.1	BW Proliferation Prevention - Former Soviet Union			9				
1.6, 1.6.1	BW Infrastructure Elimination	1	1	5			Y	

Paragraph Reference	Program / Project****	A&E(s)		PM Trips **	CLS		U.S. On-Site Support	Concerns
		Planned	Completed		Visits***	Maintenance Actions		
2.5.1	Biosecurity & Biosafety	1	1	7			Y	During the initial A&E, security deficiencies were noted at Otar and Almaty.
3.2.1	Cooperative Biological Research			6			Y	Solvency of the Labs supported by CTR funding. VAT paid with USG funds in violation of ISTC project agreements. Negative affects on the efficiency of BW Projects caused by the absence of a BW Implementing Agreement with Russia. Difficulties related to the export of deliverables from CTR funded BW projects.
4.1.1	BW Threat Agent Detection and Response			5				
4.3*	<i>Defense & Military Contacts - Former Soviet Union</i>							
4.3*	<i>Defense & Military Contacts - Counter Proliferation</i>							
4.7	<i>Defense Enterprise Fund - Former Soviet Union</i>			2				
4.6	<i>International Science and Technology Center</i>						Y	
4.2	<i>WMD Proliferation Prevention Initiative - FSU</i>			5				
	Former Soviet Union - Former Soviet Union Programs Total	2	2	39	0	0	0	
	Grand Totals	20	19	224	525	4,907		

Accounting Activities Planned for FY 2004

DoD uses a collaborative effort to develop the annual A&E schedule. A key component of the process is the completion of a GAO approved risk analysis matrix for each CTR project. The matrix applies a defined set of weighted factors to CTR projects and yields an assessment of the “at risk” factor for assistance to be used for other than its intended purpose. It incorporates the frequency of CTR program/project manager visits, level of site access, project history, project maturity, U.S. contractor presence on-site, and other confidence-building accountability methods. The risk assessment scores derived from this process, recommendations from program and executive management, and input from the Intelligence Community and DoD teams were key elements in the development of the A&E schedule for FY 2004.

DoD plans to conduct 20 A&Es for FY 2004 (see Figure 8) in Russia, Ukraine and Uzbekistan as part of the Accounting for CTR Program Assistance in the States of the FSU to ensure that CTR assistance is fully accounted for, is used for its intended purposes, and is being used efficiently and effectively. The plan includes the first A&E of the FMSF.

Figure 8 A&E Monthly Activities for FY 2004.

Month	Russia	Ukraine	Uzbekistan	FY 2004
October				
November	1			1
December	1			1
January				
February	2			2
March				
April	3			3
May	1		1	2
June	2			2
July	1	2		3
August	1			1
September	3			3
Total	15	2	1	18

APPENDIX A: CTR PROGRAM UMBRELLA AGREEMENTS AND IMPLEMENTING AGREEMENTS

The Appendix lists all umbrella agreements, implementing agreements, and memoranda of understanding that have been concluded with FSU states and have not expired and/or CTR Program project implementation has not been terminated or completed. Short titles used in the main body of this report are in parentheses.

GEORGIA

Agreement Between the Government of the United States of America and the Government of the Republic of Georgia Regarding Cooperation to Facilitate Humanitarian and Technical Economic Assistance, dated July 31, 1992.

Agreement Between the United States of America and Georgia Concerning Cooperation in the Area of the Prevention of Proliferation of Weapons of Mass Destruction, and the Promotion of Defense and Military Relations, dated July 17, 1997 and extended May 17, 2002. (U.S.-Georgia CTR Umbrella Agreement)

Implementing Agreement Between the Department of Defense of the United States of America and the State Department of the State Border Guards of Georgia Concerning the Provision of Assistance to Georgia Related to the Establishment of Export Control Systems to Prevent the Proliferation of Weapons of Mass Destruction, dated January 30, 1998 and extended July 13, 2002. (Georgia Export Control Implementing Agreement)

Agreement Between the Department of Defense of the United States of America and the Ministry of Defense of Georgia Concerning Cooperation in the Area of Prevention of Proliferation of Technology, Pathogens and Expertise Related to the Development of Biological Weapons, dated December 30, 2002. (Biological Threat Reduction Implementing Agreement - Georgia)

KAZAKHSTAN

Agreement Between the United States of America and the Republic of Kazakhstan Concerning the Destruction of Silo Launchers of Intercontinental Ballistic Missiles, Emergency Response, and the Prevention of Proliferation of Nuclear Weapons, dated December 13, 1993, and extended December 5, 2000. (U.S.-Kazakhstan CTR Umbrella Agreement)

Memorandum of Understanding and Cooperation on Defense and Military Relations Between the Department of Defense of the United States of America and the Ministry of Defense of the Republic of Kazakhstan, dated February 14, 1994. (Defense and Military Contacts Memorandum of Understanding (MOU))

Agreement Between the Department of Defense of the United States of America and the Ministry of Defense of the Republic of Kazakhstan Concerning the Provision of Material, Services, and Related Training to the Republic of Kazakhstan in Connection with the Destruction of Silo Launchers of Intercontinental Ballistic Missiles and Associated Equipment and Components,

dated December 13, 1993 and amended July 1, 1995 and June 10, 1996. (Strategic Offensive Arms Elimination Implementing Agreement)

Agreement Between the Department of Defense of the United States of America and the Ministry of Defense of the Republic of Kazakhstan Concerning the Provision to the Republic of Kazakhstan of Material and Services for the Establishment of a Government-to-Government Communications Link, dated December 13, 1993, amended June 30, 1995, July 20, 1998 and extended August 1, 1997. (Government-to-Government Communications Link Implementing Agreement)

Agreement Between the Department of Defense of the United States of America and the Ministry of Defense of the Republic of Kazakhstan Concerning the Provision to the Republic of Kazakhstan of Emergency Response Equipment and Related Training in Connection with the Removal of Nuclear Warheads from the Republic of Kazakhstan for Destruction and the Removal of Intercontinental Ballistic Missiles and the Destruction of their Silo Launchers, dated December 13, 1993 and extended December 29, 1995 and November 17, 1997. (Emergency Response Implementing Agreement)

Agreement Between the Department of Defense of the United States of America and the Ministry of Defense of the Republic of Kazakhstan Concerning the Provision of Assistance to the Republic of Kazakhstan Related to the Establishment of Export Control Systems to Prevent the Proliferation of Weapons of Mass Destruction, dated December 13, 1993, amended June 30, 1995, and extended December 29, 1995. (Export Control Implementing Agreement)

Agreement Between the Department of Defense of the United States of America and the Ministry of Defense of the Republic of Kazakhstan Concerning the Conversion of Military Technologies and Capabilities into Civilian Activities, dated March 19, 1994 and extended July 20, 1998 and December 17, 1999. (Defense Conversion Implementing Agreement)

Agreement Between the Department of Defense of the United States of America and the Ministry of Energy, Industry, and Trade of the Republic of Kazakhstan Concerning the Elimination Infrastructure for Weapons of Mass Destruction, dated October 3, 1995 and amended June 10, 1996, September 9, 1998, December 17, 1999, July 29, 2000, May 13, 2002, and April 3, 2003. (Weapons of Mass Destruction Infrastructure Elimination Implementing Agreement)

MOLDOVA

Agreement Between the Government of the United States of America and the Government of Moldova Regarding Cooperation to Facilitate the Provision of Assistance, dated March 21, 1994.

Memorandum on Cooperation on Defense and Military Relations Between the Ministry of Defense of the Republic of Moldova and the Department of Defense of the United States of America, dated December 4, 1995. (Defense and Military Relations Moldova Agreement)

Agreement Between the Department of Defense of the United States of America and the Ministry of Defense of the Republic of Moldova Concerning Cooperation in the Area of the Prevention of Proliferation of Weapons of Mass Destruction, and the Promotion of Defense and Military Relations, dated June 25, 1997. (U.S.-Moldova CTR Umbrella Agreement)

RUSSIA

Agreement Between the United States of America and the Russian Federation Concerning the Safe and Secure Transportation, Storage and Destruction of Weapons and the Prevention of Weapons Proliferation, dated June 17, 1992, as amended and extended June 15/16, 1999. (U.S.-Russia CTR Umbrella Agreement)

Agreement Between the Department of Defense of the United States of America and the Ministry of Atomic Energy of the Russian Federation Concerning the Safe and Secure Transportation and Storage of Nuclear Weapons Material through the Provision of Fissile Material Containers, dated June 17, 1992, amended July 23, 1997, and June 10, 1998, and extended May 28, 1996. (Fissile Material Containers Implementing Agreement)

Agreement Between the Department of Defense of the United States of America and the Ministry of Atomic Energy of the Russian Federation Concerning the Safe and Secure Transportation and Storage of Nuclear Weapons through the Provision of Emergency Response Equipment and Related Training, dated June 17, 1992, amended March 26, 1993, and March 23, 1994, and extended May 25, 1994, May 28, 1996, and April 1, 1998. (Emergency Response Implementing Agreement)

Agreement Between the Department of Defense of the United States of America and the President's Committee on Conventional Problems of Chemical and Biological Weapons of the Russian Federation Concerning the Safe, Secure, and Ecologically Sound Destruction of Chemical Weapons, dated July 30, 1992 and amended March 18, 1994, May 28, 1996, April 10, 1997, December 29, 1997, January 14, 1999, November 14, 2000, August 29, 2002, October 23, 2002, March 17/18, 2003, and September 23, 2003. (Chemical Weapons Destruction Implementing Agreement)

Agreement Establishing an International Science and Technology Center, dated November 27, 1992. (The International Science and Technology Center Agreement)

Agreement Between the Government of the United States of America and the Government of the Russian Federation on Science and Technology Cooperation, dated December 16, 1993. (Science and Technology Cooperation Russia Implementing Agreement)

Memorandum of Agreement Between the Government of the United States of America and the International Science and Technology Center Concerning the Contribution of Funds for Approved Project to Facilitate the Nonproliferation of Weapons and Weapons Expertise, dated April 15, 1996, amended by annexes May 23, 1997, May 21, 1998, and January 26, 1999, and by amendments to the annex of January 26, 1999, June 29, 1999, and September 18, 2000. (ISTC Funding Memorandum of Agreement)

Agreement Between the Department of Defense of the United States of America and the Russian Aviation and Space Agency of the Russian Federation Concerning Cooperation in the Elimination of Strategic Offensive Arms, dated August 26, 1993 and amended April 3, 1995, June 19, 1995, May 27, 1996, April 11, 1997, February 11, 1998, June 9, 1998, August 16, 1999, and August 8, 2000, and amended and extended August 30, 2002. (Strategic Offensive Arms Elimination Implementing Agreement)

Agreement Between the Department of Defense of the United States of America and the Ministry of the Russian Federation for Atomic Energy Concerning the Safe and Secure Transportation of Nuclear Weapons and Nuclear Weapons Material through the Provision of Cargo and Guard Railcar Conversion Kits, dated August 28, 1992, amended March 23, 1994, and extended May 28, 1996 and April 1, 1998. (Railcar Conversion Implementing Agreement)

Agreement Between the Department of Defense of the United States of America and the Ministry of the Russian Federation for Atomic Energy Concerning the Provision of Material, Services, and Training Relating to the Construction of a Safe, Secure, and Ecologically Sound Storage Facility for Fissile Material Derived from the Destruction of Nuclear Weapons, dated September 2, 1993, amended June 20, 1995, September 6, 1996, April 9, 1997, May 26, 1999, September 15, 1999 and August 21, 2000, and extended January 27, 1999. (Fissile Material Storage Facility Construction Implementing Agreement)

Memorandum of Understanding and Cooperation on Defense and Military Relations Between the Department of Defense of the United States of America and the Ministry of Defense of the Russian Federation, dated September 8, 1993. (Defense and Military Contacts MOU)

Protocol on Cooperation in the Implementation of Certain Defense Conversion Projects, dated December 16, 1993, amended March 18, 1994, extended December 15, 1997, and January 21, 2000. (Defense Conversion Implementing Agreement)

Agreement Between the Department of Defense of the United States of America and the Ministry of Defense of the Russian Federation Concerning Cooperation in Nuclear Weapons Transportation Security through Provision of Material, Services, and Related Training, dated April 3, 1995, amended June 21, 1995, May 27, 1996, June 12, 2000, February 28, 2002, September 19, 2002, and March 26, 2003, and extended January 14, 1999 and January 25, 2000. (Nuclear Weapons Transportation Security Implementing Agreement)

Agreement Between the Department of Defense of the United States of America and the Ministry of Defense of the Russian Federation Concerning Cooperation in Nuclear Weapons Storage Security through Provision of Material, Services, and Related Training, dated April 3, 1995, amended June 21, 1995, May 27, 1996, April 8, 1997, January 14, 1999, November 1, 1999, June 12, 2000, and September 19, 2002 and extended January 14, 1999 and January 25, 2000. (Nuclear Weapons Storage Security Implementing Agreement)

UKRAINE

Agreement Between the United States of America and Ukraine Concerning Assistance to Ukraine in the Elimination of Strategic Nuclear Arms, and the Prevention of Proliferation of Weapons of Mass Destruction, dated October 25, 1993, and extended July 31, 1999. (U.S. - Ukraine CTR Umbrella Agreement)

Memorandum of Understanding and Cooperation on Defense and Military Relations Between the Department of Defense of the United States of America and the Ministry of Defense of Ukraine, dated July 27, 1993. (Defense and Military Contacts MOU)

Agreement Between the Department of Defense of the United States of America and the Ministry of Defense of Ukraine Concerning the Provision of Material, Services, and Related Training to Ukraine in Connection with the Elimination of Strategic Nuclear Arms, dated December 5, 1993

and amended December 18, 1993, March 21, 1994, April 1, 1995, June 27, 1995, June 4, 1996, May 1, 1997, June 12, 1998, July 10, 1999, July 28, 2000, December 4, 2000 and September 9, 2002 and extended January 31, 2001. (Strategic Nuclear Arms Elimination Implementing Agreement)

Agreement Between the Department of Defense of the United States of America and the Expert and Technical Committee of the Cabinet of Ministers of Ukraine Concerning the Provision of Assistance to Ukraine Related to the Establishment of an Export Control System to Prevent the Proliferation of Weapons of Mass Destruction from Ukraine, dated December 5, 1993, amended March 21, 1994, June 27, 1995, and June 12, 1998 and extended December 6, 1995, and August 13, 1999. (Export Control Implementing Agreement)

Agreement Between the Department of Defense of the United States of America and the Ministry of Defense of Ukraine Concerning the Provision to Ukraine of Material and Services for the Establishment of a Government-to-Government Communications Link, dated December 18, 1993 and extended July 24, 1997 and December 28, 1998. (Government-to-Government Communications Link Implementing Agreement)

Agreement Between the Department of Defense of the United States of America and the Ministry of Defense of Ukraine Concerning the Provision to Ukraine of Emergency Response Equipment and Related Training in Connection with the Removal of Nuclear Warheads from Ukraine for Destruction in the Course of the Elimination of Strategic Nuclear Arms, dated December 18, 1993. (Emergency Response Implementing Agreement)

Agreement Between the Department of Defense of the United States of America and the Ministry of Machine Building, Military-Industrial Complex and Conversion of Ukraine Concerning the Conversion of Enterprises of the Military-Industrial Complex, dated March 21, 1994, amended June 27, 1995, February 12, 1996 and June 12, 1998, and extended August 1, 1997 and February 6, 2001. (Defense Conversion Implementing Agreement)

Agreement to Establish a Science and Technology Center in Ukraine, dated October 25, 1993. (Science and Technology Center Ukraine Agreement)

Agreement Between the Department of Defense of the United States of America and the Ministry of Defense of Ukraine Concerning Cooperation in the Elimination of Infrastructure for Weapons of Mass Destruction through Provision to Ukraine of Material, Services, and Related Training, dated June 27, 1995, amended June 4, 1996, and extended June 12, 1998 and October 30, 2001. (Weapons of Mass Destruction Infrastructure Elimination Implementing Agreement)

UZBEKISTAN

Agreement Between the Government of the United States of America and the Government of the Republic of Uzbekistan Concerning Cooperation in the Area of the Promotion of Defense Relations and the Prevention of Proliferation of Weapons of Mass Destruction, dated June 5, 2001. (U.S.-Uzbekistan CTR Umbrella Agreement)

Agreement Between the Department of Defense of the United States of America and the Ministry of Defense of the Republic of Uzbekistan Concerning Cooperation in the Area of Dismantlement of Weapons of Mass Destruction, the Prevention of Proliferation of Weapons of Mass

Destruction, and the Promotion of Defense and Military Relations, dated June 27, 1997.
(Dismantlement of WMD Implementing Agreement)

Agreement Between the Department of Defense of the United States of America and the Ministry of Defense of the Republic of Uzbekistan Concerning Cooperation in the Area of Demilitarization of Chemical Weapons Associated Facilities and the Prevention of Proliferation of Chemical Weapons Technology, dated May 25, 1999 and amended July 11, 2001. **(Chemical Weapons Proliferation Prevention Uzbekistan Implementing Agreement)**

Implementing Agreement on Border Security Assistance Between the Department of Defense of the United States of America and the Ministry of Defense of the Republic of Uzbekistan Under the Agreement Concerning Cooperation in the Area of the Dismantlement of Weapons of Mass Destruction, the Prevention of Proliferation of Weapons of Mass Destruction, and the Promotion of Defense and Military Relations, dated June 2, 2000. **(Border Security Assistance Implementing Agreement)**

Agreement Between the Department of Defense of the United States of America and the Ministry of Defense of the Republic of Uzbekistan Concerning Cooperation in the Area of Demilitarization of Biological Weapons Associated Facilities and the Prevention of Proliferation of Biological Weapons Technology, dated October 22, 2001 and amended 29 July 2003.
(Biological Threat Reduction Implementing Agreement - Uzbekistan)

APPENDIX B: CTR PROGRAM NOTIFICATIONS, OBLIGATIONS, AND DISBURSEMENTS (\$ MILLIONS)

Program Name	Notified In FY2003	Cumulative Notified	Obligated In FY2003	Cumulative Obligations	Expended In FY2003	Cumulative Expended
Strategic Offensive Arms Elimination (R)	\$54.20	\$1,077.78	\$115.78	\$926.95	\$89.91	\$720.26
Nuclear Weapons Storage Security (R)	\$29.20	\$403.10	\$43.05	\$306.70	\$25.10	\$178.91
Nuclear Weapons Transportation Security (R)	\$19.60	\$104.88	\$15.12	\$84.84	\$18.52	\$76.26
Fissile Material Storage Facility Design (R)	\$0.00	\$15.00	\$0.00	\$15.00	\$0.00	\$14.96
Fissile Material Storage Facility (R)	(\$38.30)	\$331.88	(\$3.60)	\$331.20	\$47.17	\$292.83
Fissile Material Containers (R)	\$0.00	\$73.51	(\$0.05)	\$73.32	\$0.10	\$69.27
Elimination of Weapons Grade Plutonium Production (R)	(\$0.03)	\$26.02	(\$0.01)	\$25.94	\$0.00	\$25.93
Chemical Weapons Destruction (R)	\$236.98	\$547.78	\$237.04	\$532.11	\$41.26	\$249.85
Emergency Response (R)	(\$0.07)	\$15.28	\$0.00	\$14.86	\$0.00	\$14.83
Security Enhancements for Railcars (R)	(\$0.00)	\$21.49	\$0.00	\$21.38	\$0.00	\$21.38
Material Control and Accounting (R)	\$0.00	\$44.37	\$0.00	\$43.82	\$0.00	\$43.82
Export Control (R)	\$0.00	\$2.22	(\$0.19)	\$2.04	\$0.00	\$2.04
Armored Blankets (R)	\$0.00	\$3.32	\$0.00	\$2.99	\$0.00	\$2.99
Defense Conversion (R)	\$0.00	\$43.66	(\$0.00)	\$36.96	\$0.30	\$35.97
International Science and Technology Center (R)	\$0.00	\$35.00	\$0.00	\$34.89	\$0.00	\$34.89
Research and Development Foundation (R)	\$0.00	\$10.00	\$0.00	\$10.00	\$0.00	\$10.00
Arctic Nuclear Waste (R)	(\$0.83)	\$29.17	(\$0.17)	\$29.07	\$0.00	\$28.72
Strategic Nuclear Arms Elimination (U)	(\$5.50)	\$544.55	\$5.93	\$491.89	\$26.52	\$456.51
Government-to-Government Communications Link (U)	(\$0.11)	\$2.06	\$0.00	\$2.06	(\$0.00)	\$1.95
WMD Infrastructure Elimination (U)	\$0.00	\$29.42	\$3.27	\$21.30	\$0.69	\$16.41
Emergency Response (U)	(\$0.13)	\$2.81	\$0.00	\$2.81	\$0.00	\$2.80
Multilateral Nuclear Safety Initiative (U)	\$0.00	\$11.00	\$0.00	\$11.00	\$0.00	\$10.99
Material Control and Accounting (U)	(\$0.20)	\$21.98	(\$0.00)	\$21.97	\$0.00	\$21.75
Export Control (U)	(\$0.08)	\$13.85	\$0.00	\$13.85	\$0.02	\$13.85
Defense Conversion (U)	\$0.00	\$55.73	\$0.21	\$55.39	\$0.18	\$54.86
Science and Technology Center (U)	\$0.00	\$15.00	\$0.00	\$14.69	\$0.00	\$14.69
Strategic Offensive Arms Elimination (K)	(\$0.36)	\$59.56	(\$0.06)	\$59.52	\$0.26	\$58.81
Government-to-Government Communications Link (K)	(\$0.06)	\$2.32	(\$0.00)	\$2.32	\$0.00	\$2.31
WMD Infrastructure Elimination (K)	\$8.90	\$50.90	\$0.86	\$33.88	\$2.32	\$31.46
BW Proliferation Prevention (KZ)	\$0.00	\$5.00	\$0.00	\$4.99	\$0.88	\$2.26
Emergency Response (K)	(\$0.68)	\$3.99	\$0.00	\$4.00	\$0.00	\$3.99
Material Control and Accounting (K)	(\$0.54)	\$21.61	(\$0.00)	\$21.89	\$0.00	\$21.82
Export Control (K)	(\$0.04)	\$7.13	(\$0.01)	\$7.12	\$0.00	\$7.11
Defense Conversion (K)	\$0.00	\$17.20	\$0.06	\$17.10	\$0.01	\$17.01
Science and Technology Center (K)	\$0.00	\$9.00	\$0.00	\$9.00	\$0.00	\$9.00
Strategic Offensive Arms Elimination (B)	\$0.00	\$3.34	\$0.00	\$3.34	\$0.00	\$3.34
Continuous Communications Link (B)	(\$0.00)	\$1.02	(\$0.00)	\$1.00	\$0.00	\$1.00
Environmental Restoration (Project Peace) (B)	(\$0.47)	\$24.44	\$0.00	\$24.44	\$0.00	\$24.36
Emergency Response (B)	(\$0.03)	\$4.97	\$0.00	\$4.86	\$0.00	\$4.82
Material Control and Accounting (B)	\$0.00	\$2.59	\$0.00	\$2.60	\$0.00	\$2.59
Export Control (B)	(\$0.10)	\$12.13	(\$0.01)	\$12.01	\$0.01	\$11.98
Defense Conversion (B)	\$0.00	\$19.25	\$0.00	\$19.24	\$0.00	\$19.24
Science and Technology Center (B)	\$0.00	\$1.03	\$0.00	\$1.03	\$0.00	\$1.03
Special Project	\$0.00	\$40.00	\$0.00	\$40.00	\$0.00	\$40.00
Nukus Chemical Research (UZ)	(\$0.05)	\$8.45	(\$0.04)	\$8.33	\$0.14	\$8.27
Export Control (G)	(\$0.00)	\$1.14	\$0.00	\$1.14	\$0.00	\$1.10
Auburn Endeavor	\$0.00	\$4.09	\$0.00	\$4.13	\$0.00	\$4.13
BW Proliferation Prevention (FSU)	\$56.63	\$137.63	\$39.77	\$86.11	\$13.82	\$45.76
Defense and Military Contacts (FSU)	\$15.94	\$68.04	\$5.89	\$31.28	\$2.59	\$22.76
Defense and Military Contacts (R)	(\$2.08)	\$12.58	(\$0.05)	\$11.12	\$0.01	\$10.14
Defense and Military Contacts (U)	(\$2.11)	\$5.39	\$0.01	\$3.93	\$0.01	\$3.80
Defense and Military Contacts (K)	(\$0.63)	\$1.67	(\$0.00)	\$1.50	\$0.00	\$1.33
Defense and Military Contacts (B)	(\$0.02)	\$0.45	\$0.00	\$0.42	\$0.00	\$0.42
Defense and Military Contacts (CP)	(\$0.12)	\$4.17	\$0.02	\$4.16	\$0.27	\$1.55
Defense Enterprise Fund (R)	\$0.00	\$10.00	\$0.00	\$10.00	\$0.00	\$10.00
Defense Enterprise Fund (K)	\$0.00	\$7.00	\$0.00	\$7.00	\$0.00	\$7.00
Defense Enterprise Fund (B)	\$0.00	\$5.00	\$0.00	\$5.00	\$0.00	\$5.00
Defense Enterprise Fund (FSU)	\$0.00	\$44.67	\$0.00	\$44.67	\$0.00	\$44.67
Industrial Partnering Program (FSU)	\$0.00	\$10.00	\$0.00	\$10.00	\$0.27	\$9.61
Science and Technology Center (FSU)	\$0.00	\$3.97	\$0.00	\$3.97	\$0.00	\$3.97
WMD Proliferation Prevention Initiative (FSU)	\$39.80	\$39.80	\$0.00	\$0.00	\$0.00	\$0.00
Other Assessments/Administration Costs	\$15.56	\$135.92	\$13.89	\$116.59	\$5.69	\$102.55
Total CTR	\$424.26	\$4,266.33	\$476.71	\$3,744.74	\$276.03	\$2,960.93

APPENDIX C: CTR EQUIPMENT AND LOCATIONS AS OF SEPTEMBER 30, 2003

This appendix includes government-furnished equipment with a total value greater than or equal to \$5,000 that is located in the FSU and is subject to A&E by DoD. Each item is identified by country, project, unit price, quantity, and total value. Project titles are annotated with the paragraph in the report that provides a description of the assistance (e.g., Fissile Material Storage Facility 2.3). Also identified are the arrival date of the shipment and current location of the equipment. If the equipment is mobile, the location is identified by country. Equipment that has been moved to classified locations is footnoted. As of September 30, 2003, the total original cost of equipment included in this appendix is \$364,643,018.

DoD's accounting system was designed to record transactions at the program level. The system does not provide flexibility to track transactions by project or activity type. Additionally, a sub-ledger is not available to track equipment purchases. Due to these limitations, DoD has historically used off-line data to accumulate equipment values included in the Annual Accounting Assistance Report to Congress. The primary source of data is the shipping database, which is maintained by DoD contractors. Shipping data and supporting documentation is analyzed to determine the description, quantity, cost, and destination of equipment sent to the FSU. Although not all equipment shipments are recorded in this database, it has been historically recognized as the most complete starting point for data accumulation.

DoD's CLS contractor has developed the Electronic Information Delivery System (EIDS), which is a centralized database to track CTR equipment. However, since not all CTR equipment is supported by the CLS contractor, this database is incomplete. DoD is working towards a goal of loading all equipment data to EIDS in order to enhance both reporting and tracking capabilities. As this effort is not complete, DoD utilizes input from the shipping database, program management, the CLS contractor, and data in EIDS to accumulate and verify the equipment listing presented in this appendix. DoD is confident that this appendix includes the vast majority of GFE provided to FSU nations, however DoD acknowledges that, based on the absence of a single comprehensive equipment tracking system, there are opportunities to improve the data. DoD will continue to enhance equipment accountability by consolidating detailed records for existing equipment items in EIDS. Further, DoD has improved procedures to ensure that all new equipment acquisitions are captured in EIDS.

Item Name	Unit Price	Quantity	Total Value	Arrival Date	Location
Country - Russia					
Project: Emergency Response Support Equipment – 1.1.1			\$4,061,799		
Crane with Boom Car	\$2,279,000	1	\$2,279,000	9/7/1999	Krasnoyarsk
Hydro-Cutter	\$284,592	1	\$284,592	9/7/1999	Krasnoyarsk
Excavators	\$369,113	2	\$738,226	9/7/1999	Krasnoyarsk
Grapples, HD-160	\$27,796	2	\$55,592	9/7/1999	Krasnoyarsk
Jacks, Pillow	\$1,800	5	\$9,000	9/7/1999	Krasnoyarsk
MSD Shears	\$183,521	2	\$367,042	9/7/1999	Krasnoyarsk
Processor, General GP-90	\$23,435	1	\$23,435	9/7/1999	Krasnoyarsk

Item Name	Unit Price	Quantity	Total Value	Arrival Date	Location
Processor, Universal	\$224,808	1	\$224,808	9/7/1999	Krasnoyarsk
Truck	\$80,104	1	\$80,104	9/7/1999	Krasnoyarsk
Project: Solid Propellant ICBM/SLBM and Mobile Launcher Elimination 1.1.2			\$4,028,260		
Baler	\$362,230	1	\$362,230	9/21/1995	Piban'shur
Bulldozer	\$455,035	1	\$455,035	9/6/1994	Piban'shur
Crane	\$835,000	1	\$835,000	3/31/1999	Votkinsk
Crane	\$108,333	1	\$108,333	8/10/1995	Perm
Crane	\$370,745	1	\$370,745	4/8/1995	Piban'shur
Cutter, Plasma	\$15,200	1	\$15,200	9/16/1994	Piban'shur
Dump truck	\$63,178	1	\$63,178	11/5/1994	Zlatoust
Equipment, Ventilation	\$2,577	3	\$7,732.11	8/23/1995	Piban'shur
Excavator	\$744,368	1	\$744,368	11/9/1995	Perm
Fire truck	\$191,512	1	\$191,512	6/15/1995	Piban'shur
Truck, Concrete Mixer	\$129,210	1	\$129,210	12/1/1995	Perm
Tool Carrier, Integrated	\$145,675	1	\$145,675	11/5/1994	Perm
Tool Carrier, Integrated	\$144,337	1	\$144,337	8/6/1995	Piban'shur
Tractor	\$63,847	1	\$63,847	11/5/1994	Perm
Tractor	\$77,027	1	\$77,027	7/19/1998	Piban'shur
Trailer	\$18,588	1	\$18,588	11/5/1994	Perm
Trailer, Lowbed Drop Deck	\$56,976	1	\$56,976	10/27/1998	Piban'shur
Wheel Loader	\$239,267	1	\$239,267	11/5/1994	Perm
Project: Liquid Propellant ICBM and Silo Elimination 1.1.3			\$44,912,957		
Ambulance	\$52,415	1	\$52,415	4/10/1998	Surovatikha
Analyzers, Gas	\$5,197	2	\$10,394	7/25/1997	Surovatikha
Analyzers, Nitrogen Dioxide	\$3,012	2	\$6,024	7/25/1997	Surovatikha
Baler	\$362,230	1	\$362,230	8/31/1995	Surovatikha
Boiler Unit	\$681,300	1	\$681,300	11/2/2000	Surovatikha
Bulldozer	\$455,035	1	\$455,035	9/3/1994	Surovatikha
Bulldozer	\$455,035	1	\$455,035	9/7/1994	Surovatikha
Containers, Intermodal	\$54,068	8	\$432,548	4/19/1995	Russia
Containers, Intermodal	\$38,874	28	\$1,088,464	4/19/1995	Russia
Containers, Intermodal	\$38,874	90	\$3,498,636	6/30/1995	Russia
Containers, Intermodal	\$54,068	30	\$1,622,054	8/15/1995	Russia
Containers, Intermodal	\$38,874	75	\$2,915,530	8/15/1995	Russia
Containers, Intermodal	\$38,874	77	\$2,993,277	11/4/1995	Russia
Containers, Intermodal	\$54,068	106	\$5,731,208	11/4/1995	Russia
Containers, Intermodal	\$54,068	12	\$648,816	12/1/1995	Russia
Containers, Intermodal	\$38,874	22	\$855,228	12/1/1995	Russia
Containers, Intermodal	\$54,068	8	\$432,544	2/3/1996	Russia
Containers, Intermodal	\$38,874	34	\$1,321,716	2/3/1996	Russia
Containers, Intermodal	\$42,500	10	\$425,000	8/6/1996	Russia
Containers, Intermodal	\$42,500	30	\$1,275,000	8/7/1996	Russia
Containers, Intermodal	\$59,100	40	\$2,364,000	8/14/1996	Russia
Containers, Intermodal	\$72,860	50	\$3,643,022	10/3/1996	Russia
Containers, Intermodal	\$59,100	12	\$709,200	10/3/1996	Russia
Containers, Intermodal	\$59,100	11	\$650,100	10/7/1996	Russia
Containers, Intermodal	\$42,500	10	\$425,000	10/18/1996	Russia
Containers, Intermodal	\$59,100	17	\$1,004,700	10/18/1996	Russia
Crew Cab, Chevrolet	\$26,231	1	\$26,231	12/4/02	Surovatikha
Suburban, Chevrolet	\$30,788	1	\$30,788	12/4/02	Surovatikha
Crane	\$391,735	1	\$391,735	8/2/1995	Turinskaya

Item Name	Unit Price	Quantity	Total Value	Arrival Date	Location
Crane	\$391,735	1	\$391,735	8/26/1995	Ilyino
Crane	\$391,735	1	\$391,735	8/29/1995	Moshkova
Crane	\$391,735	1	\$391,735	9/1/1995	Mulyanka
Crane	\$391,735	1	\$391,735	9/9/1995	Tambov
Crane	\$391,735	1	\$391,735	9/22/1995	Vanino
Crane	\$174,560	1	\$174,560	11/5/1994	Surovatikha
Crane	\$370,745	1	\$370,745	4/7/1995	Surovatikha
Crane	\$370,745	1	\$370,745	4/7/1995	Surovatikha
Cutter, Plasma	\$15,200	1	\$15,200	9/15/1994	Surovatikha
Cutter, Plasma	\$15,200	1	\$15,200	10/22/1994	Surovatikha
Dump truck	\$63,178	1	\$63,178	11/5/1994	Surovatikha
Engine, Yard	\$560,000	1	\$560,000	2/24/1998	Surovatikha
Equipment, Ventilation	\$2,577	1	\$2,577.37	8/23/1995	Uzhur
Equipment, Ventilation	\$2,577	3	\$7,732.11	8/23/1995	Surovatikha
Excavator	\$744,368	1	\$744,368	11/9/1995	Surovatikha
Fax Machines	\$1,345	5	\$6,725	1/17/1997	Moscow
Fire truck	\$191,512	1	\$191,512	6/15/1995	Surovatikha
Fire truck	\$206,980	1	\$206,980	2/2/1998	Surovatikha
Hoods, Welder's Air Fed	\$895	30	\$26,850	7/25/1997	Surovatikha
Loader, Bobcat	\$26,448	1	\$26,448	12/8/1997	Surovatikha
Loader, Bobcat	\$26,573	1	\$26,573	12/8/1997	Surovatikha
Railcars	\$38,300	10	\$383,000	3/30/1995	Russia
Railcars	\$38,300	25	\$957,500	4/18/1995	Russia
Railcars	\$38,300	25	\$957,500	5/12/1995	Russia
Railcars	\$38,300	25	\$957,500	5/15/1995	Russia
Railcars	\$38,300	15	\$574,500	5/18/1995	Russia
Railcars	\$38,300	6	\$229,800	11/13/1995	Russia
Railcars	\$38,300	4	\$153,200	11/14/1995	Russia
Railcars	\$38,300	4	\$153,200	11/15/1995	Russia
Railcar	\$88,300	1	\$88,300	1/31/1996	Russia
Railcars	\$38,300	10	\$383,000	1/31/1996	Russia
Saws, Cutoff	\$673	30	\$20,204	7/25/1997	Surovatikha
Tool Carrier, Integrated	\$144,337	1	\$144,337	8/7/1995	Surovatikha
Tool Carrier, Integrated	\$144,337	1	\$144,337	8/8/1995	Surovatikha
Tools, Hydraulic	\$7,559	2	\$15,118	9/30/1997	Surovatikha
Tractor	\$76,302	1	\$76,302	9/23/1997	Surovatikha
Tractor	\$77,027	1	\$77,027	11/24/1998	Surovatikha
Trailer	\$16,544	1	\$16,544	9/23/1997	Surovatikha
Trailer, Lowbed Drop Deck	\$56,976	1	\$56,976	12/1/1998	Surovatikha
Trucks	\$124,657	2	\$249,314	8/17/1998	Surovatikha

Project: SLBM Launcher Elimination/SSBN Dismantlement

- 1.1.4			\$27,481,462		
Air Compressors	\$18,594	5	\$92,970	10/2/1998	Bolshoi Kamen
Air Compressors	\$18,594	3	\$55,782	10/5/1998	Severodvinsk
Air Compressors	\$18,594	3	\$55,782	10/29/1998	Murmansk
Asphalt, Layer	\$163,367	1	\$163,367	12/1/1995	Bolshoi Kamen
Baler	\$362,230	1	\$362,230	9/30/1995	Severodvinsk
Baler	\$362,230	1	\$362,230	12/7/1995	Bolshoi Kamen
Baler Shear	\$3,357,609	1	\$3,357,609	8/5/1995	Bolshoi Kamen
Baler Shear	\$3,357,609	1	\$3,357,609	10/23/1995	Severodvinsk
Baler Shear	\$3,357,609	1	\$3,357,609	1/17/1996	Murmansk
Cable Chopper	\$507,230	1	\$507,230	11/4/1994	Bolshoi Kamen
Cable Chopper	\$507,230	1	\$507,230	11/10/1994	Murmansk

Item Name	Unit Price	Quantity	Total Value	Arrival Date	Location
Cable Chopper	\$507,230	1	\$507,230	11/22/1994	Severodvinsk
Computer, Printer	\$36,018	1	\$36,018	4/13/1999	Moscow
Containers	\$5,237	2	\$10,474	2/12/1998	Severodvinsk
Conveyer	\$191,769	1	\$191,769	6/13/1996	Bolshoi Kamen
Conveyer	\$191,769	1	\$191,769	7/30/1996	Severodvinsk
Conveyer	\$191,769	1	\$191,769	8/2/1996	Murmansk
Crane	\$391,735	1	\$391,735	9/8/1995	Severodvinsk
Crane	\$835,000	1	\$835,000	1/17/1995	Severodvinsk
Crane	\$271,888	1	\$271,888	3/7/1995	Bolshoi Kamen
Crane	\$271,888	1	\$271,888	3/15/1995	Severodvinsk
Crane	\$271,888	1	\$271,888	3/16/1995	Murmansk
Crane	\$417,785	1	\$417,785	8/7/1998	Murmansk
Cranes	\$417,785	3	\$1,253,355	10/8/1998	Bolshoi Kamen
Crane, Demag	\$1,241,721	1	\$1,241,721	11/12/2001	Bolshoi Kamen
Cutters, Plasma	\$15,200	2	\$30,400	9/9/1994	Bolshoi Kamen
Cutters, Plasma	\$15,200	3	\$45,600	9/24/1994	Severodvinsk
Cutter, Plasma	\$15,200	1	\$15,200	9/25/1994	Murmansk
Cylinder, Gas	\$42,098	1	\$42,098	8/26/1998	Bolshoi Kamen
Equipment, Ventilation	\$2,460	20	\$49,200	9/9/1994	Bolshoi Kamen
Equipment, Ventilation	\$2,460	30	\$73,800	9/24/1994	Severodvinsk
Equipment, Ventilation	\$2,460	10	\$24,600	9/25/1994	Murmansk
Excavator	\$761,441	1	\$761,441	4/21/1995	Bolshoi Kamen
Excavator	\$919,766	1	\$919,766	4/21/1995	Bolshoi Kamen
Excavator	\$761,441	1	\$761,441	8/1/1995	Murmansk
Excavator	\$761,441	1	\$761,441	10/15/1995	Severodvinsk
Excavator	\$788,590	1	\$788,590	7/30/1996	Severodvinsk
Excavators with Attachments	\$968,947	2	\$1,937,894	10/15/1995	Bolshoi Kamen
Excavator with Attachments	\$880,860	1	\$880,860	8/2/1996	Murmansk
Forklifts	\$43,095	2	\$86,190	3/12/1998	Severodvinsk
Forklifts	\$43,095	2	\$86,190	3/13/1998	Bolshoi Kamen
Forklifts	\$43,095	2	\$86,190	4/3/1998	Murmansk
Fuel Truck	\$76,446	1	\$76,446	11/5/1998	Bolshoi Kamen
Grapple	\$29,000	1	\$29,000	10/2/1998	Bolshoi Kamen
Grapple	\$36,685	1	\$36,685	2/26/1999	Murmansk
Hoods, Welder's Air Fed	\$612	20	\$12,239	9/9/1994	Bolshoi Kamen
Hoods, Welder's Air Fed	\$612	30	\$18,359	9/24/1994	Severodvinsk
Hoods, Welder's Air Fed	\$612	10	\$6,120	9/25/1994	Murmansk
Hoods, Welder's Air Fed	\$603	50	\$30,150	1/27/1998	Severodvinsk
Hoods, Welder's Air Fed	\$635	20	\$12,700	10/29/1998	Murmansk
Magnets	\$95,461	3	\$286,383	11/6/1998	Bolshoi Kamen
Magnet	\$54,382	1	\$54,382	2/26/1999	Murmansk
Radios	\$606	22	\$13,335	3/11/1999	Russian Shipyards
Radios, 16VHF Channel	\$570	20	\$11,399	10/29/1998	Severodvinsk
Reanimation Ambulance	\$27,974	1	\$27,974	8/8/2003	Bolshoi Kamen
Sawzalls	\$1,667	50	\$83,334	10/2/1998	Bolshoi Kamen
Sawzalls	\$1,667	50	\$83,334	10/5/1998	Severodvinsk
Sawzalls	\$1,667	50	\$83,334	2/26/1999	Murmansk
Scale, Track, Railroad	\$16,010	1	\$16,010	10/5/1998	Severodvinsk
Scale, Truck	\$32,445	1	\$32,445	2/27/1998	Bolshoi Kamen
Scalers	\$566	18	\$10,179	1/14/1998	Bolshoi Kamen
Scalers	\$566	18	\$10,179	1/27/1998	Severodvinsk
Shear, Hydraulic	\$11,600	1	\$11,600	10/2/1998	Bolshoi Kamen
Shear, Hydraulic	\$11,600	1	\$11,600	10/5/1998	Severodvinsk
Shear, Hydraulic	\$11,600	1	\$11,600	10/29/1998	Murmansk

Item Name	Unit Price	Quantity	Total Value	Arrival Date	Location
Systems, Cutting Torch	\$1,072	80	\$85,760	1/14/1998	Bolshoi Kamen
Torches	\$3,965	10	\$39,650	10/29/1998	Murmansk
Torches, Cutting	\$1,095	10	\$10,950	10/29/1998	Murmansk
Tractors	\$78,460	2	\$156,921	6/24/1998	Bolshoi Kamen
Tractor	\$78,460	1	\$78,460	7/19/1998	Severodvinsk
Tractor	\$82,977	1	\$82,977	10/29/1998	Murmansk
Tractor	\$82,977	1	\$82,977	9/8/1999	Murmansk
Trailers	\$20,856	2	\$41,713	9/28/1998	Bolshoi Kamen
Trailers	\$31,610	3	\$94,831	9/28/1998	Bolshoi Kamen
Trailers	\$32,237	2	\$64,474	1/24/1999	Murmansk
Trailer, Roll-off	\$44,778	1	\$44,778	10/21/1998	Severodvinsk
Welders, Electric Arc	\$57,173	2	\$114,346	8/10/1995	Bolshoi Kamen

Project: Spent Naval Fuel Disposition - 1.1.5

No GFE equipment with a total value > \$5,000 has been provided under this project.

Project: Liquid Propellant SLBM Elimination 1.1.6			\$2,683,249		
Baler	\$362,230	1	\$362,230	10/30/1995	Sergiev Posad
Baler	\$504,855	1	\$504,855	3/7/2000	Krasnoyarsk
Tractor	\$77,027	1	\$77,027	7/27/1998	Krasnoyarsk
Crane	\$370,745	1	\$370,745	4/20/1995	Krasnoyarsk
Crane	\$174,560	1	\$174,560	11/5/1994	Krasnoyarsk
Bulldozer	\$455,035	1	\$455,035	10/22/1994	Krasnoyarsk
Trailer, Lowbed Drop Deck	\$56,976	1	\$56,976	10/31/1998	Krasnoyarsk
Tractor	\$63,847	1	\$63,847	11/5/1994	Krasnoyarsk
Tool Carrier, Integrated	\$145,675	1	\$145,675	11/5/1994	Krasnoyarsk
Trailer	\$18,588	1	\$18,588	11/5/1994	Krasnoyarsk
Wheel Loader	\$239,267	1	\$239,267	11/5/1994	Krasnoyarsk
Fire truck	\$191,512	1	\$191,512	6/15/1995	Krasnoyarsk
Cutter, Plasma	\$15,200	1	\$15,200	9/14/1994	Sergiev Posad
Equipment, Ventilation	\$2,577.00	3	\$7,732.11	8/23/1995	Sergiev Posad

Project: Liquid Propellant Disposition Systems – 1.1.7			\$17,136,942		
Plants, Steam Generator	\$520,334	2	\$1,040,667	10/13/1997	Krasnoyarsk
Shelter, UDMH Unit 1	\$410,000	1	\$410,000	10/21/1997	Krasnoyarsk
Shelter, UDMH Unit 2	\$410,000	1	\$410,000	10/21/1997	Krasnoyarsk
Tool, Balance	\$102,943	1	\$102,943	10/4/1997	Krasnoyarsk
UDMH Accessories Unit 1	\$53,630	1	\$53,630	1/31/1998	Krasnoyarsk
UDMH Accessories Unit 1	\$80,883	1	\$80,883	1/31/1998	Krasnoyarsk
UDMH Accessories Unit 2	\$53,630	1	\$53,630	1/31/1998	Krasnoyarsk
UDMH Accessories Unit 2	\$80,883	1	\$80,883	1/31/1998	Krasnoyarsk
UDMH Plant - Hydrogen Sys. Unit 1	\$3,166,784	1	\$3,166,784	10/29/1998	Krasnoyarsk
UDMH Plant - Hydrogen Sys. Unit 2	\$3,164,016	1	\$3,164,016	10/29/1998	Krasnoyarsk
UDMH Systems	\$4,286,753	2	\$8,573,506	10/13/1997	Krasnoyarsk

Project: Solid Propellant Disposition Facility - 1.1.8

No GFE equipment with a total value > \$5,000 has been provided under this project.

Project: Heavy Bomber Elimination Equipment – 1.1.9			\$94,948		
Cutter, Guillotine	\$23,726	1	\$23,726	1/17/1995	Engels AFB
Cutter, Guillotine	\$23,726	1	\$23,726	6/15/1995	Engels AFB
Tool, Universal Hydraulic	\$6,628	1	\$6,628	11/5/1994	Engels AFB

Item Name	Unit Price	Quantity	Total Value	Arrival Date	Location
Tool, Universal Hydraulic	\$40,868	1	\$40,868	11/5/1994	Engels AFB

Project: Low Level Radioactive Waste Volume Reduction - 1.1.10 No GFE equipment with a total value > \$5,000 has been provided under this project.

Item Name	Unit Price	Quantity	Total Value	Arrival Date	Location
Project: Chemical Weapons Destruction Facility – 1.2.1			\$3,006,840		
Atomic Emission Detector	\$356,736	1	\$356,736	9/27/1995	Moscow
Computer, Office Equipment	\$37,637	1	\$37,637	4/1/1995	Moscow
Computer, Office Equipment	\$43,863	1	\$43,863	4/1/1995	Moscow
Computers, Office Equipment	\$23,500	2	\$47,000	4/1/1995	Moscow
Copiers with Sorters and Finishers	\$13,018	6	\$78,108	4/1/1995	Moscow
Dual Flame, Lab Chemical Station	\$222,515	1	\$222,515	9/27/1995	Moscow
EC Detector	\$295,528	1	\$295,528	9/27/1995	Moscow
Electrophoresis, Capillary	\$120,879	1	\$120,879	9/27/1995	Moscow
Equipment, Analytical	\$12,000	1	\$12,000	10/27/1995	Moscow
Equipment, Analytical	\$31,371	1	\$31,371	1/23/1996	Moscow
Equipment, Analytical Lab	\$42,448	1	\$42,448	1/23/1996	Moscow
Equipment, Analytical Lab	\$27,200	1	\$27,200	6/4/1996	Moscow
Laboratory Chemical Stations	\$21,238	3	\$63,714	8/29/1996	Moscow
Mass Selective Detector	\$303,413	1	\$303,413	9/27/1995	Moscow
Mass Spectrometer	\$93,103	1	\$93,103	8/29/1996	Moscow
Mass Spectrometers	\$93,103	2	\$186,206	8/29/1996	Moscow
System, UV-VIS	\$45,375	1	\$45,375	9/27/1995	Moscow
Systems, Balance	\$12,724	2	\$25,448	11/8/1995	Moscow
Systems, Chemical Agent	\$21,831	2	\$43,662	11/8/1995	Moscow
System, Liquid Chromatographic	\$211,591	1	\$211,591	9/27/1995	Moscow
Vehicle, Vans	\$239,681	3	\$719,043	8/29/1996	Moscow

Project: Chemical Weapons Production Facility Demilitarization - 1.2.2 No GFE equipment with a total value > \$5,000 has been provided under this project.

Item Name	Unit Price	Quantity	Total Value	Arrival Date	Location
Project: Chemical Agent Analytical Monitoring – 1.2.3			\$3,165,825		
Atomic Emission Detector	\$327,196	1	\$327,196	9/20/1995	Saratov
Dual Flame, Lab Chemical Station	\$220,675	1	\$220,675	9/20/1995	Saratov
Dual, Hewlett-P	\$253,152	1	\$253,152	9/20/1995	Saratov
Dual, Hewlett-P	\$258,160	1	\$258,160	9/20/1995	Saratov
EC Detector	\$294,608	1	\$294,608	9/20/1995	Saratov
Electrophoresis, Capillary	\$120,879	1	\$120,879	9/20/1995	Saratov
Elevator System	\$59,800	1	\$59,800	12/22/1998	Moscow
Elevator System	\$59,800	1	\$59,800	2/2/1999	Moscow
Equipment, Analytical	\$12,000	1	\$12,000	9/20/1995	Saratov
Kit, Medical	\$17,500	1	\$17,500	11/3/1995	Saratov
Laboratory Furniture	\$257,405	1	\$257,405	6/10/1999	Moscow
Laboratory Furniture	\$302,349	1	\$302,349	6/10/1999	Moscow
Mass Selective Detector	\$291,775	1	\$291,775	9/20/1995	Saratov
Mass Selective Detector	\$324,594	1	\$324,594	9/20/1995	Saratov
System, UV-VIS	\$45,375	1	\$45,375	9/20/1995	Saratov
Systems, Balance	\$12,724	2	\$25,448	11/30/1995	Saratov
Systems, Chemical Agent	\$32,746	3	\$98,238	11/30/1995	Saratov
System, Liquid Chromatographic	\$196,871	1	\$196,871	9/20/1995	Saratov

Item Name	Unit Price	Quantity	Total Value	Arrival Date	Location
Project: Automated Inventory Control & Management System – 2.1.1*			\$15,334,570		
AICMS Computer Equipment	\$55,400	1	\$55,400	11/3/2000	Sergiev Posad
AICMS Computer Equipment	\$803,402	1	\$803,402	11/3/2000	Sergiev Posad
AICMS Computer Equipment	\$486,585	1	\$486,585	11/3/2000	Sergiev Posad
AICMS Computer Equipment	\$1,180,832	1	\$1,180,832	12/1/2000	Sergiev Posad
AICMS Computer Equipment	\$134,576	1	\$134,576	12/9/2000	Sergiev Posad
AICMS Computer Equipment	\$9,265	1	\$9,265	12/9/2000	Sergiev Posad
AICMS Computer Equipment	\$74,484	1	\$74,484	12/9/2000	Sergiev Posad
AICMS Computer Equipment	\$1,210,365	1	\$1,210,365	2/1/2001	Sergiev Posad
Computer Peripheral Equipment	\$6,485	1	\$6,485	3/23/2001	Sergiev Posad
AICMS Production System	\$2,549,832	1	\$2,549,832	9/24/1999	Sergiev Posad
AICMS Production System	\$510,244	1	\$510,244	8/28/2000	Sergiev Posad
AICMS Production system	\$247,047	1	\$247,047	7/28/2000	Sergiev Posad
AICMS Production system	\$191,616	1	\$191,616	5/24/2000	Sergiev Posad
AICMS Production system	\$295,710	1	\$295,710	6/28/2000	Sergiev Posad
AICMS Production system	\$35,559	1	\$35,559	2/23/1999	Sergiev Posad
AICMS Production system	\$34,327	1	\$34,327	8/2/1999	Sergiev Posad
AICMS Production system	\$23,310	1	\$23,310	9/12/2000	Sergiev Posad
AICMS Prototype System	\$64,881	1	\$64,881	1/22/1996	Mytischi
ACIMS Interim System-50PCs	\$580,551	1	\$580,551	5/18/1998	Sergiev Posad
AICMS Prototype System	\$1,552,161	1	\$1,552,161	9/26/1996	Mytischi
AICMS Interim Sys- 2nd 50PCs	\$505,305	1	\$505,305	4/19/1999	Sergiev Posad
Oracle Software	\$836,434	1	\$836,434	6/6/1996	Mytischi
Oracle Software-Enterprise Ed.	\$2,204,995	1	\$2,204,995	3/24/2000	Mytischi
Accessories for modular buildings, Various, Multiple					
Quantity	\$13,971	1	\$13,971	9/24/2003	Moscow
Diesel Generators	\$14,225	4	\$56,900	7/21/2003	Moscow
Diesel Generators, Emergency	\$14,225	2	\$28,450	8/14/2003	Moscow
Diesel Generators, Emergency	\$14,225	2	\$28,450	9/3/2003	Moscow
Modular Building	\$125,886	1	\$125,886	9/24/2003	Moscow
Modular Building	\$136,396	1	\$136,396	7/17/2003	Moscow
Modular Building	\$125,886	1	\$125,886	7/17/2003	Moscow
Modular Buildings	\$125,886	2	\$251,772	8/12/2003	Moscow
Modular Buildings, Accessory Sets	\$23,131	4	\$92,523	8/12/2003	Moscow
Shielded Chambers	\$79,874	4	\$319,497	7/18/2003	Moscow
Shielded Chambers	\$79,874	2	\$159,749	8/29/2003	Moscow
Shielded Chambers	\$159,749	2	\$319,497	9/11/2003	Moscow
Software for Computer Equipment, Miscellaneous	\$67,767	1	\$67,767	9/4/2003	Sergiev Posad
HP Scanners, 6100C	\$723	20	\$14,460	7/10/1998	Sergiev Posad
Project: Guard Force Equipment and Training - 2.1.2*			\$11,594,024		
Authoring Station	\$26,143	1	\$26,143	3/20/2003	Sergiev Posad
Firearms Training System	\$210,012	3	\$630,035	7/17/2002	Sergiev Posad
Firing Range Control Console	\$138,490	1	\$138,490	7/25/2002	Moscow
Small Arms Training Systems	\$210,012	3	\$630,035	7/17/2002	Sergiev Posad
Small Arms Training Systems	\$210,012	4	\$840,046	7/31/2002	Sergiev Posad
Small Arms Training Systems	\$210,012	4	\$840,046	8/05/2002	Sergiev Posad
Small Arms Training Systems	\$210,012	4	\$840,046	8/19/2002	Sergiev Posad
Small Arms Training Systems	\$210,012	8	\$1,680,092	8/21/2002	Sergiev Posad
Small Arms Training Systems	\$210,012	4	\$840,046	9/12/2002	Sergiev Posad

Item Name	Unit Price	Quantity	Total Value	Arrival Date	Location
Small Arms Training Systems	\$210,012	7	\$1,470,081	9/18/2002	Sergiev Posad
Small Arms Training Systems	\$224,473	3	\$673,419	11/27/2002	Sergiev Posad
Small Arms Training Systems	\$212,688	4	\$850,750	3/19/2003	Sergiev Posad
Small Arms Training Systems	\$210,012	1	\$210,012	3/20/2003	Sergiev Posad
Small Arms Training Systems	\$433,676	1	\$433,676	3/19/2003	Sergiev Posad
Small Arms Training Systems	\$213,381	3	\$640,143	12/9/2002	Sergiev Posad
Small Arms Training Systems	\$212,741	4	\$850,963	12/9/2002	Sergiev Posad
Project: Nuclear Weapons Storage Site Support - 2.1.3*			\$7,917,960		
ACL-3-40-17 Fire Trucks	\$126,622	10	\$1,266,223	1/25/2002	Torzhok
ACL-3-40-17 Fire Trucks	\$126,622	3	\$379,867	4/3/2002	Sergiev Posad
Boiler, Modular	\$91,474	3	\$274,422	5/22/2002	Biysk
Boiler, Modular	\$139,022	2	\$278,044	5/22/2002	Biysk
Boiler, Modular	\$150,066	2	\$300,133	5/22/2002	Biysk
Boiler, Modular	\$197,667	3	\$593,001	5/22/2002	Biysk
Boiler	\$44,306	1	\$44,306	12/27/2001	Biysk
Boilers	\$109,066	2	\$218,132	12/27/2001	Biysk
Bulldozer	\$220,068	1	\$220,068	10/31/2001	Chelyabinskaya Oblast
Bulldozer	\$365,796	1	\$365,796	11/17/2001	Chelyabinskaya Oblast
Cement Mixers	\$1,621	20	\$32,425	12/27/2001	Sergiev Posad
Chain Saw, Gas	\$11,674	1	\$11,674	10/4/2001	Sergiev Posad
DT-75 PPC Bulldozers w/attachments	\$10,980	10	\$109,800	4/5/2002	Sergiev Posad
Excavator	\$89,443	1	\$89,443	11/30/2001	Tver
Fire trucks	\$39,569	25	\$989,237	12/11/2001	Vargashi
Fire trucks	\$126,622	7	\$886,356	12/17/2001	Sergiev Posad
Gulf X-ray equipment	\$5,320	1	\$5,320	5/6/2002	St. Petersburg
Lipetsk Excavators	\$8,000	15	\$119,999	2/21/2002	Sergiev Posad
OES Analyzer	\$135,149	1	\$135,149	2/19/2002	St. Petersburg
Partner Saws	\$612	47	\$28,758	1/14/2002	Sergiev Posad
Sand Spreaders	\$1,125	20	\$22,494	12/27/2001	Sergiev Posad
Snow Blowers	\$1,256	20	\$25,127	12/27/2001	Sergiev Posad
Spectrometer, Base Detector	\$345,500	1	\$345,500	11/27/2001	St. Petersburg
Testing Instrument, Shimadzu	\$303,250	1	\$303,250	3/14/2002	St. Petersburg
Tractor	\$297,838	1	\$297,838	11/15/2001	Sergiev Posad
Testing Equipment	\$160,953	1	\$160,953	1/17/2001	St. Petersburg
HAZMAT for Test Equipment	\$10,760	1	\$10,760	6/6/2001	Moscow
Laboratory Equipment	\$118,151	1	\$118,151	8/17/2001	St. Petersburg
Laboratory Equipment	\$59,500	1	\$59,500	9/20/2001	St. Petersburg
X-ray Spectrometer	\$226,235	1	\$226,235	9/20/2001	St. Petersburg
Site Security Enhancements 2.1.4*			\$33,427,300		
Cable Sets	\$24,644	20	\$492,880	11/26/1999	12th GUMO
Cable Sets	\$24,644	20	\$492,880	12/16/1999	12th GUMO
Cable Sets	\$24,644	13	\$320,372	1/12/2000	12th GUMO
Cable Sets	\$2,071	20	\$41,416	3/5/2001	Sergiev Posad
Cable Sets	\$8,818	60	\$531,734	3/20/2001	Sergiev Posad
Cable Sets	\$2,456	283	\$695,361	3/28/2001	Sergiev Posad
Cable Sets	\$7,663	83	\$638,362	4/3/2001	Sergiev Posad
Cable Sets	\$3,332	140	\$465,859	4/12/2001	Sergiev Posad
Cable Sets	\$2,368	203	\$480,875	4/19/2001	Sergiev Posad
Cable Sets	\$520	750	\$389,848	5/16/2001	Sergiev Posad
Cable Sets	\$3,838	19	\$72,917	5/24/2001	Sergiev Posad
Cable Trays	\$9,682	36	\$348,552	3/28/2001	Sergiev Posad

Item Name	Unit Price	Quantity	Total Value	Arrival Date	Location
Cable Trays	\$1,191	18	\$21,436	4/12/2001	Sergiev Posad
Cable Trays	\$9,682	18	\$174,276	4/19/2001	Sergiev Posad
Cable Trays	\$9,682	49	\$474,418	5/16/2001	Sergiev Posad
Cable Trays	\$9,682	2	\$19,364	5/24/2001	Sergiev Posad
Computer Equipment, Various, Monitors, Printers, Components	\$11,769	1	\$11,769	7/28/2003	Moscow
Conduit	\$30,081	20	\$601,620	10/11/1999	12th GUMO
Conduit	\$30,081	22	\$661,782	10/28/1999	12th GUMO
Conduit	\$30,081	3	\$90,243	11/26/1999	12th GUMO
Conduit	\$30,081	9	\$270,729	12/16/1999	12th GUMO
Conduit	\$30,081	12	\$360,972	1/12/2000	12th GUMO
Conduit	\$30,081	12	\$360,972	1/27/2000	12th GUMO
Conduit	\$30,081	15	\$451,215	2/6/2000	12th GUMO
Conduit	\$30,081	27	\$812,187	3/14/2000	12th GUMO
Conduit	\$30,081	3	\$90,243	3/31/2000	12th GUMO
Engineering Fencing, IZP2-04	\$89,033	5	\$445,165	10/11/2001	12th GUMO
Engineering Fencing, IZP2-04	\$89,033	7	\$623,231	11/13/2001	12th GUMO
Engineering Fencing, IZP-2-05	\$9,360	24	\$224,640	10/11/1999	12th GUMO
Engineering Fencing, IZP-2-05	\$9,360	22	\$205,920	11/9/1999	12th GUMO
Engineering Fencing, IZP-2-05	\$9,360	22	\$205,920	12/9/1999	12th GUMO
Engineering Fencing, IZP-2-05	\$9,360	22	\$205,920	1/14/2000	12th GUMO
Engineering Fencing, IZP-2-05	\$9,360	22	\$205,920	2/11/2000	12th GUMO
Engineering Fencing, IZP-2-05	\$9,360	23	\$215,280	3/13/2000	12th GUMO
Gate-locks	\$464	84	\$39,002	8/16/2000	12th GUMO
Gates	\$2,952	48	\$141,696	10/11/1999	12th GUMO
Gates	\$2,952	44	\$129,888	11/9/1999	12th GUMO
Gates	\$2,697	14	\$37,758	11/26/1999	12th GUMO
Gates	\$2,872	64	\$183,828	12/9/1999	12th GUMO
Gates	\$2,884	60	\$173,040	1/14/2000	12th GUMO
Gates	\$2,872	64	\$183,828	2/11/2000	12th GUMO
Gates	\$2,875	66	\$189,732	3/13/2000	12th GUMO
Gates	\$2,952	80	\$236,160	7/7/2000	12th GUMO
Higher Level SOS-1-VU	\$20,053	5	\$100,265	2/11/2000	12th GUMO
Higher Level SOS-1-VU	\$20,053	15	\$300,795	3/13/2000	12th GUMO
Higher Level SOS-1-VU	\$20,053	4	\$80,212	4/6/2000	12th GUMO
Higher Level SOS-1-VU	\$20,053	16	\$320,848	7/7/2000	12th GUMO
Higher Level SOS-1-VU	\$20,053	33	\$661,749	8/16/2000	12th GUMO
Ionscan Detectors	\$56,731	66	\$3,744,243	8/11/2003	Sergiev Posad
Metal Detectors, Portable, Garrett	\$193	185	\$35,705	7/22/2003	Sergiev Posad
Portable Radios, Radiy-301 Complete Set	\$979	1200	\$1,174,800	2/5/2003	Sergiev Posad
Portable Lighting Units	\$6,010	119	\$715,190	9/17/2003	Sergiev Posad
Protva Systems	\$13,238	50	\$661,880	10/19/1999	12th GUMO
Protva Systems	\$13,247	50	\$662,360	11/17/1999	12th GUMO
Protva Systems	\$13,247	50	\$662,360	12/15/1999	12th GUMO
Protva Systems	\$12,907	58	\$748,600	1/17/2000	12th GUMO
Quick deployment detection systems	\$18,232	20	\$364,640	8/14/2003	Sergiev Posad
Quick deployment detection systems	\$18,232	20	\$364,640	9/18/2003	Sergiev Posad
Radio Equipment,Radius 201R Repeater, Complete Set	\$4,895	84	\$411,188	2/5/2003	Sergiev Posad
Road Obstacle, IZP-1	\$488	96	\$46,848	10/11/1999	12th GUMO

Item Name	Unit Price	Quantity	Total Value	Arrival Date	Location
Road Obstacle, IZP-1	\$488	88	\$42,944	11/9/1999	12th GUMO
Road Obstacle, IZP-1	\$488	36	\$17,568	12/9/1999	12th GUMO
Road Obstacle, IZP-1	\$488	52	\$25,376	12/9/1999	12th GUMO
Road Obstacle, IZP-1	\$488	88	\$42,944	1/14/2000	12th GUMO
Road Obstacle, IZP-1	\$488	36	\$17,568	2/11/2000	12th GUMO
Road Obstacle, IZP-1	\$488	52	\$25,376	2/11/2000	12th GUMO
Road Obstacle, IZP-1	\$488	28	\$13,664	3/13/2000	12th GUMO
Road Obstacle, IZP-1	\$488	64	\$31,232	3/13/2000	12th GUMO
Snowblowers	\$51,927	10	\$519,270	12/14/2000	Sergiev Posad
Snowblowers	\$62,942	11	\$692,362	1/13/2001	Sergiev Posad
Snowblowers	\$54,090	16	\$865,440	3/1/2001	Sergiev Posad
SOS-1DK	\$6,372	30	\$191,160	11/10/2000	Sergiev Posad
SOS-1-05 Systems	\$67,479	2	\$134,958	11/26/1999	12th GUMO
SOS-1-05 Systems	\$67,479	5	\$337,395	11/26/1999	12th GUMO
SOS-1-05 Systems	\$67,479	2	\$134,958	12/9/1999	12th GUMO
SOS-1-05 Systems	\$67,479	8	\$539,832	12/9/1999	12th GUMO
SOS-1-05 System	\$67,479	1	\$67,479	1/14/2000	12th GUMO
SOS-1-05 Systems	\$67,479	8	\$539,832	1/14/2000	12th GUMO
SOS-1-05 Systems	\$67,479	10	\$674,790	2/11/2000	12th GUMO
SOS-1-05 Systems	\$67,479	10	\$674,790	3/13/2000	12th GUMO
SOS-1-05 Systems	\$67,479	10	\$674,790	4/6/2000	12th GUMO
SOS-1-05 Systems	\$67,479	10	\$674,790	5/16/2000	12th GUMO
SOS-1-05 Systems	\$67,479	8	\$539,832	6/16/2000	12th GUMO
Surveillance Systems	\$6,009	20	\$120,182	2/8/2001	Sergiev Posad
Surveillance Systems	\$6,009	40	\$240,364	3/4/2001	Sergiev Posad
Surveillance Systems	\$6,009	20	\$120,182	11/16/1999	12th GUMO
Surveillance Systems	\$9,455	40	\$378,191	8/6/2001	Sergiev Posad
Surveillance Systems	\$9,455	40	\$378,191	3/1/2000	12th GUMO
Surveillance Systems	\$9,455	40	\$378,191	7/4/2000	12th GUMO
Telescopic Ladders	\$218	119	\$25,924	6/30/2003	Sergiev Posad
Weedcutters w/119 Tool sets	\$505	357	\$180,285	5/29/2003	12th GUMO
Wicket-Pentstocks	\$1,266	5	\$6,330	11/26/1999	12th GUMO
Wicket-Pentstocks	\$1,266	8	\$10,128	12/9/1999	12th GUMO
Wicket-Pentstocks	\$1,266	8	\$10,128	1/14/2000	12th GUMO
Wicket-Pentstocks	\$1,266	10	\$12,660	2/11/2000	12th GUMO
Wicket-Pentstocks	\$1,266	10	\$12,660	3/13/2000	12th GUMO

Project: Security Assessment, Training, and Logistics - 2.1.5

No GFE equipment with a total value > \$5,000 has been provided under this project.

Project: Nuclear Weapons Transportation - 2.2.1

No GFE equipment with a total value > \$5,000 has been provided under this project.

Project: Railcar Maintenance and Procurement – 2.2.2**

\$16,407,866

Kit, Railcar Conversion	\$130,000	1	\$130,000	10/27/1993	Tver
Kit, Railcar Conversion	\$390,000	1	\$390,000	10/27/1993	Tver
Kit, Railcar Conversion	\$626,735	1	\$626,735	3/8/1994	Tver
Kit, Railcar Conversion	\$130,000	1	\$130,000	3/24/1994	Tver
Kit, Railcar Conversion	\$558,735	1	\$558,735	3/28/1994	Tver
Kit, Railcar Conversion	\$694,586	1	\$694,586	5/25/1994	Tver
Kit, Railcar Conversion	\$558,735	1	\$558,735	5/28/1994	Tver
Kit, Railcar Conversion	\$1,660,874	1	\$1,660,874	5/28/1994	Tver
Kit, Railcar Conversion	\$1,102,139	1	\$1,102,139	6/10/1994	Tver
Kit, Railcar Conversion	\$830,437	1	\$830,437	6/26/1994	Tver

Item Name	Unit Price	Quantity	Total Value	Arrival Date	Location
Kit, Railcar Conversion	\$558,735	1	\$558,735	7/20/1994	Tver
Kit, Railcar Conversion	\$694,586	1	\$694,586	7/20/1994	Tver
Kit, Railcar Conversion	\$694,586	1	\$694,586	8/8/1994	Tver
Kit, Railcar Conversion	\$578,735	1	\$578,735	8/29/1994	Tver
Kit, Railcar Conversion	\$578,735	1	\$578,735	9/1/1994	Tver
Kit, Railcar Conversion	\$578,735	1	\$578,735	9/5/1994	Tver
Kit, Railcar Conversion	\$578,735	1	\$578,735	10/7/1994	Tver
Kits, Railcar Conversion	\$563,735	2	\$1,127,470	11/5/1994	Tver
Kit, Railcar Conversion	\$670,482	1	\$670,482	11/14/1994	Tver
Kit, Railcar Conversion	\$1,161,931	1	\$1,161,931	11/14/1994	Tver
Kit, Railcar Conversion	\$1,161,931	1	\$1,161,931	11/14/1994	Tver
Kits, Railcar Conversion	\$670,482	2	\$1,340,964	11/14/1994	Tver
Project: Transportation Safety Enhancements – 2.2.3**			\$7,406,317		
Flaw-mike systems	\$156,123	1	\$156,123	9/30/2002	St. Petersburg
Vehicles, Emergency Response	\$178,052	7	\$1,246,364	11/5/02	Rybinsk
Vehicles, Emergency Response	\$178,052	6	\$1,068,312	10/2/02	Rybinsk
Vehicles, Emergency Response	\$178,052	5	\$890,260	6/05/2002	Rybinsk
Vehicles, Emergency Response	\$178,052	5	\$890,260	7/12/2002	Rybinsk
Vehicles, Emergency Response	\$14,800	6	\$88,800	8/02/2002	Rybinsk
Vehicles, Emergency Response	\$178,052	6	\$1,068,312	9/11/2002	Rybinsk
Vehicle, Emergency Response	\$203,018	1	\$203,018	9/13/2002	Rybinsk
Vehicles, Emergency Response	\$178,052	9	\$1,602,468	9/13/2002	Rybinsk
Video Endoscope Equipment	\$14,800	1	\$14,800	5/17/2002	St. Petersburg
Video Endoscope Equipment	\$103,600	1	\$103,600	6/21/2002	St. Petersburg
Video Endoscope Equipment	\$14,800	5	\$74,000	7/12/2002	St. Petersburg
Project: Supercontainers – 2.2.4**			\$19,926,451		
Abnormal Events Lifting Beam					
Kits	\$26,681	10	\$266,814	3/21/2000	Sergiev Posad
Blocking and Bracing Kit	\$25,452	1	\$25,452	3/24/1999	Sergiev Posad
Chains, Lashing	\$259	900	\$232,695	8/27/1997	Sergiev Posad
Chains, Lashing	\$259	1,200	\$310,260	10/7/1997	Sergiev Posad
Chains, Lashing	\$259	1,200	\$310,260	10/8/1997	Sergiev Posad
Device, Spring for Lashing					
Chains	\$121,701	1	\$121,701	4/1/1998	Sergiev Posad
Earth Cable	\$51	165	\$8,475	12/17/1997	Sergiev Posad
Kit, Supercontainer					
Improvement	\$108,000	1	\$108,000	10/7/1997	Sergiev Posad
Supercontainers	\$122,662	14	\$1,717,266	2/10/1997	Sergiev Posad
Supercontainers	\$122,662	24	\$2,943,885	6/8/1997	Sergiev Posad
Supercontainers	\$122,662	24	\$2,943,885	7/1/1997	Sergiev Posad
Supercontainers	\$122,662	24	\$2,943,885	8/6/1997	Sergiev Posad
Supercontainers	\$122,662	24	\$2,943,885	8/27/1997	Sergiev Posad
Supercontainers	\$122,662	24	\$2,943,885	9/7/1997	Sergiev Posad
Supercontainers	\$122,662	16	\$1,962,590	10/7/1997	Sergiev Posad
Supercontainer	\$122,662	1	\$122,662	2/4/1998	Sergiev Posad
Tool Kits, Ancillary	\$2,606	8	\$20,851	12/17/1997	Sergiev Posad
Project: Emergency Support Equipment – 2.2.4**			\$6,871,677		
Base Stations	\$3,321	6	\$19,926	11/11/1998	St. Petersburg
Battery Chargers	\$689	10	\$6,890	11/11/1998	St. Petersburg
Chairs	\$63	84	\$5,292	11/12/1998	St. Petersburg
Copier	\$13,273	1	\$13,273	4/29/1998	St. Petersburg

Item Name	Unit Price	Quantity	Total Value	Arrival Date	Location
Copier	\$13,384	1	\$13,384	11/11/1998	St. Petersburg
Equipment Case 1	\$25,000	1	\$25,000	11/12/1998	St. Petersburg
Equipment, Emergency	\$916,000	1	\$916,000	8/30/1996	St. Petersburg
Equipment, Emergency	\$916,000	1	\$916,000	11/14/1996	St. Petersburg
Equipment, Emergency	\$916,000	2	\$1,832,000	3/18/1997	St. Petersburg
Equipment, Emergency	\$916,000	1	\$916,000	3/25/1997	St. Petersburg
Exiter, Vibro - Acoustics System	\$12,940	1	\$12,940	8/3/1998	St. Petersburg
Fiberscope	\$14,300	1	\$14,300	11/12/1998	St. Petersburg
Finder, Faul	\$5,500	1	\$5,500	11/12/1998	St. Petersburg
INMARSAT Terminals	\$90,000	12	\$1,080,000	9/13/1999	St. Petersburg
Inventory Analysis System	\$331,926	1	\$331,926	3/13/1998	St. Petersburg
Kit, Fusion Splice	\$9,500	1	\$9,500	11/12/1998	St. Petersburg
Lens, Zoom	\$5,148	1	\$5,148	2/15/1997	St. Petersburg
Lights, Stand	\$985	10	\$9,850	11/12/1998	St. Petersburg
Module, Base Control	\$40,000	1	\$40,000	11/12/1998	St. Petersburg
Module, Site Control	\$45,000	1	\$45,000	11/12/1998	St. Petersburg
Monitors	\$2,611	2	\$5,222	4/29/1998	St. Petersburg
Printers	\$5,503	2	\$11,006	4/29/1998	St. Petersburg
Projector, Infocus 720	\$5,158	1	\$5,158	4/29/1998	St. Petersburg
Radiation Detection Equipment	\$41,560	1	\$41,560	5/8/1998	St. Petersburg
Radiation Detection Equipment	\$55,194	1	\$55,194	5/8/1998	St. Petersburg
Radiation Detection Equipment	\$63,134	1	\$63,134	5/8/1998	St. Petersburg
Radiation Detection Equipment	\$61,134	2	\$122,268	5/8/1998	St. Petersburg
Radios	\$1,937	60	\$116,220	11/11/1998	St. Petersburg
Radiological monitoring equip.	\$10,175	1	\$10,175	4/29/1998	St. Petersburg
Rap-Kits	\$2,733	3	\$8,199	4/29/1998	St. Petersburg
Repeaters	\$11,300	6	\$67,800	11/11/1998	St. Petersburg
Systems, Uranium & Plutonium					
Inspector	\$36,000	3	\$108,000	6/20/1997	St. Petersburg
Transducer	\$20,162	1	\$20,162	8/3/1998	St. Petersburg
VCRs	\$3,275	6	\$19,650	10/1/1997	St. Petersburg
Project: Fissile Material Storage Facility - 2.3.1			\$5,561,203		
Bulldozers	\$486,252	2	\$972,504	5/31/1995	Mayak
Cranes	\$108,333	2	\$216,666	8/10/1995	Chelyabinsk
Cranes	\$108,333	3	\$324,999	8/10/1995	Mayak
Cranes	\$589,500	2	\$1,179,000	8/10/1995	Mayak
Excavator	\$324,903	1	\$324,903	5/31/1995	Mayak
Excavators	\$373,571	2	\$747,142	5/31/1995	Mayak
Pumps, Concrete	\$360,000	2	\$720,000	12/1/1995	Mayak
Trucks, Concrete Mixer	\$129,210	7	\$904,470	12/1/1995	Chelyabinsk
Welder, Electric Arc	\$57,173	1	\$57,173	8/10/1995	Chelyabinsk
Welders, Electric Arc	\$57,173	2	\$114,346	8/10/1995	Mayak
Project: Fissile Storage Facility Transparency – 2.3.2				No GFE equipment with a total value > \$5,000 has been provided under this project.	
Project: Fissile Material Containers – Mayak - 2.3.3			\$38,664,354		
Containers, Fissile Material	\$1,570	10	\$15,700	3/1/1993	Mytishi
Containers, Fissile Material	\$1,570	16	\$25,120	11/8/1994	Mytishi
Containers, Fissile Material	\$1,700	948	\$1,611,600	3/17/1996	Mayak
Containers, Fissile Material	\$1,700	840	\$1,428,000	4/10/1996	Mayak
Containers, Fissile Material	\$1,700	840	\$1,428,000	5/5/1996	Mayak
Containers, Fissile Material	\$1,700	840	\$1,428,000	5/28/1996	Mayak

Item Name	Unit Price	Quantity	Total Value	Arrival Date	Location
Containers, Fissile Material	\$1,550	12	\$18,600	6/26/1996	Mayak
Containers, Fissile Material	\$1,450	1,188	\$1,722,600	6/26/1996	Mayak
Containers, Fissile Material	\$1,450	1,320	\$1,914,000	7/30/1996	Mayak
Containers, Fissile Material	\$1,450	960	\$1,392,000	8/28/1996	Mayak
Containers, Fissile Material	\$1,450	1,200	\$1,740,000	9/30/1996	Mayak
Containers, Fissile Material	\$1,450	1,080	\$1,566,000	10/26/1996	Mayak
Containers, Fissile Material	\$1,450	840	\$1,218,000	11/29/1996	Mayak
Containers, Fissile Material	\$1,382	1680	\$2,321,760	1/24/1997	Mayak
Containers, Fissile Material	\$1,382	840	\$1,160,880	2/27/1997	Mayak
Containers, Fissile Material	\$1,382	840	\$1,160,880	4/10/1997	Mayak
Containers, Fissile Material	\$1,382	840	\$1,160,880	4/22/1997	Mayak
Containers, Fissile Material	\$1,382	840	\$1,160,880	6/10/1997	Mayak
Containers, Fissile Material	\$1,382	840	\$1,160,880	7/7/1997	Mayak
Containers, Fissile Material	\$1,382	840	\$1,160,880	7/30/1997	Mayak
Containers, Fissile Material	\$1,382	840	\$1,160,880	10/2/1997	Mayak
Containers, Fissile Material	\$1,382	1,200	\$1,658,400	11/2/1997	Mayak
Containers, Fissile Material	\$1,382	1,800	\$2,487,600	11/29/1997	Mayak
Containers, Fissile Material	\$1,382	960	\$1,326,720	1/6/1998	Mayak
Containers, Fissile Material	\$1,382	840	\$1,160,880	1/28/1998	Mayak
Containers, Fissile Material	\$1,466	960	\$1,407,360	3/5/1998	Mayak
Containers, Fissile Material	\$1,736	120	\$208,320	5/3/1998	Mayak
Containers, Fissile Material	\$1,466	581	\$851,746	5/3/1998	Mayak
Containers, Fissile Material	\$1,466	720	\$1,055,520	6/13/1998	Mayak
Containers, Fissile Material	\$1,736	87	\$151,032	7/3/1998	Mayak
Containers, Fissile Material	\$1,466	600	\$879,600	7/3/1998	Mayak
Containers, Fissile Material	\$1,466	840	\$1,231,440	7/29/1998	Mayak
Special Containers, Fissile Material	\$145,098	2	\$290,196	5/3/1998	Mayak

Project: Chemical Weapons Site Security - 2.6

No GFE equipment with a total value \geq \$5,000 has been provided under this project.

Project: Emergency Response – Russia***			\$6,457,289		
Accelerator, Linear	\$1,150,000	1	\$1,150,000	4/10/1995	Sarov
Accelerator, Linear (Head Unit)	\$250,000	1	\$250,000	10/2/1995	Sarov
Accelerator, Linear (Parts)	\$13,251	1	\$13,251	8/30/1997	Sarov
Barriers	\$69	100	\$6,864	3/29/1993	Snezshinsk
Computers	\$1,966	8	\$15,728	4/10/1995	Mytishchi
Computers	\$1,993	8	\$15,944	4/10/1995	Mytishchi
Conditioners, Power	\$402	16	\$6,432	4/10/1995	Mytishchi
Copiers	\$12,998	6	\$77,988	4/10/1995	Mytishchi
Cutter, Liquid Abrasive	\$700,000	1	\$700,000	4/10/1995	Snezshinsk
Cutter, Liquid Abrasive	\$700,000	1	\$700,000	12/15/1995	Sarov
Fax Machines	\$2,609	6	\$15,654	4/10/1995	Mytishchi
Kits, Polyurethane Foam	\$38	200	\$7,500	3/29/1993	Snezshinsk
Network Computer System	\$455,403	1	\$455,403	1/25/1994	Sarov, Snezhinsk, Mytishchi
Office LAN Computer System	\$368,973	1	\$368,973	3/28/1997	Sarov, Snezhinsk, Mytishchi
Players, Video	\$2,035	6	\$12,210	4/10/1995	Mytishchi
Portable Integrated Video System	\$218,900	1	\$218,900	12/3/1993	Sarov
Portable Integrated Video System	\$218,900	1	\$218,900	12/3/1993	Snezshinsk
Portable Integrated Video Systems	\$218,900	2	\$437,800	12/3/1993	Mytishchi

Item Name	Unit Price	Quantity	Total Value	Arrival Date	Location
Printers	\$1,867	8	\$14,936	4/10/1995	Mytishchi
Software, MS Office	\$511	16	\$8,176	4/10/1995	Mytishchi
Software, Windows Write	\$549	16	\$8,784	4/10/1995	Mytishchi
System, Fiberscope	\$22,100	1	\$22,100	9/28/1993	Sarov
System, Fiberscope	\$22,100	1	\$22,100	9/28/1993	Snezshinsk
Systems, Fiberscope	\$22,100	2	\$44,200	9/28/1993	Mytishchi
Tools, Emergency Access	\$43,900	10	\$439,000	9/19/1993	Sverdlovsk
Vehicle, Packaging	\$67,950	1	\$67,950	9/28/1993	Mytishchi
Vehicle, Packaging	\$67,950	1	\$67,950	11/30/1993	Sverdlovsk
Vehicle, Packaging	\$67,950	1	\$67,950	12/3/1993	Sarov
Video Camcorders	\$637	8	\$5,096	4/10/1995	Mytishchi
Violinist III, Kits	\$10,175	10	\$101,750	4/28/1993	Sarov, Snezhinsk, Mytishchi
Violinist III, Kits	\$10,175	23	\$234,025	6/15/1993	Sarov, Snezhinsk, Mytishchi
Violinist III, Kits	\$10,175	20	\$203,500	7/6/1993	Sarov, Snezhinsk, Mytishchi
Violinist III, Kits	\$10,175	47	\$478,225	9/28/1993	Sarov, Snezhinsk, Mytishchi
Project: Personnel Reliability & Safety – 3.1.1*			\$4,993,762		
Additional Polygraph Equipment	\$13,070	10	\$130,702	3/10/2000	Sergiev Posad
Breathalyzer, Alcohol	\$11,782	1	\$11,782	11/14/1997	Sergiev Posad
Breathalyzers, Alcohol	\$6,820	20	\$136,400	11/14/1997	Sergiev Posad
Breathalyzer, Alcohol	\$136,535	1	\$136,535	11/14/1997	Sergiev Posad
Breathalyzers, Alcohol	\$4,407	40	\$176,280	11/14/1997	Sergiev Posad
Computers	\$2,700	5	\$13,500	7/16/1996	St. Petersburg
Computers	\$1,152	6	\$6,912	6/20/1997	St. Petersburg
Confirmation Lab	\$227,196	1	\$227,196	11/29/1999	Sergiev Posad
Dosimeters	\$41,400	8	\$331,200	12/3/1998	Sergiev Posad
Dosimeters	\$41,400	8	\$331,200	3/29/1999	St. Petersburg
Dosimeters	\$41,400	27	\$1,117,800	5/6/1999	Sergiev Posad
Dosimeters	\$686,971	2	\$1,373,942	7/3/2002	Sergiev Posad
Equipment, Support	\$14,421	8	\$115,371	12/3/1998	Sergiev Posad
Equipment, Support	\$14,421	8	\$115,371	3/29/1999	St. Petersburg
Equipment, Support	\$14,421	27	\$389,378	5/6/1999	Sergiev Posad
Lab Standards	\$23,477	1	\$23,477	5/17/2000	Sergiev Posad
Laboratory Standards	\$8,992	1	\$8,992	12/2/1999	Sergiev Posad
Miscellaneous Equipment	\$5,854	1	\$5,854	11/29/1999	Sergiev Posad
Polygraphs, Computerized	\$10,704	5	\$53,520	11/14/1997	St. Petersburg
Radioactive Sources	\$101,574	1	\$101,574	6/4/2002	Sergiev Posad
Receiving/Accessioning Room	\$63,923	1	\$63,923	11/29/1999	Sergiev Posad
Screening Lab	\$122,854	1	\$122,854	11/29/1999	Sergiev Posad
Project: Defense Conversion – Russia - 4.4.1			\$350,368		
Component Placer	\$14,000	1	\$14,000	6/16/1999	Moscow
Component Placer	\$16,650	1	\$16,650	6/16/1999	Moscow
Computers	\$2,828	5	\$14,140	6/16/1999	Moscow
Hearing Aid Automatic Coil					
Winding Production System	\$71,966	1	\$71,966	12/11/2002	Fryazino
Hearing Aid Equipment	\$143,605	1	\$143,605	7/23/2003	Fryazino
Reflow Oven	\$32,900	1	\$32,900	6/16/1999	Moscow
Stereo Microscope Sets	\$3,500	2	\$7,000	6/16/1999	Moscow
Stereo Microscope Sets	\$3,500	2	\$7,000	12/29/1999	Moscow
System, Hearing Aid Test	\$10,635	1	\$10,635	6/16/1999	Moscow
System, Hearing Aid Test	\$12,151	1	\$12,151	6/16/1999	Moscow
Systems, Hearing Aid Test	\$10,160	2	\$20,321	6/16/1999	Moscow

Item Name	Unit Price	Quantity	Total Value	Arrival Date	Location
Project: Armored Blankets***			\$3,188,434		
Armored Blankets (Army Stock)	\$406	750	\$304,500	6/23/1992	Russia
Armored Blankets (Army Stock)	\$406	750	\$304,500	7/14/1992	Russia
Armored Blankets	\$997	684	\$681,736	4/27/1993	Russia
Armored Blankets	\$997	649	\$646,852	5/14/1993	Russia
Armored Blankets	\$997	684	\$681,736	5/28/1993	Russia
Armored Blankets	\$997	571	\$569,110	6/11/1993	Russia
Russia Total			\$285,138,491		

Country - Ukraine

Project: SS-24 Missile Disassembly, Storage and Elimination
- 1.3.1

			\$489,615		
Dump truck	\$63,178	1	\$63,178	3/30/1995	Pavlograd
Equipment, Fire Fighting	\$7,815	1	\$7,815	12/2/2002	Pavlograd
Dump truck	\$63,178	1	\$63,178	3/30/1995	Pavlograd
Vehicle, Toyota 4runner, 1993	\$6,324	1	\$6,324	6/24/2003	Kiev
Cranes	\$174,560	2	\$349,120	3/20/1995	Pavlograd

Project: SS-24 Missile Motor Elimination - 1.3.2

No GFE equipment with a total value > \$5,000 has been provided under this project.

Project: Bomber & ALCM Elimination – 1.3.3

			\$2,643,590		
Air Compressors	\$4,809	3	\$14,428	4/1/1999	Zherebkovo
Ambulance	\$265,360	1	\$265,360	7/14/1997	Vinnitsa
Baler	\$497,941	1	\$497,941	10/16/1998	Mikhailyenki
Cable Chopper	\$346,444	1	\$346,444	7/14/1997	Mikhailyenki
Cable Stripper	\$31,340	1	\$31,340	10/28/1998	Mikhailyenki
Carriers, Personnel	\$83,461	2	\$166,922	6/12/1996	Belaya Tserkov
Carrier, Personnel	\$83,461	1	\$83,461	6/12/1996	Priluki
Carrier, Personnel	\$83,461	1	\$83,461	6/12/1996	Vinnitsa
Cranes	\$215,000	2	\$430,000	10/18/1995	Belaya Tserkov
Dump trucks	\$63,178	2	\$126,356	3/30/1995	Belaya Tserkov
Shears, Alligator	\$38,493	1	\$38,493	10/28/1998	Mikhailyenki
Shelters, Housing	\$58,378	3	\$175,134	7/21/1995	Priluki
Shelters, Housing	\$58,378	2	\$116,756	7/21/1995	Belaya Tserkov
Shelter, Mess Facility	\$39,310	1	\$39,310	8/2/1995	Belaya Tserkov
Suspended Electromagnets	\$27,630	1	\$27,630	10/28/1998	Mikhailyenki
Tractors	\$74,125	1	\$74,125	8/6/1995	Priluki
Tractors	\$74,125	1	\$74,125	8/6/1995	Belaya Tserkov
Trailers (36L)	\$52,305	1	\$52,305	8/6/1995	Belaya Tserkov

Project: SS-24 Propellant Disposition Facility - 1.3.4

			\$203,383		
Prime Mover	\$65,028	1	\$65,028	8/5/2002	Pavlograd
Grader	\$138,355	1	\$138,355	3/20/1995	Pavlograd

Project: Non-Deployed ICBM Elimination Equipment– 1.3.5

			\$1,494,229		
Air Compressors	\$4,809	5	\$24,046	4/1/1999	Mikhailyenki
Copier	\$11,319	1	\$11,319	4/26/1999	Mikhailyenki
Cutters, Plasma	\$63,909	2	\$127,818	7/26/1999	Mikhailyenki
Cutters, Plasma	\$99,942	2	\$163,851	10/18/1999	Mikhailyenki
Fire truck	\$285,593	1	\$285,593	1/25/2000	Mikhailyenki
Hoods	\$1,707	50	\$85,368	7/26/1999	Mikhailyenki

Item Name	Unit Price	Quantity	Total Value	Arrival Date	Location
Jacks, Hydraulic	\$1,703	4	\$6,813	4/1/1999	Mikhailyenki
Saws, Cutoff	\$2,102	10	\$21,019	7/26/1999	Mikhailyenki
Shear, Hydraulic	\$22,841	1	\$22,841	4/1/1999	Mikhailyenki
Slings, Nylon	\$120	50	\$6,006	7/26/1999	Mikhailyenki
Slings, Nylon	\$120	50	\$6,006	10/18/1999	Mikhailyenki
Tool Carriers, Integrated	\$190,860	2	\$381,720	9/8/1999	Mikhailyenki
Tool Sets	\$1,666	20	\$33,318	4/1/1999	Mikhailyenki
Torches, Cutting	\$1,869	5	\$9,345	7/26/1999	Mikhailyenki
Torches, Cutting	\$1,869	5	\$9,345	10/18/1999	Mikhailyenki
Tractors, Ford	\$109,040	2	\$218,080	8/13/1999	Mikhailyenki
Trailers, 26 L	\$40,871	2	\$81,742	5/24/1999	Mikhailyenki
Project: Emergency Response Support Equipment – 1.3.6			\$8,981,364		
Air Compressor	\$36,452	1	\$36,452	8/22/1995	Khmelnitskiy
Air Compressor	\$36,452	1	\$36,452	8/22/1995	Pervomaysk
Ambulance	\$265,360	1	\$265,360	7/14/1997	Uman
Breathing Apparatus & Cylinders	\$2,121	50	\$106,050	8/22/1995	Khmelnitskiy
Breathing Apparatus & Cylinders	\$2,121	50	\$106,050	8/22/1995	Pervomaysk
Cranes	\$1,112,580	2	\$2,225,160	5/2/1995	Khmelnitskiy
Crane	\$1,739,000	1	\$1,739,000	1/26/1996	Khmelnitskiy
Crane	\$1,739,000	1	\$1,739,000	1/30/1996	Pervomaysk
Cutters	\$283,368	2	\$566,736	9/5/1995	Pervomaysk
Cutters	\$283,368	2	\$566,736	9/7/1995	Khmelnitskiy
Equipment, Computer	\$4,834	2	\$9,668	10/3/1994	Kiev
Equipment, Fire Fighting	\$185,000	2	\$370,000	5/23/1996	Uman
Fire truck	\$191,512	1	\$191,512	8/22/1995	Khmelnitskiy
Fire Fighting System, Helicopter-Mounted	\$162,500	2	\$325,000	5/23/1996	Uman
Jack, Set, Pillow	\$5,774	1	\$5,774	11/5/1994	Khmelnitskiy
Jack, Set, Pillow	\$5,774	1	\$5,774	11/5/1994	Pervomaysk
Radios	\$1,795	10	\$17,950	3/22/1994	Kiev
Short Range Radios	\$2,171	90	\$195,429	9/12/1995	Uman
Slings, Lifting	\$9,348	4	\$37,390	9/11/1996	Khmelnitskiy
Slings, Lifting	\$9,348	4	\$37,391	9/9/1996	Khmelnitskiy
Toxic Gas Analyzers N204	\$2,306	10	\$23,064	11/30/1995	Uman
Toxic Gas Analyzers UMDH	\$5,500	10	\$55,000	11/30/1995	Uman
Trucks	\$80,104	2	\$160,208	9/5/1995	Pervomaysk
Trucks	\$80,104	2	\$160,208	9/7/1995	Khmelnitskiy
Project: SS-19 Silo Elimination – 1.3.7			\$15,725,001		
Air Compressors	\$32,631	3	\$97,893	12/3/1996	Pervomaysk
Appliances, Kitchen	\$6,229	2	\$12,458	8/2/1995	Pervomaysk
Bulldozers	\$399,696	1	\$399,696	3/20/1995	Pervomaysk
Bulldozers	\$208,480	1	\$208,480	3/20/1995	Pervomaysk
Bulldozers	\$92,085	3	\$276,255	3/30/1995	Pervomaysk
Carriers, Personnel	\$83,461	12	\$1,001,532	6/12/1996	Pervomaysk
Carts, Hot Gas Purge	\$18,646	2	\$37,292	7/26/1996	Pervomaysk
Cleaners, Steam	\$24,911	2	\$49,822	4/5/1996	Pervomaysk
Computer	\$24,783	1	\$24,783	10/31/1997	Kiev
Copier	\$20,415	1	\$20,415	4/21/1998	Kiev
Cranes	\$174,560	5	\$872,800	3/20/1995	Pervomaysk
Cranes	\$215,000	5	\$1,075,000	10/18/1995	Pervomaysk

Item Name	Unit Price	Quantity	Total Value	Arrival Date	Location
Cranes	\$871,213	2	\$1,742,426	10/23/1995	Pervomaysk
Cranes	\$143,020	7	\$1,001,140	9/1/1996	Pervomaysk
Cutters, Plasma	\$15,200	2	\$30,400	9/12/1995	Pervomaysk
Cutters, Plasma	\$15,200	2	\$30,400	9/12/1995	Pervomaysk
Dump trucks	\$63,178	21	\$1,326,738	3/30/1995	Pervomaysk
Equipment, Communication	\$29,012	1	\$29,012	3/6/1997	Kiev
Equipment, Computer	\$7,123	1	\$7,123	8/28/1995	Pervomaysk
Equipment, Computer	\$14,141	1	\$14,141	8/28/1995	Pervomaysk
Equipment, Computer	\$7,123	1	\$7,123	10/30/1995	Pervomaysk
Equipment, Replacement	\$28,626	2	\$57,252	9/11/1995	Kiev
Excavator	\$212,140	1	\$212,140	8/5/1995	Pervomaysk
Excavators	\$189,144	6	\$1,134,864	8/5/1995	Pervomaysk
Fire trucks	\$99,181	2	\$198,362	8/16/1996	Pervomaysk
Forklifts	\$55,773	7	\$390,411	9/21/1995	Pervomaysk
Graders	\$321,923	5	\$1,609,615	3/20/1995	Pervomaysk
Jacks, Hydraulic	\$1,156	12	\$13,872	10/30/1995	Pervomaysk
Lab, Mobile	\$617,460	1	\$617,460	4/22/1996	Pervomaysk
Network, Communication	\$195,429	1	\$195,429	9/12/1995	Pervomaysk
Saws, Cutoff	\$484	12	\$5,808	10/30/1995	Pervomaysk
Server, Color Xerox	\$22,365	1	\$22,365	4/21/1998	Kiev
Shelters, Housing	\$58,378	10	\$583,780	8/2/1995	Pervomaysk
Shelters, Mess Facility	\$39,310	3	\$117,930	7/21/1995	Pervomaysk
Slings, Lifting	\$9,348	4	\$37,392	9/11/1996	Pervomaysk
Tool Carriers	\$200,278	6	\$1,201,668	9/22/1997	Pervomaysk
Tool, Emergency Access	\$11,947	1	\$11,947	8/6/1995	Pervomaysk
Tools, Emergency Access	\$11,947	9	\$107,523	9/12/1995	Pervomaysk
Torches, Cutting	\$961	12	\$11,532	3/1/1996	Pervomaysk
Tractors	\$44,826	4	\$179,304	8/18/1995	Pervomaysk
Tractors	\$74,125	4	\$296,499	8/6/1995	Pervomaysk
Trailers (20L)	\$40,650	2	\$81,299	8/6/1995	Pervomaysk
Washers - Dryers	\$792	25	\$19,800	7/19/1995	Pervomaysk
Winches	\$14,900	8	\$119,200	8/6/1995	Pervomaysk
Winches	\$14,900	2	\$29,800	9/12/1995	Pervomaysk
Winches	\$18,700	10	\$187,000	9/12/1995	Pervomaysk
Winches, Hand	\$990	18	\$17,820	10/30/1995	Pervomaysk
Project: SS-19 Neutralization and Dismantlement Facility – 1.3.8			\$10,027,010		
Analyzers, Gas	\$2,691	5	\$13,455	5/30/1996	Dnepropetrovsk
Analyzers, Gas	\$5,770	5	\$28,850	5/30/1996	Dnepropetrovsk
Computers	\$10,148	8	\$81,184	11/4/1994	Kiev
Computers	\$28,626	5	\$143,130	3/31/1995	Kiev
Computer Equipment	\$3,163	2	\$6,326	5/30/1996	Dnepropetrovsk
Computer Equipment – Hand carry	\$8,282	1	\$8,282	4/5/1999	Dnepropetrovsk
Containers, Intermodal	\$54,068	6	\$324,408	5/4/1995	Dnepropetrovsk
Copiers	\$3,852	2	\$7,704	5/31/1996	Uman
Crane	\$76,910	1	\$76,910	9/28/1995	Dnepropetrovsk
Crane	\$295,000	1	\$295,000	9/28/1995	Dnepropetrovsk
Crane	\$350,509	1	\$350,509	4/22/1996	Dnepropetrovsk
Cutter, Plasma	\$15,200	1	\$15,200	5/30/1996	Dnepropetrovsk
Fax Machines	\$2,493	6	\$14,958	8/17/1994	Kiev
Incinerators, Single Trailer	\$929,000	2	\$1,858,000	7/29/1995	Pervomaysk
Incinerator, Single Trailer	\$929,000	1	\$929,000	7/31/1995	Dnepropetrovsk

Item Name	Unit Price	Quantity	Total Value	Arrival Date	Location
Incinerator, Single Trailer	\$1,034,000	1	\$1,034,000	8/11/1995	Dnepropetrovsk
Mobile Incinerators	\$929,000	2	\$1,858,000	8/3/1995	Khmelnitskiy
Oxygen-Nitrogen Prod. Systems	\$615,095	2	\$1,230,190	5/13/1996	Pervomaysk
Oxygen-Nitrogen Prod. Systems	\$615,095	2	\$1,230,190	5/14/1996	Mikhailienki
Oxygen-Nitrogen Prod. Systems	\$73,560	2	\$147,120	5/13/1996	Pervomaysk
Oxygen-Nitrogen Prod. Systems	\$73,560	2	\$147,120	5/14/1996	Mikhailienki
Power Units	\$3,134	2	\$6,268	5/30/1996	Dnepropetrovsk
Radios	\$1,881	5	\$9,405	5/30/1996	Dnepropetrovsk
Tool Carrier, Integrated	\$145,690	1	\$145,690	3/22/1995	Dnepropetrovsk
Tractor	\$39,226	1	\$39,226	3/30/1995	Dnepropetrovsk
Trailer	\$15,917	1	\$15,917	3/30/1995	Dnepropetrovsk
Ventilation Equipment	\$2,742	4	\$10,968	5/30/1996	Dnepropetrovsk
Project: SS-24 Silo Elimination - 1.3.9			\$1,395,106		
Crane	\$368,837	1	\$368,837	3/28/1994	Pervomaysk
Cranes	\$368,837	2	\$737,675	5/18/1994	Pervomaysk
HMMWV's	\$38,900	6	\$233,400	3/21/1994	Pervomaysk
Suburbans	\$27,597	2	\$55,194	11/3/2000	Uman
Project: SS-19 Liquid Propellant Disposition***			\$2,316,177		
Cranes	\$391,735	3	\$1,175,205	8/18/1995	Lubashevka
Fuel Storage Tanks	\$12,875	60	\$772,500	12/15/1994	Shevchenkovo
Tractors	\$74,418	4	\$297,672	8/18/1995	Lubashevka
Trailers	\$17,700	4	\$70,800	9/12/1995	Lubashevka
Project: Weapons of Mass Destruction Infrastructure Elimination - Ukraine - 1.4			\$4,262,162		
Bulldozers	\$208,480	2	\$416,960	3/20/1995	Pervomaysk
Bulldozer	\$208,480	1	\$208,480	3/20/1995	Lyubashevka
Carriers, Personnel	\$83,461	2	\$166,922	6/12/1996	Sevastopol
Carriers, Personnel	\$83,461	2	\$166,922	6/12/1996	Pervomaysk
Container, Intermodal	\$54,068	1	\$54,068	5/4/1995	Pervomaysk
Containers, Intermodal	\$54,068	7	\$378,476	5/4/1995	Lyubashevka
Cranes	\$215,000	2	\$430,000	10/18/1995	Pervomaysk
Crane	\$215,000	1	\$215,000	10/18/1995	Zherebkovo
Crane	\$215,000	1	\$215,000	10/18/1995	Lyubashevka
Dump trucks	\$63,178	7	\$442,246	3/30/1995	Pervomaysk
Dump truck	\$63,178	1	\$63,178	3/30/1995	Zherebkovo
Dump truck	\$63,178	1	\$63,178	3/30/1995	Lyubashevka
Excavators	\$212,140	2	\$424,280	8/5/1995	Pervomaysk
Excavator	\$337,795	1	\$337,795	8/5/1995	Pervomaysk
Fire truck	\$191,512	1	\$191,512	8/22/1995	Mikhailienki
Grader	\$138,355	1	\$138,355	3/20/1995	Pervomaysk
Grader	\$138,355	1	\$138,355	3/20/1995	Zherebkovo
Shelter, Mess Facility	\$39,310	1	\$39,310	8/2/1995	Pervomaysk
Tractors	\$44,826	1	\$44,826	8/18/1995	Pervomaysk
Trailers (20L)	\$40,650	2	\$81,299	8/6/1995	Pervomaysk
Vans	\$23,000	2	\$46,000	2/1/1996	Sevastopol
Project: Defense Conversion - Ukraine - 4.4.2			\$1,714,481		
Assembly Set	\$55,489	1	\$55,489	12/14/2001	Kiev
Assembly Sets	\$50,000	3	\$150,000	12/14/2001	Kiev
Appliances, Heating & Cooling with Spare Filter Cartridges	\$7,060	6	\$42,361	1/10/2003	Kiev

Item Name	Unit Price	Quantity	Total Value	Arrival Date	Location
Computer Systems (130) and Servers (3)	\$1,988	133	\$264,468	12/16/2002	Kiev
Die Casting Press Unit	\$309,473	1	\$309,473	12/14/2001	Kiev
Die Casting Press Units	\$170,000	3	\$510,000	12/14/2001	Kiev
Guard	\$15,000	1	\$15,000	12/14/2001	Kiev
Locking System	\$55,000	1	\$55,000	12/14/2001	Kiev
Press Unit Control System	\$60,000	1	\$60,000	12/14/2001	Kiev
Press Unit Control Systems	\$60,000	3	\$180,000	12/14/2001	Kiev
Spare Parts	\$16,691	1	\$16,691	12/14/2001	Kiev
Stand	\$26,000	1	\$26,000	12/14/2001	Kiev
Trim Presses	\$10,000	3	\$30,000	12/14/2001	Kiev
Project: Export Control - Ukraine - 4.5			\$9,099,222		
Computers	\$3,928	5	\$19,640	1/2/1995	Kiev
Computer Equipment	\$161,457	1	\$161,457	8/30/1999	Kiev
Computer Equipment	\$161,457	1	\$161,457	10/1/1999	Kiev
Compressors, Air	\$9,486	2	\$18,972	1/10/2003	Kiev
Copiers	\$3,255	2	\$6,510	6/20/1995	Kiev
Customs Automation	\$535,163	2	\$1,070,326	2/17/1996	Kiev
Customs Automation	\$1,085,920	2	\$2,171,840	4/4/1996	Kiev
Detectors	\$12,755	25	\$318,875	1/17/1997	Kiev
Detectors	\$13,533	25	\$338,332	2/9/2000	Kiev
Elevator, Otis	\$40,800	1	\$40,800	10/20/1999	Kiev
Equipment, Computer	\$1,081,373	1	\$1,081,373	3/3/1998	Kiev
Equipment, Computer	\$158,895	1	\$158,895	3/26/1998	Kiev
Equipment, Computer	\$59,620	1	\$59,620	6/15/1998	Kiev
Equipment, Computer	\$18,400	1	\$18,400	7/16/1998	Kiev
Equipment, Computer	\$32,701	1	\$32,701	8/3/1999	Kiev
Equipment, Laboratory	\$34,154	1	\$34,154	10/12/1995	Kiev
Generators	\$2,420	60	\$145,200	1/30/1998	Kiev
LAN for Export Control ETC	\$1,684,419	1	\$1,684,419	4/8/1996	Kiev
LAN for Export Control ETC	\$169,065	1	\$169,065	2/28/1996	Kiev
Machines, X-Ray	\$31,450	7	\$220,150	1/17/1997	Kiev
Machines, X-Ray	\$31,450	6	\$188,700	1/27/1997	Kiev
Machines, X-Ray	\$32,950	3	\$98,850	2/18/1997	Kiev
System, Computer, Office LAN	\$72,586	1	\$72,586	5/29/1995	Kiev
X-Ray Vans	\$98,450	2	\$196,900	8/2/1996	Kiev
X-Ray Vans	\$105,000	6	\$630,000	8/5/1998	Kiev
Project: Government-to-Government Communications Links - Ukraine - 4.8			\$921,614		
Equipment, Communications	\$223,841	1	\$223,841	5/22/1995	Kiev
Equipment, Communications	\$692,773	1	\$692,773	8/3/1998	Kiev
Transceiver	\$5,000	1	\$5,000	4/5/2000	Kiev
Project: Emergency Response - Ukraine***			\$1,651,583		
Air Samplers	\$690	10	\$6,900	4/10/1995	Kiev
Air Samplers	\$3,498	10	\$34,980	4/10/1995	Kiev
Detectors, Neutron	\$1,000	16	\$16,000	7/5/1995	Kiev
Detectors, Radiation	\$7,000	20	\$140,000	7/5/1995	Kiev
Equipment, Computer	\$62,333	3	\$186,999	4/10/1995	Kiev
Equipment, Computer	\$44,189	1	\$44,189	9/13/1996	Kiev
Network, Radio	\$567,204	1	\$567,204	9/18/1996	Kiev
Spectrometer, Alpha	\$25,289	1	\$25,289	7/5/1995	Kiev

Item Name	Unit Price	Quantity	Total Value	Arrival Date	Location
System, Computer, Office LAN	\$351,762	1	\$351,762	9/13/1996	Kiev
Violinist III, w/Laptop Drivers	\$13,913	20	\$278,260	7/5/1995	Kiev
Project: Equipment Pool - Ukraine			\$8,206,635		
Bulldozer	\$399,696	1	\$399,696	3/20/1995	Pervomaysk
Bulldozer	\$399,696	1	\$399,696	3/20/1995	Pervomaysk
Bulldozers	\$208,480	2	\$416,960	3/20/1995	Pervomaysk
Carrier, Personnel	\$83,461	1	\$83,461	6/12/1996	Uman
Carrier, Personnel	\$83,461	1	\$83,461	6/12/1996	Pavlograd
Crane	\$143,020	1	\$143,020	9/1/1996	Pervomaysk
Cranes	\$1,112,580	2	\$2,225,160	1/27/1996	Pavlograd
Cranes	\$871,213	2	\$1,742,426	10/20/1995	Pervomaysk
Cranes	\$174,560	2	\$349,120	3/20/1995	Pervomaysk
Crane	\$215,000	1	\$215,000	10/18/1995	Uman
Dump trucks	\$63,178	2	\$126,356	3/30/1995	Pervomaysk
Excavators	\$337,795	2	\$675,590	8/5/1995	Pervomaysk
Fire trucks	\$99,181	2	\$198,362	8/14/1996	Dnepropetrovsk
Forklifts	\$55,773	3	\$167,319	9/21/1995	Pervomaysk
Grader	\$321,923	1	\$321,923	3/20/1995	Pervomaysk
Shelters, Housing	\$58,378	8	\$467,024	7/21/1995	Pervomaysk
Shelters, Housing	\$58,378	2	\$116,756	8/2/1995	Pervomaysk
Trailer (36L)	\$52,305	1	\$52,305	8/6/1995	Pavlograd
Van	\$23,000	1	\$23,000	2/1/1996	Uman

Ukraine Total \$69,131,172

Country - Kazakhstan

Project: Weapons of Mass Destruction Infrastructure

Elimination - Kazakhstan - 1.5, 2.4			\$536,592		
Air Compressor	\$64,450	1	\$64,450	6/19/1997	Semipalatinsk
Computer	\$6,290	1	\$6,290	1/23/1998	Semipalatinsk
Computers	\$1,825	10	\$18,250	6/2/1998	Semipalatinsk
Drill, Rock	\$180,000	1	\$180,000	5/29/1998	Semipalatinsk
Equipment, Safety and Computer	\$70,453	1	\$70,453	4/19/1996	Semipalatinsk
Equipment, Safety and Computer	\$12,323	1	\$12,323	5/13/1996	Semipalatinsk
Instrument	\$20,000	1	\$20,000	5/29/1998	Semipalatinsk
Plotter, HP Design Jet	\$7,611	1	\$7,611	1/23/1998	Semipalatinsk
Rods, Drill	\$300	20	\$6,000	6/19/1997	Semipalatinsk
Scanner	\$12,282	1	\$12,282	1/23/1998	Semipalatinsk
Software, MS Office 97	\$908	12	\$10,896	6/2/1998	Semipalatinsk
Track, Drill	\$116,037	1	\$116,037	6/19/1997	Semipalatinsk
Vehicle	\$12,000	1	\$12,000	1/16/1998	Semipalatinsk

Project: Defense Conversion - Kazakhstan - 4.4.3

No GFE equipment with a total value \geq \$5,000 has been provided under this project.

Project: Export Control - Kazakhstan - 4.5

Project: Export Control - Kazakhstan - 4.5			\$3,974,301		
Accessories	\$379	50	\$18,950	6/29/1997	Almaty
Adapters, Vehicle	\$584	50	\$29,200	6/29/1997	Almaty
Advance Payment	\$121,121	1	\$121,121	3/29/1997	Almaty
Boats	\$144,368	2	\$288,736	1/2/1996	Aqtau
Boat	\$118,264	1	\$118,264	4/12/1996	Aqtau
Boat	\$140,763	1	\$140,763	4/27/1996	Aqtau
Boat	\$140,763	1	\$140,763	4/27/1996	Aqtau

Item Name	Unit Price	Quantity	Total Value	Arrival Date	Location
Boat	\$144,368	1	\$144,368	4/27/1996	Aqtau
Boat	\$613,537	1	\$613,537	8/1/1996	Aqtau
Buses	\$60,000	4	\$240,000	7/2/1997	Almaty
Cameras	\$388	20	\$7,759	9/19/1996	Almaty
Notebook Computer	\$70,806	1	\$70,806	3/29/1997	Almaty
Computer Systems	\$262,088	1	\$262,088	3/29/1997	Almaty
Computer, Workstation	\$86,648	1	\$86,648	11/28/1996	Almaty
Copiers	\$3,255	2	\$6,510	7/28/1995	Almaty
Copiers	\$10,016	2	\$20,032	11/21/1995	Almaty
Copier	\$182,648	1	\$182,648	2/20/1997	Almaty
Documentation	\$80,747	1	\$80,747	3/29/1997	Almaty
Equipment, Boat Training	\$5,746	1	\$5,746	4/12/1996	Aqtau
Equipment, Computer	\$51,719	1	\$51,719	12/10/1995	Almaty
Equipment, Computer	\$258,198	1	\$258,198	2/7/1997	Almaty
Equipment, Computer	\$71,306	1	\$71,306	3/29/1997	Almaty
Equipment, Laboratory	\$54,109	1	\$54,109	7/30/1995	Almaty
Equipment, Office	\$34,686	1	\$34,686	11/21/1995	Almaty
Equipment, Patrol	\$11,143	1	\$11,143	7/7/1997	Aqtau
Equipment, Radio	\$203,798	1	\$203,798	7/7/1997	Aqtau
Fax Machines	\$2,600	2	\$5,200	12/12/1995	Almaty
Gamma Rad.	\$1,297	100	\$129,700	9/18/1996	Almaty
Gun Mounts	\$10,778	1	\$10,778	8/1/1996	Aqtau
Lenses	\$344	20	\$6,876	9/19/1996	Almaty
Lenses	\$467	20	\$9,334	9/19/1996	Almaty
Lenses, Zoom	\$450	20	\$8,995	9/19/1996	Almaty
Radios	\$1,648	50	\$82,400	6/29/1997	Almaty
Repeater II	\$14,106	2	\$28,212	6/29/1997	Almaty
Speed Lights	\$375	20	\$7,499	9/19/1996	Almaty
Trailers	\$7,453	3	\$22,359	4/27/1996	Aqtau
Trucks, Pickup	\$16,985	8	\$135,880	6/29/1997	Almaty
Vans, Mini	\$18,482	5	\$92,410	6/29/1997	Almaty
Vehicles	\$21,377	8	\$171,013	6/29/1997	Almaty
Project: Government-to-Government Communications Links – Kazakhstan - 4.9			\$939,706		
Circuitry, Communications	\$25,000	1	\$25,000	5/2/1995	Almaty
Components, Earth Station	\$51,656	1	\$51,656	7/11/1998	Almaty
Equipment, Antenna	\$158,279	1	\$158,279	7/3/1998	Almaty
Equipment, Communications	\$222,153	1	\$222,153	5/2/1995	Almaty
Equipment, STS	\$482,618	1	\$482,618	7/3/1998	Almaty
Project: Strategic Offensive Arms Elimination – Kazakhstan***			\$2,276,465		
Ambulance	\$52,415	1	\$52,415	11/1/1998	Almaty
Baler	\$134,939	1	\$134,939	11/1/1998	Almaty
Baler	\$404,817	1	\$404,817	11/1/1998	Almaty
Crane	\$230,369	1	\$230,369	11/1/1998	Almaty
Excavator	\$145,879	1	\$145,879	11/1/1998	Almaty
Incinerator, Mobil	\$825,500	1	\$825,500	10/21/2001	Almaty
Platform, Ladders	\$1,596	4	\$6,384	11/1/1998	Almaty
Radio	\$12,909	1	\$12,909	11/1/1998	Almaty
Saws, Cutoff	\$673	10	\$6,735	11/1/1998	Almaty
Scales, Truck	\$1,275	4	\$5,100	11/1/1998	Almaty
Shears/Inst	\$86,950	1	\$86,950	11/1/1998	Almaty

Item Name	Unit Price	Quantity	Total Value	Arrival Date	Location
Tool Carrier, Integrated	\$93,363	1	\$93,363	11/1/1998	Almaty
Tool, Hydraulic	\$66,309	1	\$66,309	11/1/1998	Almaty
Torches, Cutting	\$845	10	\$8,450	11/1/1998	Almaty
Tractor	\$76,302	1	\$76,302	11/1/1998	Almaty
Tractor	\$103,500	1	\$103,500	10/21/2001	Almaty
Trailer	\$16,544	1	\$16,544	11/1/1998	Almaty
Project: Emergency Response – Kazakhstan***			\$763,284		
Air Samplers	\$2,395	12	\$28,740	2/25/1996	Semipalatinsk
Analyzer, Gas	\$38,303	1	\$38,303	2/25/1996	Semipalatinsk
Detectors, Material	\$12,187	8	\$97,496	2/25/1996	Semipalatinsk
Detectors, Radiation	\$6,845	6	\$41,070	2/25/1996	Semipalatinsk
Dosimeters	\$100	330	\$33,000	2/25/1996	Semipalatinsk
Equipment, Computer	\$16,081	1	\$16,081	6/21/1996	Semipalatinsk
Network, Radio	\$257,853	1	\$257,853	6/20/1997	Semipalatinsk
System, Computer, Office LAN	\$250,741	1	\$250,741	6/20/1997	Semipalatinsk
Kazakhstan Total			\$8,490,348		
Country - Georgia					
Project: Export Control - 4.5			\$679,550		
Boat	\$329,550	1	\$329,550	2/8/1999	Poti
Boat	\$350,000	1	\$350,000	4/15/1998	Poti
Georgia Total			\$679,550		
Country - Uzbekistan					
Project: Nukus Chemical Research Institute Demilitarization - 1.7			No GFE equipment with a total value \geq \$5,000 has been provided under this project.		
Uzbekistan Total			\$0		
Country - Multiple					
Project: BW Infrastructure Elimination - 1.6			\$1,123,823		
PCR System and accessories	\$13,130	1	\$13,130	10/30/2000	Stepnogorsk
PCR System and accessories	\$13,139	1	\$13,139	11/10/2000	Stepnogorsk
Liquid Chromatograph	\$90,500	1	\$90,500	10/30/2000	Stepnogorsk
Accessory	\$25,873	1	\$25,873	6/5/1998	Stepnogorsk
Ball Mill	\$5,005	1	\$5,005	6/5/1998	Stepnogorsk
Equipment, Laboratory	\$919,490	1	\$919,490	11/27/1997	Stepnogorsk
Freezer	\$14,700	1	\$14,700	6/5/1998	Stepnogorsk
Gas, Chromatograph	\$35,750	1	\$35,750	6/5/1998	Stepnogorsk
Laboratory Safety Supplies	\$6,237	1	\$6,237	11/7/1999	Stepnogorsk
Project: Biosecurity & Biosafety - 2.5.1			No GFE equipment with a total value \geq \$5,000 has been provided under this project.		
Project: Cooperative Biological Research - 3.2.1			No GFE equipment with a total value \geq \$5,000 has been provided under this project.		
Project: BW Threat Agent Detection and Response (TADR) - 4.1.1			No GFE equipment with a total value \geq \$5,000 has been provided under this project.		
Project: WMD Proliferation Prevention Initiative - 4.2			\$79,632		

Item Name	Unit Price	Quantity	Total Value	Arrival Date	Location
Fissile & radioactive material detection equipment, Various	\$79,632	1	\$79,632	7/28/2003	Tashkent
Projects: Defense and Military Contacts - 4.3					No GFE equipment with a total value \geq \$5,000 has been provided under these projects.
Projects: Science and Technology Centers (ISTC) - 4.6					No GFE equipment with a total value \geq \$5,000 has been provided under these projects.
Projects: Defense Enterprise Fund - 4.7					No GFE equipment with a total value \geq \$5,000 has been provided under these projects.
Multiple Total			\$1,203,455		
Total Equipment			\$364,643,018		

* Equipment was shipped to initial delivery locations in Russia for onward delivery to classified locations such as nuclear weapons storage sites. MOD has identified these locations by site designator. The Special Arrangements for the conduct of A&Es of NWSS equipment require MOD to provide periodic inventories of assistance at each location. However, as referenced in the Executive Summary of this Annual Report to Congress, to-date MOD has not provided a full inventory of assistance by site designator. MOD has requested technical assistance from DoD to meet this requirement. In response, DoD is providing computers, training, and access to an equipment database to help MOD meet this requirement.

** These items are used to support transportation of Nuclear Weapons throughout Russia.

*** These projects are completed and do not have a corresponding reference in the report.

APPENDIX D: FINANCIAL COMMITMENTS FOR FY 2004 FROM THE INTERNATIONAL COMMUNITY AND RUSSIA FOR THE CHEMICAL WEAPONS DESTRUCTION FACILITY AT SHCHUCH'YE, RUSSIA

Section 1309 of the National Defense Authorization Act (NDAA) for FY 2002 (Public Law 107-107) is entitled, "Additional Matter in Annual Report on Activities and Assistance under Cooperative Threat Reduction Programs" and requires:

"A description of the amount of the financial commitment from the international community, and from Russia, for the chemical weapons destruction facility located at Shchuch'ye, Russia, for the fiscal year beginning in the year in which the report is submitted."

FY 2004 Financial Commitment from the International Community

Members of the international community plan to commit over \$45,000,000 in United States dollars¹ (USD) to fund high-priority infrastructure projects that will support the operation of the chemical weapons destruction facility (CWDF) at Shchuch'ye:

- ?? Canada has committed \$24,000,000 to build the railway between the storage and destruction facilities.
- ?? Czech Republic has contributed \$69,000 to procure equipment for the electrical substation.
- ?? European Union has committed up to \$2,400,000 for the electrical substation project.
- ?? Italy has committed \$6,100,000 for the installation of additional gas pipeline.
- ?? Norway has committed \$2,600,000 for the electrical substation project.
- ?? The United Kingdom intends to commit about \$10,410,000 for the procurement of equipment for the electrical substation.

Additional contributions for the Shchuch'ye CWDF project in FY 2004 are possible. Other countries including France and Switzerland have indicated interest in supporting Shchuch'ye.

FY 2004 Financial Commitment from the Russian Federation.

The Russian Federation plans to commit at least \$25,000,000 to fund industrial and social infrastructure projects, as well as the construction of the second drill, drain, and neutralization building at Shchuch'ye.

¹ The amounts stated in USD are approximate because of the fluctuation of currency exchange rates.

APPENDIX E: REPORT OF USE OF REVENUE GENERATED BY ACTIVITIES CARRIED OUT UNDER COOPERATIVE THREAT REDUCTION PROGRAMS

Russia

Although DoD has not finalized formal agreements and procedures for scrap revenue tracking on SOAE projects, the following advances have been made relative to this process.

DoD negotiated and finalized an update to the SOAE Implementing Agreement signed August 30, 2002. This update changed the Executive Agent from the former Russian Executive Agent, the Ministry of Economics, to RASA. Additionally, Article VII of the Agreement was amended to provide "... DoD the right to audit and examine the use of and proceeds from any material, services, or training provided pursuant to this agreement..." This update established DoD's right to audit revenues generated by scrap and by-products for SOAE projects.

DoD is drafting Guidelines to Account for Proceeds from Scrap and Other Marketable By-Products Generated by the CTR SOAE Projects for RASA consideration. These guidelines will be negotiated with RASA.

Ukraine

Ukraine has indicated that it has used a portion of scrap revenues to build housing for demilitarized officers, and has submitted documentation in this regard. DoD has assessed the disposition of scrap proceeds to complement CTR objectives, particularly the construction of housing to accommodate demobilized military personnel. DoD has requested that Ukraine continue to periodically inform DoD of the utilization of scrap to fund demobilized military housing.

APPENDIX F: DEFENSE AND MILITARY ACTIVITIES CARRIED OUT UNDER COOPERATIVE THREAT REDUCTION PROGRAM

Created in 1993 as a part of the larger CTR program, the Defense and Military Contact (DMC) program is a policy tool used to promote USG and DoD-specific objectives in the former Soviet Union states eligible for CTR funds. These bilateral activities are designed to engage the FSU military and defense officials in activities that promote demilitarization and defense reform, further counterproliferation efforts, and endorse regional stability and cooperation. Specifically, DMC activities in Russia seek to stem proliferation of Russian chemical, biological, and nuclear weapons and related technology; support implementation of the new strategic framework; and enhance the U.S.-Russia partnership. In the other CTR-eligible Eurasia states, the DMC activities are intended to stem proliferation of chemical, biological, and nuclear weapons and increase U.S. access to and cooperation with the region by strengthening defense partnerships.

Through conferences, talks, information exchanges, familiarization visits, traveling contact teams, and combined military exercises, DoD has been able to simultaneously advance democratic military and defense institutions within the FSU while also furthering U.S. national security strategy interests. The DMC program is part of a number of policy tools and activities, all of which are designed to build security cooperation with the Eurasian states. In FY 2003, DoD executed 300 events. Bilateral Defense Consultations took place across Eurasia as well as important events in each individual country:

- ?? Armenia: Peacekeeping study
- ?? Azerbaijan: Defense assessment and implementation plan
- ?? Georgia: Assessment of the 11th brigade as a follow on to the train and equip program
- ?? Kazakhstan: Special Operations Forces exchanges
- ?? Kyrgyzstan: Mountainous terrain training exchanges
- ?? Moldova: Ongoing defense assessment
- ?? Russia: Arctic Search and Rescue Exercise and Colonels interoperability group
- ?? Tajikistan: High level exchanges in preparation for a defense assessment
- ?? Ukraine: Joint staff talks and Rough and Ready naval exercise
- ?? Uzbekistan: Special Operations forces exercises

**APPENDIX G: SECTION 1307 OF THE NDAA FOR FY 1999
SUMMARY OF AMOUNT REQUESTED BY PROJECT
CATEGORY (\$ K)**

	Program	Project	FY 2003	FY 2004	FY 2005
A.	Strategic	Offensive Arms Elimination (R)	\$70,100	\$66,600	\$58,522
		Emergency Response Support Equipment	\$400	\$400	\$400
		Solid Propellant ICBM/SLBM and Mobile Launcher Elimination	\$13,100	\$30,200	\$29,073
		Liquid Propellant ICBM and Silo Elimination	\$12,600	\$14,900	\$17,049
		SLBM Launcher Elimination/SSBN Dismantlement	\$27,000	\$9,700	\$10,200
		Spent Naval Fuel Disposition	\$12,400	\$7,600	\$400
		Liquid Propellant SLBM Elimination	\$4,600	\$3,800	\$1,400
B.	Nuclear	Weapons Storage Security (R)	\$39,800	\$48,000	\$48,672
		Automated Inventory Control & Management System	\$187		
		Personnel Reliability and Safety	\$1,800	\$100	\$50
		Guard Force Equipment and Training	\$100		
		Nuclear Weapons Storage Site Support	\$29,100		
		Site Security Enhancements	\$8,613	\$47,900	\$48,622
C.	Nuclear	Weapons Transportation Security (R)	\$19,600	\$23,200	\$26,300
		Nuclear Weapons Transportation	\$10,655	\$14,000	\$17,500
		Railcar Maintenance and Procurement	\$8,050	\$3,300	\$8,800
		Weapons Transportation Safety Enhancements	\$895	\$5,900	
D.	Chemical	Weapons Destruction (R)	\$132,900	\$200,300	\$158,400
		Chemical Weapons Destruction Facility	\$125,900	\$190,300	\$155,200
		CW Production Facility Demilitarization	\$7,000	\$10,000	\$3,200
E.	Strategic	Nuclear Arms Elimination (U)	\$6,400	\$4,900	
		SS-24 Missile Motor Elimination	\$6,400	\$4,900	
F.	WMD	Infrastructure Elimination (U)	\$8,700		
		National Nuclear Storage Site Elimination	\$8,700		
G.	WMD	Infrastructure Elimination (K)	\$8,900		
		Fissile and Radioactive Material Proliferation Prevention	\$2,650		
		Liquid Missile Propellant and Storage facility Elimination	\$4,750		
		Nuclear Weapons Storage Security Elimination	\$1,500		
H.	BW	Proliferation Prevention (FSU)	\$54,700	\$54,200	\$54,959
		BW Infrastructure Elimination	\$4,109	\$4,309	\$3,727
		Biosecurity & Biosafety	\$16,012	\$11,249	\$24,615
		Cooperative Biological Research	\$18,271	\$36,583	\$13,148
		BW Threat Agent Detection and Response	\$16,308	\$2,059	\$13,469
I.	WMD	Proliferation Prevention	\$39,800	\$29,400	\$40,030
		WMD Proliferation Prevention Initiative - (Non-Russia FSU)	\$39,800	\$29,400	\$40,030
J.	Defense & Military	Contacts (FSU)	\$18,800	\$8,945	\$8,000
		Defense & Military Contacts	\$18,800	\$8,945	\$8,000
K.	Other Assessments/Administrative	Costs (O)	\$14,662	\$13,100	\$14,317
		Audits and Examinations	\$500	\$500	\$500
		Program Management/Administration	\$14,162	\$12,600	\$13,817
		Total	\$414,362	\$448,645	\$409,200

APPENDIX H: REPORT ON COOPERATIVE THREAT REDUCTION ASSISTANCE PURSUANT TO S. EXEC. RPT. 108-1, SECTION 2(1)

Senate Executive Report 108-1 dated March 6, 2003 regarding advice and consent to ratification of the Moscow Treaty states: “Recognizing that implementation of the Moscow Treaty is the sole responsibility of each party, not later than 60 days after the exchange of instruments of ratification of the Treaty, and annually thereafter on February 15, the President shall submit to the Committee on Foreign Relations and the Committee on Armed Services of the Senate a report and recommendations on how United States Cooperative Threat Reduction assistance to the Russian Federation can best contribute to enabling the Russian Federation to implement the Treaty efficiently and maintain the security and accurate accounting of its nuclear weapons and weapons-usable components and material in the current year. The report shall be submitted in both unclassified and, as necessary, classified form.” (S. Exec. Rpt. 108-1, 2(1)). This report responds to the forgoing requirement.

I. Overview.

The Strategic Offensive Reduction Treaty (Moscow Treaty), which entered into force on June 1, 2003, commits each party to reduce the aggregate number of strategic nuclear warheads to 1700-2200 by December 31, 2012. The Department of Defense (DoD) Cooperative Threat Reduction (CTR) program assists former Soviet states to reduce and prevent proliferation of Weapons of Mass Destruction (WMD), delivery systems, and related materials, technologies, and expertise. CTR-supported projects include dismantlement of: Russian intercontinental ballistic missiles (ICBMs); silo launchers and road- and rail-mobile ICBM launchers; submarine-launched ballistic missiles (SLBMs), SLBM launchers and associated submarines; and related strategic infrastructure. CTR-supported projects also assist with consolidation, securing, and accounting for nuclear weapons and fissile material removed from nuclear weapons. CTR activities that address strategic nuclear systems and infrastructure specifically will support implementation of the Moscow Treaty.

DoD develops its CTR program plans based on Russian Federation information on strategic systems and infrastructure projected to be available for elimination, consolidation or securing. DoD plans CTR assistance to be able to accommodate deactivation of Russian Federation strategic systems at the rate proposed by the Russian government. Therefore, CTR will support efficient implementation of the Moscow Treaty by continuing to plan for elimination, consolidation, or securing of Russian Federation strategic systems as they are turned over. This is also true of CTR assistance to improve the inventory and control of deactivated Russian Federation nuclear weapons.

This report provides information on CTR activities underway in the “current year” (FY 2004) that support implementation of the Moscow Treaty. The activities reported are those the Administration recommends for the contribution of the CTR program in the current year to enable the Russian Federation to implement the Moscow Treaty efficiently and to maintain the security and accounting of its nuclear weapons and weapons-usable components and material.

II. Current Year (FY 2004) Activities.

Strategic Offensive Arms Elimination (SOAE): DoD is assisting Russia by contracting for and overseeing the destruction of strategic weapons delivery systems in accordance with the SOAE implementing agreement and all relevant START provisions and agreements, including the START C or E Protocol. DoD is providing equipment and services to destroy or dismantle intercontinental ballistic missiles (ICBMs), ICBM silos, submarine-launched ballistic missiles (SLBMs), SLBM launchers, and related infrastructure. CTR will also dismantle road- and rail-mobile missiles and missile-launcher systems in accordance with certain protections to CTR assistance agreed to by Russia and contained in agency-level agreements negotiated in May and September 2003. The CTR Program also supports the placement in casks designed for long term storage of spent naval reactor fuel from SSBNs being prepared for elimination.

The following projects supported this activity in FY 2004:

- ?? Solid Propellant ICBM/SLBM and Mobile Launcher Elimination,
- ?? Liquid Propellant ICBM and Silo Elimination,
- ?? SLBM Launcher Elimination/SSBN Dismantlement,
- ?? SNF Disposition, and
- ?? Liquid Propellant SLBM Elimination.

Solid Propellant ICBM/SLBM and Mobile Launcher Elimination. Twelve SS-N-20 submarine launched ballistic missiles (SLBMs), ten SS-24 intercontinental ballistic missiles (ICBMs), nine rail-mobile ICBM launchers, and eighteen launch-associated railcars are expected to be eliminated in FY 2004. Facilities for the elimination of the SS-25 road-mobile missile system will be completed. Facilities associated with one SS-25 regiment will be eliminated.

Liquid Propellant ICBM and Silo Elimination. In FY 2004, 26 SS-18 ICBMs will be removed from silos, defueled, and shipped to a storage facility. Approximately 1,300 metric tons of fuel and 3,380 metric tons of oxidizer are being shipped to storage facilities. Twenty-six SS-18 and nine SS-19 ICBMs, 16 ICBM silos, and three LCC silos are expected to be eliminated by the end of the fiscal year.

SLBM Launcher Elimination/SSBN Dismantlement. Twelve SLBM launchers will be eliminated, and DoD will complete the dismantlement of two SSBNs. Two additional SSBNs will be placed on contract, one at the Severodvinsk Machine Building Plant and one at the Zvezda Far East Factory. These contracts will eliminate 20 and 16 SLBM launchers respectively.

SNF Disposition. Twenty-four casks designed to store SNF will be produced in FY 2004. The final two of six railcars for transporting SNF from shipyards to centralized storage will be completed. The design for a SNF storage facility at the Mayak Production Association will be completed.

Liquid Propellant SLBM Elimination. Seventy-four SLBMs will be dismantled and eliminated at Krasnoyarsk and Sergiev Posad.

Nuclear Weapons Storage Security (NWSS): In accordance with the NWSS implementing agreement, this program supports U.S. proliferation prevention objectives by enhancing the security, safety, and control of nuclear weapons destined for dismantlement during storage. The following projects supported this objective in FY 2004.

?? Automated Inventory Control and Management System (AICMS)

?? Site Security Enhancements

AICMS. This project enhances the ability of the MOD to account for and track strategic and tactical nuclear weapons scheduled for dismantlement. The operational configuration consists of hardware and off-the-shelf software for a fully integrated system, housed in modular facilities. In FY 2004, the construction of Central Control Point 1 will be completed. The sixteen modular facilities will be installed at Russian sites.

Site Security Enhancements. This project enhances the safety and security of Russian nuclear weapons storage at national stockpile sites and at Air Force and some Strategic Rocket Force (SRF) and, possibly, Navy operational storage sites. This CTR work is closely coordinated with Department of Energy projects to enhance security at several Russian Navy and SRF sites. MOD has provided a database depicting 52 nuclear weapons storage areas (NWSAs) of various sizes and configurations. Since DOE has been given responsibility for upgrading some SRF and Navy sites, DoD expects to provide security upgrades for up to 32 NWSAs. MOD has also identified temporary storage security requirements at road-to-rail transfer points. Depending on the condition of the sites, security and safety enhancements may include equipment to rapidly improve guard force capabilities, "quick fix" fencing to improve perimeter security, and comprehensive security upgrades. Assistance includes suites of security equipment, support equipment, and training to implement security enhancements.

Work has also begun on the first nine sites that will receive comprehensive security upgrades. DoD expects to complete site designs and one site security equipment installation in FY 2004.

Nuclear Weapons Transportation Security (NWTS): In accordance with the NWTS implementing agreement, this program supports U.S. proliferation prevention objectives by enhancing the security, safety, and control of nuclear weapons during shipment to consolidated storage sites or to dismantlement. The following projects are supporting this initiative during FY 2004:

?? Nuclear Weapons Transportation

?? Railcar Maintenance and Procurement

Nuclear Weapons Transportation. This project assists MOD in the shipment of nuclear warheads from deployment sites to central storage and dismantlement locations and from central storage sites to dismantlement locations. In FY 2004, the project is expected to support 72 nuclear weapons train shipments.

Railcar Maintenance and Procurement. This project is intended to ensure that the 200 nuclear weapons cargo railcars and 15 guard railcars that support MOD's dismantlement efforts

are able to maintain the required Ministry of Railways certification. The project also improves the capability to transport nuclear weapons by extending the service life of existing railcars or, if that effort fails, by procuring new railcars. The 15 guard railcars exceeded their service life in 2003, and were permanently removed from service. In FY 2004, production of the 15 replacement guard railcars is scheduled to begin.

Fissile Material Storage Facility: In accordance with the FMSF Construction Implementing Agreement, the FMSF will provide centralized, safe, secure, and ecologically sound storage for fissile material removed from nuclear weapons. The project supports U.S. proliferation prevention objectives through enhanced material control and accounting (MC&A) and transparency, which requires confidence that the stored weapons grade fissile material is safe and secure, and that the fissile material declared excess to military needs will not be re-used for nuclear weapons.

The FMSF is designed to accelerate nuclear warhead dismantlement by furnishing storage for weapons grade fissile material. Construction of the FMSF at Mayak, Russia, will provide a capability to store 25,344 containers of fissile material. The design incorporates the required support buildings and a receiving/storage building. Construction was completed and the FMSF was commissioned on December 11, 2003. It is anticipated that a transparency agreement with Russia will be signed and the development of the transparency system that will measure certain characteristics of the material will begin in FY 2004.

ACRONYMS & ABBREVIATIONS

A&E	Audits and Examinations
AELB	Abnormal Event Lifting Beams
AICMS	Automated Inventory Control & Management System
AIE	Airbase Infrastructure Elimination
ALCM	Air-Launched Cruise Missile
ASM	Air-to-Surface Missile
BNI	Bechtel National, Inc.
BTRIA	Biological Threat Reduction Implementing Agreement
BW	Biological Weapons
BWPP	Biological Weapons Proliferation Prevention
C or E	Conversion or Elimination
CAL	Chemical Analytical Laboratory
CBR	Cooperative Biological Research
CDC	Center for Disease Control
CEDT	Cooperative Equipment Disposition Team
CLS	CTR Logistics Support
CRDF	Civilian Research and Development Foundation
CRI	Chemical Research Institute
CTR	Cooperative Threat Reduction
CTRIC	CTR Integrating Contract
CW	Chemical Weapons
CWC	Chemical Weapons Convention
CWD	Chemical Weapons Destruction
CWDF	Chemical Weapons Destruction Facility
CWDSO	Chemical Weapons Destruction Support Office
CY	Calendar Year
DCAA	Defense Contract Audit Agency
DCMA	Defense Contract Management Agency.
DEF	Defense Enterprise Fund
DoD	Department of Defense
DoD IG	DoD Inspector General
DOE	Department of Energy
DOS	Department of State
DTRA	Defense Threat Reduction Agency
ER	Emergency Response
ESE	Emergency Support Equipment
EVMS	Earned Value Management System
EXBS	Export Control and Related Border Security Assistance

FAR	Federal Acquisition Regulation
FMC	Fissile Material Container
FMSF	Fissile Material Storage Facility
FSU	former Soviet Union
FY	Fiscal Year
FYDP	Future Years Defense Plan
GAO	General Accounting Office
GGCL	Government-to-Government Communications Link
GosNIIOKhT	State Scientific Research Institute for Organic Chemistry & Technology
IAS	Information Analysis System
ICBM	Intercontinental Ballistic Missile
IMTC	Intermodal Tank Container
INF	Intermediate Nuclear Forces
ISMS	Inventory Sampling Measurement System
ISTC	International Science and Technology Center
JRIP	Joint Requirements and Implementation Plan
KBRS	Kellogg Brown and Root Services
LAN	Local Area Network
LCC	Launch Control Center
LLP	Limited Liability Partnership
LLRW	Low Level Radioactive Waste
LMC	Loaded Motor Case
LOV	Letter of Verification
LPDF	Liquid Propellant Disposition Facility
LPDS	Liquid Propellant Disposition Systems
MC&A	Material Control and Accounting
MEDF	Missile Elimination and Dismantlement Facility
MFA	Ministry of Foreign Affairs
MinAtom	Ministry of Atomic Energy
MOA	Memorandum of Agreement
MOD	Ministry of Defense
MOU	Memorandum of Understanding
NDAA	National Defense Authorization Act
NSS	National Stockpile Site
NWSA	Nuclear Weapons Storage Area
NWSS	Nuclear Weapons Storage Security
NWTS	Nuclear Weapons Transportation Security
OPCW	Organization for the Prohibition of Chemical Weapons
OSD	Office of the Secretary of Defense
OSDF	On-Shore Defueling Facility
OUSDP	Office of the Under Secretary of Defense for Policy

PDF	Propellant Disposition Facility
PRP	Personnel Reliability Program
RAM.....	Reliability, Availability, and Maintainability
RASA.....	Russian Aviation and Space Agency
RMA	Russian Munitions Agency
RTSC.....	Raytheon Technical Services Company
SAIC.....	Science Applications International Corporation
SATC	Security Assessment and Training Center
SATS	Small Arms Training System
SEC	Safety Enhancement Center
SETA.....	Systems Engineering and Technical Assistance
SLBM.....	Submarine Launched Ballistic Missile
SNAE	Strategic Nuclear Arms Elimination
SNF	Spent Naval Fuel
SOAE	Strategic Offensive Arms Elimination
SPDF	Solid Propellant Disposition Facility
SRCAM.....	State Research Center for Applied Microbiology
SRF.....	Strategic Rocket Forces
SRM	Solid Rocket Motor
SRMDF	Solid Rocket Motor Disposition Facility
SSBN.....	Nuclear Powered Ballistic Missile Submarine
START.....	Strategic Arms Reduction Treaty
STC	Science and Technology Center
STCU	Science and Technology Center – Ukraine
TADR.....	Threat Agent Detection and Response
TOC.....	Transfer of Custody
TRSC.....	Threat Reduction Support Center
U.S.....	United States
UFF	Unified Fill Facility
USACE.....	United States Army Corps of Engineers
USG.....	United States Government
VAT	Value Added Tax
Vector.....	State Research Center of Virology and Biotechnology
WGI.....	Washington Group International
WMD	Weapons of Mass Destruction
WMDIE.....	Weapons of Mass Destruction Infrastructure Elimination
WMD-PPI	WMD Proliferation Prevention Initiative