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Cooperative Threat Reduction Annual Report to Congress Fiscal Year 2006

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FY 2006 CTR ANNUAL REPORT TO CONGRESS

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I. EXECUTIVE SUMMARY

Recurring Requirements Addressed In This Report

The Annual Report to Congress on Cooperative Threat Reduction (CTR) activities (CTR Annual Report) for FY 2006 is submitted in accordance with Section 1308 of the Floyd D. Spence National Defense Authorization Act (NDAA) for FY 2001, as amended. It addresses the “Five-Year CTR Program Implementation Plan” (FY 2006 – FY 2011) and the FY 2004 requirement for “Accounting for CTR Program Assistance to States of the Former Soviet Union (FSU).”

Additional Reporting Requirements Addressed by the CTR Annual Report

This report includes the Treaty on Strategic Offensive Arms (Moscow Treaty) Report (Senate Executive Report 108-1, Section 2(1), dated March 6, 2003, regarding advice and consent to ratification of the Moscow Treaty on how the United States CTR assistance to the Russian Federation (RF) can best contribute to enabling Russia 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. Appendix G responds to this requirement. Also addressed is the requirement for an Annual Certification on use of facilities being constructed for CTR projects or activities, established by Section 1307 of the NDAA for FY 2004. (See Appendix H.)

CTR Program and United States National Security

In December 2002, the President issued the National Strategy to Combat Weapons of Mass Destruction, which cites Weapons of Mass Destruction (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:

- 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.*

The Department of Defense (DoD)’s support of these objectives under the CTR Program addresses proliferation prevention concerns in Russia and other FSU states as they become full partners in the Global War on Terrorism. CTR activities are intended to help deny rogue states and terrorists access to WMD and related materials, technologies, and expertise in support of the Global War on Terrorism while contributing to stability, cooperation, and expanding 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 fissile material storage and

transportation; monitors and consolidates dangerous pathogens that pose risk for theft, diversion, accidental release, or use by terrorists; helps prevent trafficking of WMD across non-Russia FSU states; and facilitates defense and military contacts to encourage military reductions and reform.

CTR Program — Proliferation Prevention

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

The BWPP program seeks to counter the threat of bioterrorism and to prevent the proliferation of biological weapons technology, materials, and expertise at their sources in FSU states. DoD's strategic vision is to partner with FSU states to eliminate biological weapons and prevent bioterrorism. The approach is to build a capability to enhance public health while consolidating and accessing dangerous pathogens through cooperative relationships at multiple levels – regional, government-to-government, lab-to-lab, and scientist-to-scientist.

The WMD-PPI assists non-Russia FSU states in building capabilities to stem the potential proliferation of WMD. DoD helps these states develop self-sustaining, integrated capabilities to prevent proliferation of WMD, WMD-related materials, and technologies to terrorists and hostile states. The approach is to build these capabilities in coordination with other U.S. agencies' programs that support regulatory enforcement and security regimes.

Under the provisions of Section 1308 of the NDAA for FY 2004, the President determined that CTR assistance to the Republic of Albania for the destruction of its chemical weapons (CW) stockpile would "permit the United States to take advantage of opportunities to achieve long-standing proliferation goals" and would "be completed in a short period of time." This project will support the destruction of all chemical weapons and agents in Albania as declared to the Organization for the Prohibition of Chemical Weapons and starts in FY 2005.

CTR Program Accomplishments in FY 2004

In Russia, the CTR Program continued to eliminate strategic missile and launcher systems. It assisted in moving nuclear warheads from operational bases to storage and dismantlement facilities by shipping 45 trainloads of nuclear warheads and components. The number of shipments was sharply reduced from previous years due to temporary stop-work periods caused by a delay in the Russian Federation Ministry of Defense (MOD) signing an implementing agreement amendment. Vulnerability assessments and designs for 12 Russian nuclear weapons storage sites were completed; 80 percent of the selected equipment has been ordered, is being delivered, and facility upgrades are progressing. Construction of Russia's first Chemical Weapons Destruction Facility (CWDF) for nerve agent filled, proliferable weapons continued in FY 2004; design is 91 percent complete and construction is 18 percent complete.

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 intercontinental ballistic missiles (ICBMs) are in secure storage; DoD support for this storage will end in FY 2005, unless Ukraine requests assistance for elimination through a method other than water washout. DoD remains committed to motor elimination through open burn or open detonation.

Figure 1 CTR Program Assisted Reductions to Date (Current as of December 23, 2004).

Ukraine, Kazakhstan, and Belarus are Nuclear Weapons Free							
CATEGORY	BASE LINE	Goals	FY 2004 Reductions	Current Cumulative Reduction	Per Cent	CY 2007 Target for Reductions	CY 2012 Target for Reductions
Warheads Deactivated	13,300	8,600	260	6,564	76	7,792	8,567
ICBMs Destroyed	1,473	1,140	30	568	50	766	1,140
ICBM Silos Eliminated	831	485	18	476	98	485	485
ICBM Mobile Launchers Destroyed	442	355	7	17	5	150	150
Bombers Eliminated	228	150	14	140	93	150	160
Nuclear ASMs Destroyed	829	830	110	745	90	829	829
SLBM Launchers Eliminated	728	570	0	420	74	472	572
SLBMs Eliminated	936	670	99	541	81	609	669
SSBNs Destroyed	48	32	0	28	88	32	32
Nuclear Test Tunnels/Holes Sealed	194	194	0	194	100	194	194

DoD made significant progress in the BWPP program. In Georgia, interim biosafety and biosecurity upgrades at the National Center for Disease Control, the site of the temporary Central Reference Laboratory (CRL) and national pathogen repository were completed, and a project to eliminate facilities at Biokombinat in Tbilisi was initiated. In Kazakhstan, DoD efforts to eliminate Buildings 221 and 600 at Stepnogorsk continued. In Kazakhstan, Uzbekistan, and Georgia, DOD initiated the Threat Agent Detection and Response (TADR) project to consolidate and secure dangerous pathogens by establishing in-country Integrated Process Teams to refine system requirements, fielding a prototype electronic disease reporting system and the first of 32 Epidemiological Monitoring Stations, and completing conceptual designs for CRLs in each country. Three Cooperative Biological Research (CBR) projects were initiated - two in Uzbekistan and one in Kazakhstan. Four new projects were approved for initiation in 2005 - one in Uzbekistan, two in Kazakhstan, and one in Georgia. Assessments were completed at sites that potentially stored pathogens – eleven in Kazakhstan, ten in Uzbekistan, and nine in Georgia. In Russia, DoD began conducting an engineering study at former institutes that specialized in biological weapons (BW) pathogens during the Cold War.

The WMD-PPI program initiated three projects that seek to bolster the ability of non-Russia FSU states to prevent proliferation of WMD across their borders. Assistance is being provided to: Ukraine, focusing on providing a WMD and related materials detection and interdiction capability on its border with Moldova; Uzbekistan, to enhance its ability to monitor its borders for illegal transport of fissile and radioactive materials; and Azerbaijan, to provide comprehensive maritime WMD proliferation prevention surveillance and interdiction capabilities on the Caspian Sea maritime border. Implementing agreements were signed, goals and objectives were agreed upon with each recipient state, and initial contracts were awarded to begin implementation. Negotiations on an implementing agreement continue with Kazakhstan to establish a Caspian Sea maritime WMD-PPI project parallel to the effort in Azerbaijan.

The Defense and Military Contacts program to prevent proliferation, encourage military reform, and promote transparency conducted 235 events with FSU states, including major exercises, exchanges, assessments, and familiarizations (Non Commissioned Officer development; Nuclear, Biological, and Chemical defense; and mountain warfare) and supported DoD and Combatant Command regional security initiatives.

Validating the Proper Use of CTR Assistance

In FY 2004, accounting for CTR assistance was accomplished through these controls:

- Application of U.S. Federal Acquisition Regulations (FAR), appropriate DoD regulations, and disciplined acquisition procedures in contracting;
- Frequent, direct observations of CTR assistance in recipient states, including site visits by CTR program management, technical teams, and CTR Logistics Support (CLS) contractor personnel and oversight provided by on-site U.S. contractors;
- Audits and Examinations (A&Es) under applicable international agreements;
- CTR Program monitoring of assistance provided through other Government agencies;
- Use of best business practices by CTR management teams; and
- Defense Contract Audit Agency (DCAA)/Defense Contract Management Agency (DCMA) audits and surveys.

Audits and Examinations

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 service provided. Results of A&Es conducted in FY 2004 appear in this report with the corresponding CTR project area write-ups.

In FY 2004, DoD conducted 12 of 17 scheduled A&Es in the recipient states: 10 of 14 in Russia; 1 of 1 in Ukraine; 1 of 1 in Uzbekistan; and 0 of 1 in Georgia. In Russia, two audits of the Fissile Material Storage Facility were cancelled due to the absence of a Transparency Agreement and follow-on A&E Arrangements. DoD is still working with the Federal Atomic Energy Agency (Rosatom) to negotiate these arrangements. An audit of the Liquid Propellant Disposition Facility in Krasnoyarsk was scheduled for April 2004; however, it was cancelled since DoD removed high value equipment and turned over the facility to Russia. An audit of Emergency Support Equipment provided under the Nuclear Weapons Transportation Security (NWTS) program scheduled for June 2004 was not completed because MOD would not bring the requested emergency support equipment module to Moscow for review or allow inspection at or near its location of use. MOD offered to use the Nuclear Weapons Storage Security (NWSS) Special Arrangements to provide photographs of the equipment for review by the A&E team. DoD declined because these arrangements do not apply to the NWTS program. In Georgia, an audit of security provided at two BWPP program sites was rescheduled for FY 2005 because the DoD contracted equipment installation was behind schedule.

Enhancing the Efficiency and Effectiveness of the CTR Program

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 high-level

consultations review requirements, assumptions, responsibilities of each party, and matters pertaining to CTR activities in Russia. DoD Executive Review teams include policy, implementation, and legal specialists and periodically include DoD Inspector General and Department of State representatives. Session highlights are in Section III program narratives.

Improving Legal Agreements and Phasing Contracts. The CTR Program continues to use amendments to implementing agreements to convert assumptions or responsibilities into firm commitments. For example, the Chemical Weapons Destruction Implementing Agreement Amendment signed July 28, 2004, includes seven specific conditions that the Federal Agency for Industry (Rosprom), formerly the Russian Munitions Agency, must meet in order to continue program implementation. DoD has used amendments to CTR implementing agreements to make the recipient state CTR Executive Agents responsible for land allocation and construction permits. Implementing agreements have been used to limit CTR program risks.

Reduction of Planning/Execution Risks. DoD continues to refine the Joint Requirements and Implementation Plan (JRIP) process to improve transparency between recipient state CTR Executive Agents and U.S. CTR project managers (PM). DoD has sought to improve the quality and timeliness of CTR contractors' cost performance reporting and their independent validation processes through a series of performance metrics across program areas.

Integrated Process Team (IPT). DoD has instituted the use of IPTs, comprised of key stakeholders, to define requirements for new projects and to monitor progress through each milestone. The use of IPTs has been significant in improving overall CTR project management.

Milestone Decision Authority (MDA). DoD now uses MDAs to perform oversight of all CTR major programs. The designated MDA chairs periodic program reviews and approves program acquisition and implementation strategies. The MDA has the authority to approve all phases of program efforts, or to withhold approval subject to revised acquisition planning.

Coordinating CTR Assistance. DoD coordinates its efforts with the Departments of Energy (DOE), State (DOS), Health and Human Services, Agriculture, and with agencies of the United Kingdom, and Canada to maximize leverage with FSU states, to avoid duplication of effort, and to share information for mutual planning benefit.

Exceptions to the Proper Use of CTR Assistance

DoD believes that CTR Program activities and assistance executed under its purview are generally being implemented effectively and efficiently for their intended purposes. Five new exceptions occurred during FY 2004 along with unresolved concerns reported during prior years. DoD's plans for resolving them are described in this report.

II. 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. U.S. contractors are procuring hardware, providing consolidated logistics support, and functioning as integrating contractors with U.S. and FSU subcontractors.

In some cases (e.g., strategic nuclear 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 upon completion of each contract requirement.

Interagency Responsibilities

CTR Umbrella Agreements are in place for Russia, Ukraine, Kazakhstan, Moldova, Georgia, Uzbekistan, Azerbaijan, and Albania. 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 agreement and other arrangements necessary to implement CTR Program activities with the counterpart CTR Executive Agent of the recipient state. There may be more than one CTR Executive Agent in a recipient state (i.e., an executive agent for each program). Appendix A lists applicable umbrella and implementing agreements that are part of the legal framework for program execution.

Other Executive Branch departments are pursuing related programs. DOS directs and provides funding for the International Science and Technology Center (ISTC) and the Science and Technology Center – Ukraine (STCU), which employ FSU WMD scientists and engineers on non-military research activities. DoD is an ISTC partner and manages its Russia BWPP projects through the ISTC, as there is no CTR biological threat reduction implementing agreement with Russia. DOS directs and provides funding for the Export Control and Related Border Security Assistance 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, 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. The CTR Program'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 upgrade these countries' abilities to 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, 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 policy oversight; and undertaking activities with recipient states, including the negotiation and conclusion of CTR implementing agreements and arrangements. The CTR Policy Office is responsible for interaction with Congress, the National Security Council staff, other Executive Branch components, and for public affairs. The Deputy Assistant to the

Secretary of Defense for Chemical Demilitarization and Threat Reduction (DATSD CD&TR) provides strategic implementation guidance and acquisition oversight for the CTR Program to the Defense Threat Reduction Agency (DTRA). DTRA is the CTR Program implementing agency and is responsible for all aspects of program, contract, and funding management.

CTR Funding

CTR assistance to the FSU states totals \$5,087.9 million in total obligation authority through FY 2005. In FY 2004, \$689.1 million was obligated to support CTR projects under applicable implementing agreements. This is \$200.0 million more than in any other fiscal year in the history of the CTR Program. The requested CTR Program budget for FY 2006 is \$415.5 million. Since inception of the CTR Program, 62 program areas have received funding. Fifty-four of the program areas are now complete or do not require additional funding and are not included in the President's Budget submission.

Audits and Examinations

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 3 years after the expiration of the Umbrella Agreement (currently expires on December 13, 2007). A&Es of projects in Russia can be performed for a period of 3 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 3 years thereafter. Currently, DoD is providing assistance to both Georgia and Uzbekistan. 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.

Through FY 2004, a total of 157 A&Es have been conducted in Russia, Ukraine, Kazakhstan, Belarus, Uzbekistan, and Georgia. Results of FY 2004 A&Es are in the narratives in this report for each CTR project for the following agreements and corresponding projects:

Russia: *Nuclear Weapons Storage Security Implementing Agreement* (Automated Inventory Control & Management System, Nuclear Weapons Storage Site Support, Personnel Reliability and Safety, Storage Site Enhancements); *Strategic Offensive Arms Elimination Implementing Agreement* (Solid Propellant ICBM/SLBM and Missile Elimination, Liquid Propellant Disposition Systems); *Nuclear Weapons Transportation Security Implementing Agreement* (Supercontainers, Transportation, Safety Enhancements, and Security Enhancements for Railcars); and *Chemical Weapons Destruction Implementing Agreement* (Chemical Weapons Site Security Program)

Ukraine: *Strategic Nuclear Arms Elimination Implementing Agreement* (All Projects)

Uzbekistan: *Biological Threat Reduction Implementing Agreement* (Biosecurity and Biosafety)

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, a privately managed venture capital fund, was formed to promote conversion of FSU defense-related industries to non-military commercial business, has been terminated. Its assets are being liquidated and it will close in FY 2005.

Science and Technology Centers (STCs): DOS oversees all STC 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. The Boards of Governors meet quarterly for the ISTC and semi-annually for the 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. 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 statements, while the firm of Lubbock Fine Chartered Accountants audits STCUs. The ISTC and STCU publish annual reports.

DCAA Audits of ISTC Projects: At the request of DOS, DCAA completed an audit of ISTC activity at the State Research Center of Virology and Biotechnology (Vector) in Novosibirsk, Russia. This was an agreed-upon procedures audit that covered the areas of accounting practices, grant payments, project participant timekeeping, equipment, infrastructure, material, and accounting procedures for utilities. This report contained no significant concerns related to the accounting or control of DoD funded projects at Vector.

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 and Good Business Practices

Under the applicable CTR umbrella and implementing agreements, contracts are awarded in accordance with U.S. laws and regulations, which is central to providing and accounting for CTR assistance in the FSU states. The FAR, along with DoD good business practices, provides assurance that the CTR Program is executed properly. 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 advance site access when possible to ascertain the scope of the problem and possible solutions;
- Independent U.S. Government (USG) cost estimate before beginning procurement;
- Prohibition against transferring CTR 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, 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 monitor closely 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/subcontractors only after work is completed;
- Only generally 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 (U.S. and foreign) to review their work and discuss their banking arrangements and finances.

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

During FY 2004, CTR Program management teams made 165 trips to develop requirements; negotiate agreements, arrangements, and contracts; monitor contractor performance; resolve program concerns; and assess whether DoD-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 representatives and U.S. contractors who reside “in-country” and frequently submit written project status reports to CTR program management.

CTR’s Logistics Support 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 (TOC) process. During FY 2004, CLS teams from logistics support bases in Russia and Ukraine made 428 site visits to CTR project locations and performed 3,676 maintenance actions; most attributed to particular projects and noted in CTR project narratives in this report.

Also during FY 2004, the CLS contractor reported excellent mission availability rates for DoD-provided equipment and did not report any misuse of assistance. CLS contractor reports are used in the development of DoD's assessment and the CTR Annual Report to Congress.

National Technical Means

The CTR Program also 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 2004 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." These DoD actions enhance effectiveness and efficiency of CTR Program implementation:

- During the periods February 9-12 and June 21-23, 2004, DoD conducted "Executive Reviews" of each major CTR program in Russia. These reviews were conducted with the four Russia CTR Executive Agents: Federal Space Agency (Roscosmos), MOD, Rosatom, and Rosprom. 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. These were the Fifth and Sixth Executive Reviews, respectively, held since these high-level meetings were initiated by DoD in response to the 2002 "heptyl" situation.
- Where feasible, more CTR Program risk has been shifted to FSU recipient states. In October 2003, the Deputy Under Secretary of Defense, Technology Security Policy and Counterproliferation sent letters to each Russia CTR Executive Agent summarizing adjustments that would be made in all CTR project areas in Russia, plus changes specific to the applicable agency. For example, in the nuclear weapons safety and security program, DoD will no longer provide assistance for emergency response equipment. In addition, maintenance of the personnel reliability program will be transitioned to MOD.
- DoD also mitigates risks in several project-specific areas. In the WMD-PPI program, DoD has adopted a spiral development implementation strategy, which phases projects by increments. Each increment addresses a particular capability necessary to execute a particular WMD-PPI task. Spiral development allows for identification and delivery of capabilities as the recipient is able to absorb them. The requirements for follow-on increments are then refined through assessments and demonstration.
- To formalize commitments in the BWPP project, DoD adopted the use of "non-proliferation pledges." Although 739 scientists from 27 biological facilities in Russia, Uzbekistan, Georgia, and Kazakhstan have signed the pledges, they have caused concern among Russia's security officials and staff at Russian institutions.
- Section 1305 of the FY 2004 NDAA establishes a requirement for on-site managers at FSU project sites involving dismantlement, destruction, storage facilities or construction sites where total DoD investment is expected to exceed \$50.0 million. To meet this requirement, the Assistant to the Secretary of Defense for Nuclear,

- Chemical, and Biological Defense Programs, acting under Secretary of Defense delegated authority, appointed interim on-site managers for applicable Strategic Offensive Arms Elimination (SOAE) projects and for the CWDF project in Shchuch'ye, Russia. DTRA has identified the need for additional on-site managers for the BWPP projects in Tashkent, Uzbekistan and Tbilisi, Georgia.
- During FY 2004, DoD took a “cash-on-delivery” approach to burning of propellant for SS-24 and SS-25 solid rocket motors (SRMs). The CTR Program provides for delivery of a SRM containing propellant to a Russian contractor, and DoD pays a pre-determined price once the empty motor case is returned. This ensures a consistent cost to DoD and transfers to Russian contractors the safety and environmental risks of propellant burning. This limits DoD investment in infrastructure and constitutes a “lesson learned” from the Votkinsk situation.
 - DoD instituted the use of IPTs to foster improvement in CTR project management. IPTs are a key element of DoD's Integrated Product and Process Development system of program management support. As requirements for new projects are identified, DoD forms IPTs immediately. Typically, a project IPT is led by a project manager, who first identifies and invites all stakeholders into the process. Initial meetings establish ground rules, identify relationships, and validate member empowerment. As each project progresses toward milestones, the IPT converts policy guidance into key and subordinate cost, schedule, and performance objectives. DoD has found the use of IPTs to be significant in improving overall project management.
 - During FY 2004, the DoD acquisition system was established including designation of an MDA for each CTR project. The MDA approves the cost, schedule, and performance baselines for each project. The MDA provides an oversight function and chairs introductory and quarterly program reviews, appoints program managers, reviews and approves program acquisition and implementation strategies and resource allocation plans. The application of the IPT and MDA models to CTR Program implementation is providing necessary management controls and provides much improved transparency for senior level oversight.
 - DoD continued to work with the CTR Integrating Contract (CTRIC) contractors to develop an independent validation process. DoD has validated two of the five CTRIC contractors' Earned Value Management Systems (EVMS). Validation fieldwork has been completed and all corrective action taken for a third validation that is pending signature by DCMA. Preliminary discussions have been held with the fourth CTRIC contractor, while the fifth contractor does not have a task order requiring a validated EVMS. DCMA will include monitoring of the approved contractors' CTR Program work in its routine system surveillance.

Exceptions to the Proper Use of CTR Assistance

CTR Program 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 with minor exceptions. Concerns reported in prior Annual Reports that remain unresolved are detailed under the Biological Weapons Proliferation Prevention – FSU (1.6), Nuclear Weapons Storage Security (2.1), and Fissile Material Storage Facility Transparency (2.3.1) programs in Section III. Unresolved concerns that arose during FY 2004 include the following:

- At the August 2003 CTR projects review (“rescoping”) in Russia, the U.S. determined that continued CTR funding of the transport of nuclear weapons to dismantlement/secure storage should be contingent upon having greater insight into the origin/destination of CTR-funded shipments to ensure U.S. support does not assist Russia to modernize its nuclear forces. MOD has yet to respond to DoD’s proposal.
- The U.S. agreed to provide \$10.0 million to design, fabricate and install thermal treatment units (TTUs) to help Russia meet Chemical Weapons Convention (CWC) CW destruction requirements. Russia is to bear all remaining costs. The TTUs have been produced and delivered to Novocheboksarsk, a former Chemical Weapons Production Facility (CWPF), but installation is delayed because Russia has been slow in funding its portion of the project including foundations on which the TTUs are to be installed. Russia’s lack of funding will cause an expected 6-month delay in Phase II of the CWPF demilitarization project, and further delays might result in Russia failing to meet its CWC requirement to demilitarize this facility.
- During an August 2004 audit, DoD found six intermodal tank containers (IMTCs), which were provided to Russia for the transport and storage of heptyl and amyl drained from liquid propellant missiles, contained an ammonium solution. Further review of documentation provided by Russian personnel disclosed that 534 of the 670 IMTCs had never been used to transport or store heptyl or amyl; a result of extended liquid-missile decommissioning deadlines under the Moscow Treaty. DoD intends to transfer title of the IMTCs to Russia in order to be relieved of the extended maintenance and recertification burden.
- DoD provided two automatic gas chromatographs to satisfy safety requirements while working with live chemical weapons agents at the funded scale-up facility for the CWDF in Shchuch’ye, Russia. Provisos were placed on the export of this equipment prohibiting foreign access and control. But, the equipment was shipped in June 2002 and has been under the direct control of Russian personnel. There is no indication of equipment misuse by the Russian personnel, but the absence of control resulted in an export control violation. DoD is coordinating corrective action with DOS.
- DOS has issued sanctions against the Federal Research and Production Complex Altay (Altay), a Russian subcontractor responsible for open burning of propellant from SS-N-20 submarine launched ballistic missile (SLBM) motors. The sanctions prohibit new USG contracts with Altay and terminate existing contracts. Russia has agreed to fund the propellant removal by Altay for three SS-N-20 SLBMs being dismantled on the ongoing contract option. This had delayed completing planned dismantlement of SS-N-20 SLBMs.

III. CTR PROGRAM ACTIVITIES AND ASSISTANCE – INCLUDES FIVE-YEAR (FY 2006 – FY 2011) IMPLEMENTATION PLAN AND FY 2004 ACCOUNTING ACTIVITIES

Section 1308 Requirements (as amended) Addressed

The Floyd D. Spence National Defense Authorization Act (NDAA) for FY 2001 requires the Secretary of Defense to submit an annual report to Congress on Cooperative Threat Reduction (CTR) activities (CTR Annual Report). This report for FY 2006 is submitted in accordance with Section 1308 of the NDAA for FY 2001, as amended by Sections 1307 and 1309 of the NDAA for FY 2002, Section 1304 of the NDAA for FY 2003, and Section 1304 of the NDAA for FY 2005. It includes the “Five-Year CTR Program Implementation Plan” (FY 2006 – FY 2011), the FY 2004 requirement for “Accounting for CTR Program Assistance to States of the Former Soviet Union (FSU)” and 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 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.);*
- (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.).*
- (F) financial commitments for FY 2005 from the international community and from Russia for the Chemical Weapons Destruction Facility (CWDF) located at Shchuch’ye, Russia. (See Appendix C.)*
- (G) a description of how revenue generated by CTR activities in recipient states is being utilized, monitored, and accounted for. (See Appendix D.)*
- (H) a description of CTR defense and military contact activities carried out during the fiscal year preceding the year of the report. (See Appendix E.)*
- (I) 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 (See project descriptions that follow.); and

(J) a descriptive summary, with respect to appropriations for Cooperative Threat Reduction programs for the fiscal year 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 F.)”

(K) 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.

(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 (The current condition is addressed in the project narratives. A list of locations and values of equipment is maintained at DTRA and is immediately available for review.);

(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 2004 A&Es are detailed in the project narratives. A schedule of future audits is in Figure 8.)”

Format of This Report

The CTR Implementation Plan and the Accounting for CTR Program Assistance are combined and organized according to the four CTR Program objectives. Project descriptions are listed according to program area (e.g., the 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 CLS), Executive Reviews, and A&E summaries.

Project information includes: the FY 2006 – FY 2011 Five-Year Plan, Purpose, and Resources; a Description of CTR Activities Carried Out in FY 2004; 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 CLS personnel); A&E information (if completed in FY 2004), and for completed or terminated projects, only information on accounting for CTR assistance, if conducted. DoD officials or contractors conducted all site visits and A&Es. The figures show DoD-proposed funding through the Future Years Defense Plan (FYDP). Projects requiring funding beyond the FYDP (FY 2011) will be identified in future CTR Annual Reports.

Objective 1: Dismantle FSU WMD and Associated Infrastructure

1.1 STRATEGIC OFFENSIVE ARMS ELIMINATION (SOAE) PROGRAM – RUSSIA

DoD is continuing to assist Russia by contracting for, and overseeing destruction of, strategic weapons delivery systems in accordance with the SOAE Implementing Agreement and applicable Strategic Arms Reduction Treaty (START) provisions, including the START Conversion or Elimination (C or E) Protocol. CTR assistance continues to provide 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 the associated strategic nuclear powered ballistic missile submarines (SSBNs) reactor cores, and WMD infrastructure. The CTR Program also supports placement of spent naval reactor fuel from SSBNs being prepared for elimination into casks designed for long-term storage and has provided emergency response support equipment.

Program Management: Management and technical teams made five trips. Two were to attend Executive Reviews (summarized below). One trip familiarized the new Deputy Director of DTRA with the CTR efforts in Russia. Another trip initiated a working group at Perm to address interface issues between the SS-24 and SS-25 ICBM and Mobile Launcher Elimination projects. Members of the working group included DTRA, Roscosmos, and U.S. contractors and their subcontractors. A team conducted a meeting with Russian Aviation and Space Agency (RASA) aimed specifically at understanding Russia's plans for drawing down and eliminating SS-24 and SS-25 ICBMs and their associated launchers. Trips included technical and programmatic discussions with contractors and Russian Government counterparts.

Executive Reviews:

In February and June 2004, Executive Reviews were conducted with RASA, which later became the Federal Space Agency (Roscosmos) and the Ministry of Atomic Energy (MinAtom) which later became Federal Atomic Energy Agency (Rosatom).

The February Executive Review reviewed the fifth version of the SOAE Joint Requirements and Implementation Plan (JRIP), which was initialed by both sides during the session. The JRIP lists requirements, assumptions, responsibilities, risks, and schedules for each project. Wind-down plans for the Liquid Propellant Disposition Facility (the "heptyl" facility) in Krasnoyarsk were discussed including the removal of three steam and hydrogen generators, facility turnover to Russia, and DoD's rights to conduct an A&E on any proceeds realized from the sale of items in the facility. Discussions included the need to develop procedures to ensure that revenues from the sale of scrap materials were properly accounted for and the proceeds were used for the CTR Program. Reallocation and final disposition of excess equipment provided to SOAE projects completed previously was discussed. In addition, requirements were discussed for DoD to have an on-site manager at Perm to ensure construction permits were in place and that project milestones and cost and schedule baselines were closely monitored.

The June Executive Review included discussions concerning the SOAE JRIP and comments made by both DoD and RASA to the sixth version. DoD agreed to develop a strategic plan for SRM elimination using data provided by Roscosmos. Both sides agreed on the

importance of public outreach programs in communities close to project sites at Perm and Biysk. Discussions included the need for DoD to receive draw-down schedules from RASA and how they affect DoD acquisition planning.

During both the February meeting with MinAtom and the June session with Rosatom, discussions were held concerning the JRIP for the Spent Naval Fuel (SNF) project and the progress made towards jointly defining responsibilities for both sides. During February, the SSBN dismantlement schedule for 2004 was discussed, including the potential to eliminate an additional *Typhoon* #713 at Zvezdochka.

1.1.1 Emergency Response Support Equipment

FY 2006 – FY 2011 Five-Year Plan, Purpose, and Resources: This project provides equipment 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. This project will continue through the FYDP.

The total estimated cost for this project increased from \$11.0 million to \$11.8 million. This increase is due to providing CLS support through 2011.

Description of CTR Activities Carried Out in FY 2004: Raytheon Technical Services Company (RTSC) performed corrective and preventive maintenance for project equipment.

Location: Krasnoyarsk.

Program Management: The CLS contractor made five site visits and performed 36 maintenance actions on DoD-provided equipment.

1.1.2 Solid Propellant ICBM/SLBM and Mobile Launcher Elimination

FY 2006 – FY 2011 Five-Year Plan, Purpose, and Resources: This project will support the operation and maintenance of Russia's missile disassembly and elimination facilities, including transport related costs; the operation and maintenance of mobile launcher elimination facilities; and destruction of items limited under START. Infrastructure, including START-accountable fixed structures, at three SS-24 and up to nine SS-25 Strategic Rocket Forces (SRF) deployment bases will also be eliminated. In addition, 78 SS-24 launch-associated railcars will be rendered strategically inoperable. This project will also eliminate SS-N-20 SLBMs.

The CTR Program will assist with limited infrastructure upgrades, 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 Roscosmos agreed in January 2003 that Russia would fund environmental upgrades to burn stands and DoD would provide limited CTR assistance for infrastructure upgrades and support equipment necessary to transport and prepare the motors for burning. Missile buffer storage facilities constructed in 2004 support the decommissioning of Russia's SS-24 and SS-25 missile systems. Effective January 1, 2005, DoD will pay for transporting these missiles and missile motors into and out of the buffer storage, while Russia will pay for temporary storage. The CTR Program renovated and equipped two disassembly lines for SS-25 missiles and provided a capability to eliminate SS-25 road-mobile launchers and

demilitarized support vehicles. Low-rate elimination operations will commence in March 2005; reaching full-scale elimination operations in the last quarter of FY 2005.

The current schedule plans for the destruction of 337 SS-25, 51 SS-N-20 and all 56 SS-24 missiles by the end of FY 2011. In addition, 301 SS-25 road mobile launchers and all 39 SS-24 rail mobile launchers will be destroyed in accordance with all START provisions and agreements, including the START C or E Protocol. This is an increase of 49 SS-25 missiles, 18 SS-25 road-mobile launchers, and 20 SS-N-20s from the previous CTR Annual Report. DoD destroys 30 SS-N-20 missiles for each *Typhoon* SSBN that Russia turns over for destruction under the CTR Program.

The total estimated cost of this program has increased from \$437.0 million to \$571.4 million. This increase is based on the extension of the project to 2011 for SS-25 ICBM, launcher, and base elimination.

Description of CTR Activities Carried Out in FY 2004: Ten SS-N-20 missiles were disassembled at Zlatoust, and their SRMs were open-burned at Biysk facilities through a contract with Parsons Global Services, Inc. The large SS-24 “fixed structure” (train shed) in Krasnoyarsk was eliminated by Washington Group International (WGI), the integrating contractor for SS-24 eliminations. SS-24 and SS-25 buffer storage in Perm was completed by WGI. The SS-24 disassembly facility renovations and required disassembly equipment were completed and placed into service, and the first six SS-24 ICBMs were eliminated. Seven missiles were offloaded from rail mobile launchers at the Bershet offloading facility. Seven rail mobile launchers were eliminated, and 14 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) began assistance to SS-25 base infrastructure elimination. Eighteen SS-25 sliding roof garages (“fixed structures”), nine each at Nizhniy Tagil and Yur’ya, were eliminated. Nine SS-25 missiles and nine SS-25 road-mobile launchers with launch-associated support vehicles were also decommissioned at Yur’ya and shipped to missile and launcher buffer storage facilities pending elimination. RTSC subcontracted for the renovation and equipping of SS-25 Missile Disassembly and Elimination Facilities in Votkinsk and SS-25 road-mobile Launcher Elimination and Support Vehicle Demilitarization Facilities in Piban’shur. A Fourier Transform Infrared Environmental Monitoring Unit was transferred from the terminated Solid Rocket Motor Disposition Facility project in Votkinsk to Perm to monitor SRM burn activities.

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

Program Management: The program and project managers made 28 trips. These trips were made to: conduct periodic project management reviews with CTRIC contractors; view the progress of project execution; observe ongoing missile and launcher elimination operations; conduct contract pricing negotiations; assess Roscosmos requests for additional assistance to support cost estimates and management decisions regarding requests; and conduct discussions with Roscosmos representatives. Typically, each trip covers two or three of these purposes.

A number of trips were made to assess progress in efforts at Nizhniy Tagil and Yur’ya to eliminate SS-25 fixed structure foundations and assess progress in the construction of the SS-24/25 ICBM and SRM buffer storage facility at the Perm NPO Kirov Plant. Items of interest

included a formal dedication of four SS-24 and four SS-25 ICBM buffer storage warehouses and witnessing the first nine decommissioned SS-25 ICBMs from Yur'ya being stored at the facility.

In March 2004, an IPT was established in Perm. The team consists of representatives of U.S., CTRIC, and Russian contractors involved in the execution of contracts to eliminate SS-N-20, SS-24 and SS-25 missiles, SS-24 and SS-25 launchers, and SS-24 and SS-25 fixed structures and other associated infrastructure; the SOAE program manager; SOAE project managers; and Roscosmos project managers. During FY 2004, the IPT conducted five sessions. The purpose of the IPT is to develop and execute a cooperative effort that ensures:

- Positive management controls at interfaces among contractors bringing missiles into or out of the buffer storage at Perm;
- Safe and efficient missile storage operations to support missile and launcher decommissioning/disassembly; and
- Safe and efficient SRM storage operations and flow of SRMs to burn stands.

On-site U.S. contractors maintained offices at Perm, Miass, and Biysk, as well as at Votkinsk, Piban'shur, Bryansk, Zlatoust, and Surovatikha. Periodic supervision and inspection visits were made to the work sites at Votkinsk, Piban'shur, Yur'ya, Nizhniy Tagil, Perm, Bryansk, Biysk, and Nenoksa. Supervision of design work for 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 also was coordinated by the contractors. Local subcontractors accomplished these design efforts. All local subcontractors reported to U.S. contractor management personnel, who provided management oversight and verified reporting.

The CLS contractor made 19 site visits, performed 141 maintenance actions, and provided Letter of Verification/TOC support on DoD-provided equipment.

Accountability Concern: DOS has issued sanctions against the Federal Research and Production Complex, Altay, in Biysk, Russia. Altay is a Russian subcontractor to Parsons, which is responsible for open burning of propellant from SS-N-20 motors. The sanctions prohibit new USG contracts with Altay and terminate existing contracts. Russia has agreed to fund Altay's propellant removal for three SS-N-20 SLBMs being dismantled under the ongoing subcontract option. DoD is discussing with Roscosmos cost sharing for removal of propellant from 20 more SS-N-20s.

A&E: During the period April 20-26, 2004, a team reviewed equipment and related records supporting the Solid Propellant ICBM Rail Mobile Launcher and SS-25 ICBM Elimination projects at Piban'shur and Perm.

Equipment Accountability: All of the equipment was accounted for by physical observation except the air monitoring system at Perm. The team was told the air monitoring system was located at the Institute of Polymeric Materials, an area to which the team was not granted access. At Piban'shur, the team was denied site access because classified operations were in progress. The site commander pre-positioned all equipment outside the main gate for examination except for the Harris baler, Caterpillar bulldozer, and two ventilating equipment packages. Site personnel claimed these items would damage the road if transported outside the base.

Equipment Serviceability: All of the equipment viewed appeared to be fully serviceable and was held in dry and secure areas with the exception of the Labounty shear at Perm which was lying next to the railroad tracks partially buried in snow. This item was subsequently reported to the logistics contractor who performed requisite maintenance actions to make the Labounty shear fully operational. According to site personnel, the logistics contractor met the needs of elimination operations and the equipment was well maintained.

Equipment Usage: All of the equipment audited was being used for intended purposes.

A&E Summary: The 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, were cooperative, and ensured the team had access to all equipment records except for the items noted.

1.1.3 Liquid Propellant ICBM and Silo Elimination

FY 2006 – FY 2011 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 or dismantle 78 SS-18 ICBM silos, 12 associated launch control center (LCC) silos, and 2 training silos, including technical site restoration. Additional silos may be deactivated but not eliminated. Silo eliminations will be completed in FY 2005. ICBM destruction will continue through 2012.

Upgrades to the missile elimination and destruction facility at Surovatikha support neutralization, dismantlement, and destruction of liquid propellant ICBMs. Current projections include destruction of 256 deployed/non-deployed SS-18 ICBMs, and 150 deployed/non-deployed SS-19 ICBMs and launch canisters will continue through 2012. Destruction of 98 SS-17 missiles was completed.

DoD provided equipment to store and transport liquid missile propellant at the Moshkovo, Ilyino, Mulyanka, Tambov, Turinskaya, Vanino, and Naro-Fominsk dismantlement sites. DoD plans to transfer ownership of this equipment and responsibility for its maintenance and re-certification to the Russian Federation in FY 2005.

The estimated cost remains at \$306.2 million.

Description of CTR Activities Carried Out in FY 2004: Thirty-one SS-18 ICBMs were decommissioned, 16 SS-18 ICBM silos and 2 associated LCC silos were explosively eliminated, 12 SS-18 ICBM silo sites and 2 associated LCC silo sites were technically restored. Twenty-five missiles were removed from silos and approximately 1,600 metric tons (MTs) of propellant and 4,100 MTs of oxidizer was shipped to storage facilities. Twenty-three SS-18 ICBMs were eliminated. Brown and Root International is the integrating contractor for this project. One SS-19 was also eliminated with DoD-provided equipment at Piban'shur.

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

Program Management: Management and technical teams made eight trips. The trips were to the Missile Elimination and Dismantlement Facility in Surovatikha and MOD missile sites at Kartaly, Uzhur, and Dombarovskiy. The team observed ongoing rail and infrastructure

work and the maintenance service area at Dombarovskiy. On several trips, teams performed program management reviews to assess the performance of the integrating contractor.

Teams also held technical and programmatic discussions with Russian officials, site personnel and the integrating contractor. Topics of discussion included missile elimination schedules, land allocation to support a water pipeline, and scrap revenue-reporting requirements. On one trip, a team evaluated the potential use of two modular buildings that were no longer required to support the Solid Rocket Motor Disposition Facility and determined that the movement of these buildings to the Missile Elimination and Dismantlement Facility was a priority. On a separate trip to Kartaly, a team witnessed explosive elimination of an SS-18 silo.

An on-site U.S. contractor maintained a continuous presence at project sites in Kartaly and Surovatikha. The contractor ensured that contractual requirements were met for silo elimination and restoration and for liquid propellant missile disassembly and elimination. In addition, the CLS contractor made 24 site visits, performed 302 maintenance actions, and performed TOC services for DoD-provided equipment.

A&E Team led Technical Talks and Comparative Demonstrations: In November 2003, DoD personnel met with representatives from RASA and MOD regarding testing procedures to determine the contents of Intermodal Tank Containers. DoD proposed methods to test liquid samples from the containers and it was decided that a joint demonstration of both DoD and MOD testing procedures should be conducted during a subsequent visit. The intended outcome would be to establish a final testing protocol to be used during future A&Es.

In January 2004, DoD and Russian Government representatives conducted comparative testing of both Russian and DoD techniques for IMTC sampling at the Institute for Applied Chemistry in St. Petersburg. Following the comparative testing, a Joint Memorandum of Results was signed by the Chief of the U.S. Delegation and Russian Government representatives from RASA, MOD, and the St. Petersburg Institute of Applied Chemistry. The Joint Memorandum stated that, for both the oxidizer and the fuel container testing, DoD and Russian methodologies were determined to be “interchangeable” (equivalent).

In August 2004, DoD used a combination of the Russian and USG procedures to perform an A&E to validate the contents of a DoD selected sample of Intermodal Tank Containers.

A&E: During the period August 16-25, 2004, a team conducted an A&E to validate the contents and use of a DoD-selected sample of IMTCs at Ilyino, Moshkovo, Tambov/Rada, Turinskaya, and Vanino. These IMTCs were provided to Russia for the transport and storage of heptyl and amyl drained from liquid propellant missiles. The containers were only certified for the safe storage of heptyl or amyl. This audit included a review of passport records to determine how many times each IMTC had been used, whether they were ever filled with content other than heptyl or amyl, and the date of the last documented usage. The team also inspected each IMTC for content and participated with Russian technical representatives in intrusive testing to determine whether the IMTCs housed heptyl and amyl. Results of this testing was compared to the associated passports to determine if there were discrepancies.

Testing Results: At Vanino, through a review of the related passports and conversations with site personnel, the team found that six of the containers contained an ammonium solution. The team reported that 59 of the 108 IMTCs at Ilyino were used to store amyl, while the

remaining 49 heptyl IMTCs had never been used. It was revealed that 140 of the IMTCs at Moshkovo and 170 IMTCs at Turinskaya had not been used. According to passport records documentation and statements made by site personnel, the team found that 75 of the 181 IMTCs at Tambov (Rada) contained heptyl. In summary, the team found that at least 534 of the 670 IMTCs provided by the CTR Program had never been used. We judge this to be the result of extended missile decommissioning deadlines under the Moscow Treaty.

Follow-up Actions: To address the discovery that six IMTCs were used to store an ammonium solution, DoD will send a letter to the Federal Space Agency asking that clearer guidance be provided to those Russian units charged with the responsibility of maintaining custody and utilizing equipment provided under the CTR Program. The letter will further state that it is essential to ensure that DoD-provided equipment is used only for its intended purpose. Proper use of this equipment is an important factor in judging CTR Program effectiveness.

Logistics support for IMTCs that have not been used and are not projected to be required to support future ICBM/SLBM elimination, will be shifted to Russia. A second letter will be sent to Roscosmos indicating that, after considering the results of this audit, DoD has decided to transfer ownership of all 670 IMTCs to Russia, and Roscosmos will be notified that it will be responsible for future IMTC certification, maintenance, and transportation. While we appreciate the changed circumstances created by the Moscow Treaty, we cannot continue maintenance support indefinitely.

1.1.4 SLBM Launcher Elimination/SSBN Dismantlement

FY 2006 – FY 2011 Five-Year Plan, Purpose, and Resources: This project will assist Russia in eliminating approximately 572 SLBM launchers in accordance with the START C or E Protocol at four START-designated SLBM launcher elimination facilities and will provide assistance to dismantle 32 associated SSBNs and dismantle an additional 7 SSBNs except for the bows and sterns. This is a decrease of one *Delta IV* and two *Typhoon* SSBNs from the FY 2005 CTR Annual Report since it is anticipated that Russia will keep these submarines beyond the FYDP. Support activity includes management and safety plans, SSBN towing, SLBM launcher elimination, SNF defueling operations and transport to interim storage, reactor-core compartment sectioning and preparation for storage afloat, and low level radioactive material processing.

Russia eliminated 80 SLBM launchers and 6 associated SSBNs using DoD-provided equipment and infrastructure upgrades. DoD, through direct fixed-price contracts, will eliminate 492 launchers and fully dismantle 26 associated SSBNs. Support for SLBM launcher elimination and logistics support will continue through FY 2011. Logistics support for equipment at Nerpa was terminated in 2004.

The total estimated cost for this project decreased from \$413.9 million to \$382.5 million. This is due to the decrease in planned SSBN eliminations.

Description of CTR Activities Carried Out in FY 2004: Dismantlement work continued on one *Typhoon* SSBN at SevMash Production Association and one *Delta I* class SSBN at State Machine Building Enterprise Zvezdochka. One additional *Typhoon* SSBN was placed on contract for dismantlement at SevMash Production Association, and one additional *Delta III* class SSBN was placed on contract for dismantlement by Zvezda Far East Shipyard (work to be performed at Northeast Regional Center in Kamchatka). State Machine Building Enterprise

Zvezdochka continued work on the construction of additional spent naval fuel cask transient storage facilities at the on-shore defueling facility at Zvezdochka. Zvezda Far East Shipyard completed construction and certification of additional spent naval fuel cask transient storage facilities at the On-Shore Defueling Facility at Zvezda.

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

Program Management: Management and technical teams made eight trips. Teams held programmatic and technical discussions, received contract deliverables, completed tours of Northeast Regional Center, Zvezda, Nerpa, SevMash, and Zvezdochka shipyards and facilities, and assessed progress on SSBN de-fueling and dismantlement. Teams met with RASA/Roscosmos, Rosatom, and contractors on several occasions to discuss the SSBN dismantlement schedule and to negotiate contracts and contract modifications. A team attended the International Atomic Energy Agency's Contact Experts Group semi-annual meeting to discuss the status of G-8 projects and the potential impact of CTR Program re-scoping.

On several trips, teams observed DoD-provided equipment in use for its intended purpose at the shipyards. Also, a team attended the On-Shore Defueling Facility SNF pad expansion ribbon-cutting ceremony at the Zvezda shipyard. The CLS contractor made 24 site visits, completed 316 maintenance actions, and provided Letter of Verification, TOC, and take-out-of-stock services for DoD-provided equipment.

1.1.5 Spent Naval Fuel (SNF) Disposition

FY 2006 – FY 2011 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 8 of the 26 SSBNs that will be dismantled through direct contract. Included are special railcars for SNF transportation from the shipyard to a final storage/disposition location. Russia has taken responsibility for the storage and disposition of previously offloaded SNF. The revised plan is to procure 96 casks, 84 fewer than were in the FY 2005 CTR Annual Report, since 3 SSBNs in last year's plan will not be dismantled during the FYDP and Russia has stored and transported SNF from 4 other SSBNs.

The total estimated cost for this project decreased from \$42.8 million to \$38.7 million. This change is due to reduced cask procurement.

Description of CTR Activities Carried Out in FY 2004: SevMash Production Association completed production of 25 SNF casks. Atomspetstrans completed production, received final certification, and delivered to Mayak six SNF railcars. A delivery order for 35 casks was issued. RTSC completed designs for interim storage of SNF casks at the Mayak Production Association.

Locations: SevMash (Severodvinsk), Tver Rail Factory, and Mayak Production Association (Ozersk).

Program Management: 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 work

and to conduct technical and programmatic discussions with various contractors. Teams met with Rosatom officials and contractors to discuss SNF cask production, delivery, and payment. On several trips, teams inspected and accepted delivery of railcars and SNF storage and transportation casks. A team participated in the formal commissioning ceremony for six SNF railcars. Teams also met with Rosatom officials and contractors on multiple occasions to discuss the procurement of escort railcars suitable to comply with Russia's new security guidelines.

1.1.6 Liquid Propellant SLBM Elimination

FY 2006 – FY 2011 Five-Year Plan, Purpose, and Resources: This project will assist in destroying approximately 618 liquid-propellant SS-N-6, SS-N-8, SS-N-18, and SS-N-23 SLBMs from Russia's Northern and Pacific Fleets. This is 16 fewer SLBMs than were in the FY 2005 CTR Annual Report due to a recalculation of the number of SLBMs to be eliminated. The destruction process includes shipping, defueling, neutralization, and cutting into pieces all proliferable SLBM components. This project will continue beyond FY 2011.

The total estimated cost for this project has decreased from \$49.6 million to \$44.3 million. This decrease is due to fewer SS-N-23 SLBMs projected to be eliminated.

Description of CTR Activities Carried Out in FY 2004: Eighty-nine SLBMs (70 by direct contract and 19 destroyed by Russia using CTR equipment) were eliminated and dismantled at Krasnoyarsk and Sergiev Posad, bringing the total number of SLBMs eliminated and dismantled to 513.

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

Program Management: Management and technical teams made five trips. On multiple trips, teams made site tours and observed on-going elimination activities, conducted project reviews of SS-N-8, SS-N-18, and SS-N-23 elimination efforts, and participated in programmatic and technical discussions with RASA/Roscosmos and Russian contractors. Topics included the disposal of amyl, the neutralization and elimination of SLBMs, flatbed railcar recertification, and Statement of Work development. A team also traveled to Sergiev Posad to verify the destruction of a number of SLBM components as required by contract.

An on-site U.S. contractor maintained a continuous presence at Krasnoyarsk to ensure that contractual requirements were met for liquid propellant SLBM elimination. In addition, the CLS contractor made 10 site visits, performed 97 maintenance actions, and provided certification/TOC services for DoD-provided equipment.

1.1.7 Liquid Propellant Disposition Systems (Project Terminated)

In February 2002, DoD learned that Russia had diverted ICBM fuel and oxidizer to its commercial space program. DoD terminated the contract for the oxidizer disposition units and stopped work on the fuel disposition systems contract. 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 and was completed February 19, 2004. The balance of the fuel disposition systems are being turned over to Russia for salvage or disposition, consistent with the Deputy Secretary's decision of February 4, 2003. Attempts to find users or buyers for the boilers and hydrogen generators have not proved fruitful. In 2005, DoD plans to

ship the items to the Defense Reutilization Facility in Germany or dispose of them within Russia. In accordance with the SOAE Implementing 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: The CLS contractor made five site visits, performed one maintenance action on DoD-provided equipment, and provided TOC services as part of project equipment disposition.

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 nerve agent stockpile. The CWDF and the former CWPF demilitarization projects support this effort.

Program Management: Technical and management teams made five trips that relate to the entire CWD program. Two trips supported the February and June 2004 Russia Executive Review meetings (summarized below). During a third trip, discussions were held with representatives of the Russian Munitions Agency (RMA) concerning conditions that were added to the FY 2004 Amendment to the CWD Implementing Agreement. Examples of these conditions include requirements that RMA: develop a joint construction schedule; provide reliable electrical power by its need date; and provide funding for training, certification, housing, and salaries for personnel to support CWDF activities from the beginning of the systemization/commissioning of the CWDF through the TOC to Russia. During a fourth trip, DATSD CD&TR led an inaugural Implementation Program Management Review with Rosprom to discuss CWDF and CWPF key schedule and performance parameters, funding obligations, program risks, risk mitigation strategies, and other implementation issues. Finally, there were three meetings of the Shchuch'ye Coordinating Working Group, consisting of representatives of DoD, Rosprom, the United Kingdom MOD, and Canada Department of Foreign Affairs and International Trade. Two of the three meetings of the Shchuch'ye Coordinating Working Group were held in conjunction with previously discussed trips. Discussions at these meetings facilitate the effective integration of assistance provided to Russia.

Executive Reviews:

In February and June 2004, Executive Reviews were conducted with RMA, which became Rosprom after the Russian Government reorganization. In February, discussions included the necessity for Russia to provide a practical plan for destroying its stockpile of nerve agents. Updates were received on actions taken by RMA to secure visas for U.S. contractor personnel working at the CWDF. Discussions included the need to jointly develop a JRIP to document assumptions, identify risks, lay out schedules, and outline responsibilities. DoD promised to table a JRIP at the June 2004 Executive Review. Based on attempts by Russian officials to direct CWDF design changes to U.S. subcontractors, DoD explained USG FAR to ensure Russian officials understood that, after contract award, it is the responsibility of the integrating contractor to direct subcontractors and that intervention by either government is inappropriate. In addition, discussions included actions taken by DoD and RMA to put in place exemptions from value added tax (VAT) for Russian CWDF subcontractors.

During the June meeting, discussions included updates to the Amendment to the CWD Implementing Agreement, subsequently signed on July 28, 2004. DoD expressed appreciation for actions to secure visas for U.S. contractors working at the CWDF, and Rosprom reported that progress was being made on outstanding items. A copy of the JRIP was delivered to Rosprom, with detailed content discussion occurring in a side meeting. Additional discussions included the joint schedule and the importance of closely monitoring cost, schedule, and performance of the CWDF construction. Program funding and the near-term obligation plan were also discussed.

1.2.1 Chemical Weapons Destruction Facility (CWDF)

FY 2006 – FY 2011 Five-Year Plan, Purpose, and Resources: The U.S. has agreed to build a CWDF for destruction of nerve agent-filled man-portable munitions. The project includes process development; process/facility design; construction; equipment acquisition and installation; systems integration; training; and facility start-up.

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 nearby CW storage site is about 5,449 MTs in 1.9 million warheads. Another 5,515 MTs in 2.1 million warheads is stored at Kizner. The CTR Program will construct one of two similar buildings in which the nerve agent will be removed from munitions and neutralized, and the drained munitions thermally decontaminated. CTR assistance also will 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 construct the second 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 MTs of nerve agents per year. With this capacity and successful processing, it will take 6.5 years to destroy Russia's ground-delivered nerve agent-filled weapons. The project schedule was rebaselined at the beginning of FY 2004 to reflect an actual start of construction in March 2003. The revised target for initial operations (demonstration with live agent) shifted from January to May 2008. The start of facility transfer to Russia remains September 2008. Progress by Russia on industrial and operations support infrastructure construction continued. Russia's construction responsibilities required for integration into the CWDF are scheduled for completion before the main destruction building begins initial operations.

The estimated cost remains at \$1,039.2 million. DoD has funded \$1,037.5 million and intends to reprogram \$1.7 million from other programs.

Description of CTR Activities Carried Out in FY 2004: Engineering management services continued to be provided by Parsons Delaware, Inc. with major subcontractors: Science Applications International Corporation (SAIC), WGI, EG&G, and Illinois Institute of Technology Research Institute. In March, a 1:50 scale of the actual agent destruction process was placed in operation and validated the process. Prototypes of the equipment that will remove the agent from the munitions were tested. Construction of the foundations for the Main Destruction Building and the Administration Building, and the Fire Station buildings was completed and erection of their superstructures was started. The Fire Station is presently over 98 percent complete. A heated Contractor's Warehouse is now complete with a communication link

to the main site office. Construction began for the underground utilities and sewers, hazardous material response station, fire water area, waste water area, and the fire water pump station. The Specialists Camp building, designed to house 116 personnel, is complete. Maintenance of the drainage network and temporary access roads, and extension of the temporary electrical distribution network continued. Overall design is 91 percent complete and construction is 18 percent complete.

Location: Shchuch'ye.

Program Management: Management and technical teams made six trips. A U.S.-Russia Joint Schedule for the facility was finalized and signed; setting a commonly agreed target for the design, construction, systemization, and commissioning of the CWDF. In addition to attending In-Progress Reviews of construction activity, Joint Construction Meetings, and site inspection visits, the teams held high-level discussions with RMA/Rosprom officials regarding the Shchuch'ye CWDF project implementation.

In-country personnel include individuals from the office of the U.S. Army Chemical Materials Agency, the U.S. Army Corps of Engineers, and Parsons Engineering located in Moscow, Shchuch'ye, and Volgograd. The USG On-Site Manager, in compliance with Public Law 108-136, Section 1305 of the FY 2004 NDAA, is assigned to the CWDF construction site in Shchuch'ye. Program office personnel made 31 trips to support this project.

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, the CLS contractor made one site visit to perform letter of verification/TOC services for DoD-provided equipment. On December 6, 2004, agreement was reached between the Assistant to the Secretary of Defense for Nuclear and Chemical and Biological Defense Programs and the Assistant Secretary of the Army, Acquisition, Logistics, and Technology to remove the Chemical Material Agency from their management responsibilities in the CWDF project in order to establish a more streamlined and efficient organization. The Chemical Material Agency will continue to participate in the CWDF construction as needed.

CWDF Export Control Violation:

DoD provided two automatic gas chromatographs to satisfy safety requirements for working with live chemical agents at the test facility near the CWDF. Provisos prohibited foreign access and control of this equipment. However, there were multiple violations of these provisos. During the shipment of these items, they were under the control of Russian Customs agents and foreign national freight forwarders for several days. The equipment was shipped to the Planovy test facility where it has been under the control of Russian personnel. Based on reports from on-site USG representatives, there is no indication that Russian personnel have used this equipment. On May 17, 2004, DoD initially reported these export control violations to DOS. On May 28, 2004 a full report was provided to DOS outlining the circumstances of the violation. DoD is working with DOS to coordinate corrective action.

1.2.2 Chemical Weapons Production Facility (CWPF) Demilitarization

FY 2006 – FY 2011 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 consistent with the provisions of the CWC. Demilitarization operations on CWC-declared buildings are conducted after Russia's conversion or destruction plans are approved by the Organization for the Prohibition of Chemical Weapons.

Phase I (concept plan, documentation, and demilitarization of pilot project buildings) and demilitarization of Phase II facilities at Volgograd is complete. Demilitarization of Phase III facilities at Volgograd began in FY 2003 and will be completed in FY 2005. This has been delayed primarily for safety reasons. The original plan for demolishing bunkers explosively was considered dangerous and the contractor decided to use safer, but slower demolition methods.

Phase I at Novocheboksarsk removed and destroyed specialized munitions equipment in a munitions preparation building. Phase II consists of pre-demilitarization activity, including design, fabrication, and installation of three thermal treatment units (TTUs) — a liquid waste incinerator, a metal parts furnace, and a general purpose furnace — to support demilitarization of the Vx production and munitions filling complex, and is scheduled for completion in FY 2005. This phase is behind schedule due to the delay in Khimprom's receipt of required funding from the Russian Government to support its portion of the work. Phase III consists of the dismantlement and decontamination (using TTUs from Phase II) of all specialized equipment, standard equipment, and interior building structures within Building 350. Phase III began in FY 2004 and is scheduled to be completed in FY 2006. Phase IV (demolition of Building 350 and waste disposal) will be initiated in FY 2005 and completed in FY 2007. Parsons Delaware, Inc. is the prime contractor for providing the TTUs during Phase II, and all other contract efforts are being awarded to Independent Plant #4, OAO Khimprom, Novocheboksarsk. The Tennessee Valley Authority provides project management and technical support.

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

Description of CTR Activities Carried Out in FY 2004: Volgograd: The Second Stage Phase III for demilitarization of six remaining buildings continued; Buildings 603 and 605a were completed. Novocheboksarsk: The Phase II effort, consisting of design, fabrication, and installation of TTUs for demilitarization of Buildings 350 and 352 at Novocheboksarsk, continued; design and fabrication activities were essentially completed and installation of the liquid waste incinerator was initiated. A Phase III contract was awarded to Independent Plant #4, OAO Khimprom in July 2004.

Locations: Volgograd and Novocheboksarsk.

Program Management: Management and technical teams made eight trips. One visit was to Volgograd to review the status of work performed on Phase III demilitarization. The remaining trips included visits to Aleksinsky, St. Petersburg, and Novocheboksarsk.

At Aleksinsky, teams were able to assess progress on the fabrication of TTUs. During one visit to a manufacturing facility in St. Petersburg, a team made a site tour, reviewed the status of TTU manufacturing and participated in a test run and demonstration of the general purpose furnace at the facility.

On each visit to Novocheboksarsk, a representative of Rosprom was present and a site tour was made. Several trips to Independent Plant #4, Novocheboksarsk included review of the work on the Phase II effort and discussion/review of activities pertaining to the Phase III demilitarization work. Teams also participated in quarterly In-Progress Reviews and reviewed and accepted Phase II deliverables for payment. One safety audit was conducted at Novocheboksarsk with no major deficiencies observed.

CWPF Demilitarization TTU Funding Concern:

The USG agreed to provide \$10.0 million toward TTUs to help Russia meet CWC requirements. Any remaining costs were to be borne by Russia, but it has been slow in providing its portion of the funding. DoD is taking action to ensure the key dismantlement is completed. To offset any additional cost to complete dismantlement, DoD may limit planned assistance for the Phase IV building demolition so that overall program costs remain \$50.7 million.

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 at the State Scientific Research Institute for Organic Chemistry and Technology in Moscow and through the purchase of three mobile analytical laboratories.

Locations: Moscow, Saratov, and Planovy.

Program Management: A technical team visited the chemical analytical laboratory as part of a familiarization visit for the new DTRA Director and was afforded unrestricted movement through all floors of the building. During the tour, the team visited a number of labs, spoke with lab personnel, and viewed DoD-provided equipment. The team was able to observe a test of the atmospheric pressure alarm system. The team also observed ongoing testing of the production scale model of the CWDF's equipment for removing the agent from the munitions. In addition, the CLS contractor made 2 site visits and performed 33 maintenance actions.

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 Bear nuclear-capable maritime patrol aircraft that represent modifications to START-accountable heavy bombers, Kh-22 nuclear air-to-surface missiles (ASMs), and strategic bomber trainers. DoD informed Ukraine in FY 2003 that it would not provide an SS-24 Propellant Disposition Facility to remove propellant from loaded motor case (LMCs) by means of water washout; however, DoD is assisting Ukraine to store safely 163 SS-24 LMCs through the end of FY 2005. Since Ukraine has not identified an alternative to water washout to remove propellant from LMCs, the SS-24 Missile Motor Elimination project was not initiated. DoD has offered repeatedly to assist Ukraine with open burning or detonation as alternatives to the water washout approach.

Program Management: Management teams made two trips. DoD senior leadership met with the U.S. Ambassador and high-level officials at MOD, National Space Agency of Ukraine, and the Ukrainian Air Force to discuss the future of CTR programs in Ukraine and the status of

various agreements. A policy/technical team also made one trip to Kiev to discuss alternatives for the disposal of the 163 solid rocket motors stored in Pavlograd.

A&E: During the period July 19-23, 2004, a team conducted a review of training materials and equipment of SNAE programs at MOD sites in Kiev, Dnepropetrovsk, Mikhailenki, Pavlograd, Poltava, and Vinnitsa.

Equipment Accountability: The team accounted for a majority of the equipment provided for each of these programs by visual inspection.

Equipment Serviceability: In general, all equipment in service was well maintained.

Equipment Usage: The team noted that the equipment observed in operation was being used for its intended purpose. The team observed several buses, cranes, and other pieces of equipment in use for their intended purpose. Equipment located in areas where CTR Program 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, generally are being used for intended purposes.

Cooperative Equipment Disposition Team (CEDT): DoD and Ukraine have recognized that, as SNAE and Weapons of Mass Destruction Infrastructure Elimination (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 with integrating contractors and Ukraine officials to allocate equipment among CTR projects in Ukraine or remove the equipment from CTR accountability. 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 ownership to Ukraine and cease logistics support.

There were a total of eight CEDT meetings conducted in FY 2004 - five in Alexandria, Virginia, and three in Kiev, Ukraine. During FY 2004, significant accomplishments of the CEDT included the following.

- Items transferred for use on other CTR efforts included:
 - 10,000 liters of the Detselene fuel mixture, 5 light vehicles and over 100 office and furniture items to the WMD-PPI Border Guard program in Ukraine;
 - 317 equipment items were identified for use on future nuclear weapons storage area (NWSA) elimination work; and
 - All equipment and inventory items formerly assigned to the SS-24 Propellant Disposition Facility Project were transferred to the SS-24 Missile Disassembly, Storage, and Elimination Project.

- Items Taken out of Stock included:
 - 17 shipping containers, 53 construction equipment items and spare parts, 363.72 MTs of fuel, and computer equipment were transferred to Ukraine; and
 - Laboratory spare parts were transferred to the Science Center for Military Ecology in Kharkiv.
- Other significant CEDT Accomplishments included:
 - Completed integrated contractor equipment inventories for CEDT review for disposition,
 - Four shipping containers were transferred to the U.S. Embassy,
 - A 12-man mobile shelter, originally contractor-acquired material (CAM), was transferred to the MOD in Odessa, and
 - Nine containers containing CAM and two CAM light vehicles were transferred for MOD use in Vinnitsa.

CEDT Program Management: DoD made a total of 12 trips. These meetings included Government of Ukraine officials and U.S. contractors who played key roles in the redistribution of DoD-provided equipment. Topics included the required submission of CAM equipment lists to the CTR logistics contractor, disposition/reallocation of CAM, government furnished equipment and spare parts, and procedural and administrative process details. These sessions were productive and contributed to the development of equipment disposition recommendations. The CLS contractor and its subcontractors made 37 site visits, performed 332 maintenance actions, and performed letter of verification/TOC services on DoD-provided equipment attributable to the CEDT.

1.3.1 SS-24 Missile Disassembly, Storage, and Elimination

FY 2006 – FY 2011 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 safe storage in previously constructed or renovated storage sites. Support for the safe storage of the LMCs in Pavlograd has been extended to September 2005. If agreement can be reached on the elimination of the LMCs by means other than water washout, DoD will consider funding safe storage costs until all motors are eliminated.

The total estimated cost for this project decreased from \$96.4 million to \$95.2 million. This decrease is due to reduced contract support requirements.

Description of CTR Activities Carried Out in FY 2004: The contractor, WGI, safely stored 163 LMCs in Pavlograd pending DoD and Ukraine agreement on their final disposition.

Locations: Mikhailyenki, Pervomaysk, and Pavlograd.

Program Management: The CLS contractor made 24 site visits, 251 maintenance actions, and letter of verification, certification/TOC services on DoD-provided equipment.

1.3.2 Bomber and Air-to-Surface Missile Elimination

FY 2006 – FY 2011 Five-Year Plan, Purpose, and Resources: This project is eliminating 55 Tu-22M Backfire nuclear-capable bombers and 346 Kh-22 nuclear ASMs. The increase from 40 Tu-22M and 225 ASMs was requested by Ukraine and approved by DoD in FY 2004. DoD

has also approved Ukraine's requests to eliminate four strategic bomber trainers and an additional four Tu-142 Bear maritime patrol aircraft that represent modifications to a START-accountable heavy bomber, bringing the approved total of Tu-142 to six. This project previously eliminated 38 heavy bombers and 483 Kh-55 Air-Launched Cruise Missiles (ALCMs).

The total estimated cost for this project increased from \$32.4 million to \$32.9 million. This increase is due to additional aircraft elimination.

Description of CTR Activities Carried Out in FY 2004: RTSC eliminated 12 Tu-22M bombers, 110 Kh-22 ASMs, two Tu-142 maritime patrol aircraft, and associated bomber engines, auxiliary power units, ASM rotary launchers, and external pylons.

Locations: Khmelnytskyi, Poltava, Priluki, Nikolayev, Belaya Tserkov, Konotop, and Ozerne airbases.

Program Management: Management and technical teams made ten trips. The teams held technical and programmatic discussions with the integrating contractor and MOD representatives concerning Tu-22M and Tu-142 maritime patrol aircraft, Kh-22 Kitchen ASM, and strategic bomber trainer elimination work. Discussions with the integrating contractor included reviews of project schedules, project management plans, and contract deliverables.

During multiple trips, teams traveled to elimination sites to review completed, ongoing, and planned 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.

The CLS contractor made 149 site visits, performed 1,010 maintenance actions, and performed letter of verification, certification, and TOC services for DoD-provided equipment.

1.4 WEAPONS OF MASS DESTRUCTION INFRASTRUCTURE ELIMINATION 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 design data, materials, equipment, and technologies.

Program Management: The CLS contractor made 71 site visits, performed 521 maintenance actions, and provided letter of verification/TOC support for DoD-provided equipment.

1.4.1 National Nuclear Storage Site Elimination

FY 2006 – FY 2011 Five-Year Plan, Purpose, and Resources: This project demilitarized the Raduga National Stockpile Site. In May 2004, Ukraine provided a list of four additional sites located at Lutsk, Stryi, Khmelnytskyi, and Medzhibozh for consideration. Due to funding constraints, the current plan is to do work at Stryi. Ukraine is being offered excess DoD-provided equipment and diesel fuel to do work at the other three sites.

The estimated cost decreased from \$14.2 million to \$5.6 million. This decrease is due to reducing the scope of this project.

Description of CTR Activities Carried Out in FY 2004: Raduga site activity was completed. DoD exchanged letters with MOD, made site visits, and developed technical requirements and cost estimates for requested additional NWSA elimination work at Lutsk, Stryy, Khmelnytskyi, and Medzhibozh.

Locations: Raduga and Stryy.

Program Management: Management and technical teams made 10 trips. On several trips, teams reviewed completed and ongoing work at Raduga and discussed proposed work at new sites with MOD. Teams observed DoD-provided equipment in use for its intended purpose. Upon completion of the Raduga site, a trip was made to ensure all structures scheduled for removal had been eliminated. Teams also met with the integrating contractor to discuss contract closeout for the Raduga site, to include equipment disposition. In addition, one trip was made to review the proposed NWSAs at Lutsk, Stryy, Khmelnytskyi, and Medzhibozh.

The on-site U.S. contractor provided oversight for the elimination work at Raduga. 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 2006 – FY 2011 Five-Year Plan, Purpose, and Resources: This project provided the services and equipment required to eliminate residual amounts of liquid propellant and to dismantle equipment and infrastructure at two former ICBM and ASM liquid propellant storage and handling facilities. The project was terminated in FY 2004.

Description of CTR Activities Carried Out in FY 2004: Elimination and technical restoration work was completed at both sites by the end of the first quarter of FY 2004.

Locations: Luibeshevka and Balovnoye.

Program Management: A management and technical team made one trip. The team reviewed completed and ongoing work at Balovnoye, and observed DoD-provided equipment in use for its intended purpose. Teams also met with the integrating contractor to discuss contract closeout, to include equipment disposition. Bi-weekly status reports and monthly cost performance reports were provided by the contractor for review and action.

1.4.3 Strategic Airbase Infrastructure Elimination (Project Terminated)

FY 2006 – FY 2011 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. As a result of the CTR revalidation/rescoping review, DoD terminated this project in FY 2003.

Description of CTR Activities Carried Out in FY 2004: Contract was closed out.

Locations: Priluki, Uzin, and Belaya Tserkov.

Program Management: A technical team made one trip to closeout the worksites.

1.5 WEAPONS OF MASS DESTRUCTION INFRASTRUCTURE ELIMINATION 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 Nuclear Weapons Storage Site Elimination project was not initiated since Kazakhstan has not requested any assistance.

1.5.1 Liquid Missile Propellant and Storage Facilities Elimination

FY 2006 – FY 2011 Five-Year Plan, Purpose, and Resources: This project supports the Kazakhstan MOD effort to eliminate liquid propellant for ICBMs using a U.S. supplied incinerator at liquid propellant storage and handling facilities. This project will close out in FY 2005.

The estimated cost decreased from \$5.1 million to \$0.4 million. The only cost is for CLS support and travel.

Description of CTR Activities Carried Out in FY 2004: None.

Program Management: A team traveled to Kapchagai, Kazakhstan, to inspect the DoD-provided tractor for pulling the incinerator mounted in a 40-foot trailer and recent technical work performed on the Andersen 2000 incinerator. The team also discussed spare parts requirements to maintain the unit for 3 years. The CLS contractor made 4 site visits, performed 23 maintenance actions and provided TOC support for DoD-provided equipment.

1.6 BIOLOGICAL WEAPONS PROLIFERATION PREVENTION (BWPP) – FSU

All BWPP projects in Russia fall under the ISTC Agreement and the ISTC Funding Memorandum of Agreement. The U.S.-Kazakhstan WMDIE Implementing Agreement covers BWPP projects in Kazakhstan. Biological Threat Reduction Implementing Agreements are signed with Uzbekistan and Georgia, and being negotiated with Ukraine.

Unresolved Prior Year Concern: As reported last year, portions of funding for ISTC projects were used to pay VAT in violation of the provisions of the project agreements. The VAT payments resulted from the failure of Russian purchasing agents and subcontractors to exercise rights guaranteed under the U.S.-Russia CTR Umbrella Agreement. DoD is working with Russian officials to devise solutions to these concerns.

Inefficiencies Caused by Absence of an Implementing Agreement with Russia: The BWPP Program is not governed by a “standard” CTR implementing agreement with Russia. The CTR Program relies on the Memorandum of Agreement 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 was created as an international body to fund scientific research via grants. As such, it is not a mechanism well suited to implementing engineering and construction projects. Therefore, DoD has limited the types of projects it is willing to initiate in Russia until we are able to conclude a Biological Threat Reduction Implementing Agreement.

Program Management: Management and technical teams made four trips in support of the overall BWPP effort. Program Management met with representatives of the Kazakhstan and Uzbekistan Governments to discuss the development of JRIPs, customs issues, VAT exemptions, Nunn-Lugar legislation, and recipient state responsibilities under CTR Umbrella and Implementing Agreements. Further discussions included updates to add legally binding commitments and to increase funding under both the Kazakhstan and Uzbekistan Implementing Agreements and timelines for their completion.

1.6.1 Biological Weapons Infrastructure Elimination (BWIE)

FY 2006 – FY 2011 Five-Year Plan, Purpose, and Resources: The BWIE project area seeks to eliminate former BW facilities in FSU states either through the removal of dual use equipment or through the destruction of the facility. Smaller projects, such as elimination of individual buildings or miscellaneous equipment, required as part of a Biosecurity & Biosafety, Cooperative Biological Research, or Threat Agent Detection and Response project are included within the funding profiles for those project areas and are not considered BWIE.

DoD continues to assess former BW facilities and bioresearch institutes where DoD is granted access, and there is an ongoing effort to identify BW facilities and institutes not yet known to the U.S. These assessments provide vulnerability analyses for each facility and support recommendations for elimination or engagement under other program areas.

The total estimated cost increased from \$22.8 million to \$25.4 million. This increase is to complete dismantlement at Stepnogorsk, Kazakhstan.

Description of CTR Activities Carried Out in FY 2004: DoD continued contracting with BNI for work in non-Russia FSU states and RTSC for efforts in Russia. BNI and RTSC serve as the BWPP integrating contractors to develop and integrate dismantlement projects at FSU institutes located in FSU states.

The combined Biological Weapons Production Facility Dismantlement/Defense Conversion project at Vector continued with completion of a Milestone Decision Review (MDR) approving the final phase of establishment of a production line at the Vector facility for Bifido (a sour-milk product line with anti-bacterial properties). The BWPP program target for completion is May 2005.

An MDR was completed approving demolition of Buildings 221 and 600 at Stepnogorsk. This work was awarded to BNI and the expected completion date is July 2006. This work will be the final BWIE activity at Stepnogorsk.

An MDR was completed approving the effort to remove dual use equipment and demolish buildings at Biokombinat in Georgia. The project will be executed in two phases, one for equipment removal and one for selected building demolition, with an MDR required before the demolition phase. Of note, the BWPP program has worked closely with the Bio-Industry Initiative to develop a plan with the Government of Georgia to use some components of the site to create a micronutrient animal feed line. This effort will employ Biokombinat staff following the BWIE effort and support Georgian livestock nutritional needs.

Locations: Stepnogorsk and Tbilisi.

Program Management: Management and technical teams made eight trips. Teams visited various Georgian institutes to determine requirements for BWIE work and met with Georgia Government officials to coordinate infrastructure elimination.

A technical team traveled to 11 locations in Kazakhstan to assess the Biological Research and Production Centers. Four other facilities were evaluated for potential BWPP engagement. Technical and management teams made several visits to Stepnogorsk to coordinate facilities dismantlement/elimination with Kazakhstan Government and Stepnogorsk officials.

In addition, the BWPP program provides in-country U.S. contractors who visit project sites about 10 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.

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

Implementing Agreement / Project	Prior Year	FY 2005	FY 2006	FY07-FY11	* Total
<i>Strategic Offensive Arms Elimination (Russia)</i>					
Emergency Response Support Equipment	\$9.0	\$0.4	\$0.4	\$2.0	\$11.8
Solid Propellant ICBM/SLBM and Mobile Launcher Elimination	\$247.3	\$36.6	\$49.7	\$237.8	\$571.4
Liquid Propellant ICBM and Silo Elimination	\$202.4	\$12.8	\$21.0	\$70.0	\$306.2
SLBM Launcher Elimination/SSBN Dismantlement	\$302.7	\$1.9	\$4.2	\$73.7	\$382.5
Spent Naval Fuel Disposition	\$24.8	\$0.4	\$0.2	\$13.3	\$38.7
Liquid Propellant SLBM Elimination	\$32.1	\$0.4	\$3.4	\$8.4	\$44.3
Completed/Terminated Projects	\$262.2				\$262.2
<i>Chemical Weapons Destruction (Russia)</i>					
Chemical Weapons Destruction Facility	\$731.6	\$154.7	\$108.5	\$42.7	\$1,037.5
CW Production Facility Demilitarization	\$47.5	\$3.2			\$50.7
Completed Projects	\$30.2				\$30.2
<i>Strategic Nuclear Arms Elimination (Ukraine)</i>					
SS-24 Missile Disassembly, Storage, and Elimination	\$95.2				\$95.2
Bomber & ALCM Elimination	\$32.9				\$32.9
Completed/Terminated Projects	\$368.5				\$368.5
<i>WMD Infrastructure Elimination (Ukraine)</i>					
National Nuclear Storage Site Elimination	\$5.6				\$5.6
Completed Projects	\$19.5				\$19.5
<i>WMD Infrastructure Elimination (Kazakhstan)</i>					
Liquid Missile Propellant and Storage facility Elimination	\$0.4				\$0.4
Completed Projects	\$27.4				\$27.4
<i>BW Proliferation (FSU)</i>					
BW Infrastructure Elimination - FSU	\$25.4				\$25.4
Budget	\$2,464.7	\$210.4	\$187.4	\$447.9	\$3,310.4
* 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.

In 2003, DoD and MOD concluded protocols that provide limited access to nuclear storage sites that will receive security enhancements. These protocols also apply to installation of the Automated Inventory Control & Management System (AICMS) and the Small Arms Training System (SATS). In 1997, DoD and MOD concluded “Special Arrangements” that allows the limited audit of equipment provided prior to 2003 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.

DoD and MOD are developing an unclassified database to assist with equipment accounting by tracking equipment on a site-by-site basis. The database will provide DoD with a means for efficiently conducting these limited audits across multiple project areas, allow DoD and MOD to more effectively plan comprehensive security enhancements at individual sites, and increase MOD weapons security.

Unresolved Prior Year Concern: Article 2 of the Special Arrangements for conduct of A&Es at nuclear weapons storage sites requires MOD to provide DoD, within a 60- day period from the day of equipment transfer, a list of all the equipment with the region of its location (East or West). This list must be renewed at least once a year or more frequently in the event of a transfer of a significant quantity of equipment. However, as reported last year, due to the absence of a consolidated equipment inventory tracking system, MOD had not complied with this requirement. During FY 2004, DoD provided to MOD computers and a listing of all the equipment provided to date to help them produce an inventory list with location designators. MOD has not yet provided to DoD the required inventory. This remains a key accountability concern and DoD continues to work this issue with MOD.

Program Management: DoD management and technical teams made two trips. The first was to familiarize the new Deputy Director of DTRA with the CTR Program’s efforts in Russia. The second trip was to attend the fourth Implementation Working Group meeting to discuss critical issues concerning NWSS site visits. The status of the amendment to the implementing agreement (later signed in July 2004) and equipment database for secured sites were discussed.

Limited Audit #1: During the period December 5–20, 2003, a team conducted a review of NWSS equipment provided prior to 2003 located at MOD storage sites at Vladivostok and Chita in accordance with the NWSS Special Arrangements.

Equipment Accountability: The team accounted for all equipment provided to the two sites through documentation and/or review of photographs.

Equipment Serviceability: All equipment was certified by MOD counterparts as being fully serviceable and in good working order. Photographs of equipment located indoors indicated that the facilities were well maintained.

Equipment Usage: Based on the review of photographs and documents and the certification provided by MOD officials, the team has confidence that all DoD-provided equipment was in good working order and was being used for its intended purpose.

Limited Audit Summary: MOD officials provided the team with documentation and a statement signed by senior MOD officials that equipment provided under the NWSS program was being used for its intended purpose. Documentation and photographic review of the NWSS equipment provided to two sites enhances DoD's confidence that the equipment is in good working order and is being used for its intended purpose.

Limited Audit #2: During the period April 19–30, 2004, in accordance with the NWSS Special Arrangements, a team conducted a review of NWSS equipment provided prior to 2003 located at two MOD storage sites at Petropavlovsk-Kamchatskaya and Vladivostok.

Equipment Accountability: The team accounted for all equipment provided to the two sites through documentation and/or review of photographs.

Equipment Serviceability: All equipment audited by photograph review appeared to be fully serviceable and in good working order. Facilities housing equipment were dry and secure.

Equipment Usage: Based on the review of photographs and documents and the certification provided by MOD officials, the team has confidence that all DoD-provided equipment was in good working order and being used for its intended purpose.

Limited Audit Summary: MOD officials provided all necessary documentation and a statement signed by senior MOD officials that equipment provided under the NWSS program was being used for its intended purpose. Documentation and photographic review of the NWSS equipment provided to the two sites enhance DoD's confidence that the equipment is in good working order and is being used for its intended purpose.

Limited Audit #3: During the period September 13–23, 2004, a team conducted a review of NWSS equipment provided prior to 2003 located at two MOD secure sites through the use of NWSS Special Arrangements.

Equipment Accountability: The team accounted for all equipment provided to the two sites through documentation and/or review of photographs.

Equipment Serviceability: All equipment audited by photograph review appeared to be fully serviceable and in good working order. Some of the equipment had not been uncrated, so it could not be identified in the pictures provided to the A&E team.

Equipment Usage: MOD provided a certificate stating that all equipment was in good working order and was being used for its intended purpose. This statement, with other results of this audit, provides confidence that DoD-provided assistance is used for its intended purpose.

Limited Audit Summary: A review of the photographic evidence provided by MOD, along with the certificate of use, enhances DoD's confidence that the NWSS equipment is in

good working order and is being used for its intended purpose. MOD did not raise any serviceability issues and all of the equipment appeared to be in excellent condition.

Executive Reviews:

DoD conducted Executive Reviews with MOD concerning the NWSS and NWTS programs in February and June 2004. In the February meeting, discussions were held concerning the affect a rescoping letter from the Deputy Under Secretary of Defense, Technology Security Policy and Counterproliferation would have on each of the NWSS program areas. DoD officials defined the scope of work to secure each NWSS site. During each of the reviews, discussions were held concerning the amendments that add legal commitments and additional funds to the Implementing Agreements, which were subsequently signed during July 2004.

In the February session, DoD addressed a new requirement for greater transparency into train shipments, proposing the inclusion of site designators denoting the origin and destination on each shipment paid for by the USG. During the June Executive Review, MOD stated it could not address this issue until December. Funding for shipments ended in November 2004. In December, DoD and MOD began a dialogue on a transparency non-paper that DoD had provided to MOD in April 2004. Until the transparency issue is resolved, DoD will only fund shipments from sites where known strategic ICBM eliminations are scheduled.

The NWSS JRIP and MOD responsibilities for NWSS projects were discussed at the sessions. Priorities for NWSS funds were developed during the February meeting. During the June review, it was determined that unresolved JRIP items should be addressed during technical discussions between the parties. DoD requested that MOD provide a prioritized list of NWSS sites for security work. The amendment to the implementing agreement requires that MOD only request upgrades at sites that will remain open for at least 3 years following the date of the request to ensure sufficient return on the investment of CTR funds at these sites.

2.1.1 Automated Inventory Control & Management System (AICMS)

FY 2006 – FY 2011 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 (CCPs), 2 central facilities, 4 regional facilities, and 10 field facilities. One additional site, the proof-of-concept facility located at the Security Assessment and Training Center (SATC), was completed in FY 2003. This facility will be used for training, testing, and demonstration only, and has no system operational capabilities. Final completion of all AICMS sites is now scheduled for September 2005. Lifecycle support will be provided through September 2006.

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 final operational capability will be achieved when required hardware and software is installed at all 16 AICMS nodes and CCP-1, initial training and data entry is completed, and the system is certified to meet MOD standards. CCP-2 is not required for final operational capability because it is a backup facility for CCP-1.

The estimated cost has increased from \$50.2 million to \$63.1 million. A delay in signing the implementing agreement resulted in \$1.6 million additional costs under the contract. Other

impacts to cost include the AICMS project requiring lifecycle support on a quarterly basis, the need to provide the Wide Area Network interface device, and the need to construct CCP-2.

Description of CTR Activities Carried Out in FY 2004: System hardware and software operations and maintenance training was completed. The remaining modular buildings have been shipped. Thirteen of 16 design documents for the AICMS modules have been received at their installation locations. Twelve of 16 AICMS modules have been installed and are ready for commissioning. The contract has been modified to account for additional cost and schedule requirements. A new acquisition program baseline with project/schedule changes was approved.

Locations: A proof-of-concept test facility is located at the SATC near Sergiev Posad. Sixteen operational AICMS nodes will be located at weapons storage sites throughout Russia. CCP-1 (primary) is located in Moscow and CCP-2 (back-up) will be located in Sergiev Posad.

Program Management: Management and technical teams made three trips. A team held technical discussions concerning AICMS implementation relative to MOD's communications infrastructure, network connectivity, and communications test plans. Programmatic discussions covered the shipment of AICMS hardware, training, Russian subcontractors' VAT exemptions, and the potential schedule impact of the delay in signing the NWSS Implementing Agreement. A team also visited the CCP-1, the proposed CCP-2 construction site, and the SATC. A site visit to observe work accomplished at AICMS nodes in the north was done in conjunction with DOE Assurance Activities at sites CBC-B1/C1 and PBZ C2 on September 1 and 2, 2004, respectively. The CLS contractor made 20 site visits and performed TOC services for equipment.

2.1.2 Guard Force Equipment and Training

FY 2006 – FY 2011 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. 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. 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. Logistics/maintenance support will be provided through at least April 2005 to support the SATS modular contract. In November 2003, DoD approved a request from MOD to procure and install up to 59 modular buildings to house SATS. The SATS modular buildings will be procured and installed under a 3-year contract, beginning in FY 2005.

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. Instructor training is pending MOD availability.

The estimated cost increased from \$20.6 million to \$42.5 million due to the addition of the SATS modular buildings.

Description of CTR Activities Carried Out in FY 2004: The last 16 SATS systems were shipped, delivered, and turned over to MOD. The SATS systems were certified and 47 systems were delivered to weapons storage sites. Training in installation, operation, and maintenance of

the SATS system was completed. The 12 live-fire shooting ranges were shipped to Russia and all systems have been certified and turned over to MOD.

Locations: According to MOD, 47 SATS have been distributed to nuclear weapons storage sites throughout Russia. The 12 live-fire shooting ranges and other miscellaneous Guard Force equipment remain in storage. This equipment is subject to the special audit arrangements and, therefore, will be captured in the site-by-site database.

Program Management: The CLS contractor made 6 site visits, completed 558 maintenance actions, and provided TOC support for DoD-provided equipment. The CLS contractor created a comprehensive equipment database for the Guard Force project that tracks spares usage and provides failure analysis by system component item.

2.1.3 Nuclear Weapons Storage Site Support

FY 2006 – FY 2011 Five-Year Plan, Purpose, and Resources: This project has provided support equipment for nuclear weapons storage sites and established a Safety Enhancement Center (SEC). Support equipment included firefighting, site preparation and maintenance, environmental control, and safety equipment. All equipment was stand-alone and did 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. Procurement of any additional site support equipment will occur under the Site Security Enhancements project.

The SEC supports field inspections and laboratory analysis to certify that field equipment can support 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 when appropriate. The U.S. Army Research and Development Group-Ukraine (formerly the European Research Office) and selected contractors procured and installed equipment, designed and renovated the laboratory, and conducted training. Maintenance and project support of the SEC will continue through the first quarter of FY 2006.

The total estimated cost of this project was reduced from \$60.4 million to \$31.5 million. This reduction resulted from a decision not to procure any additional equipment for this project.

Description of CTR Activities Carried Out in FY 2004: DoD continued to review MOD requests for additional equipment; developed, integrated and tested a Laboratory Information Management System thus completing the SEC; and conducted training of MOD personnel. DoD is working in conjunction with MOD to develop and implement a maintenance support plan that will transfer all responsibility for the SEC to MOD over the next year.

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.

Program Management: A management and technical team made one trip. The team met with MOD and contractor representatives to discuss status and remaining work associated with the SEC and toured the SEC fixed laboratory and mobile team components. The CLS contractor made two site visits and performed TOC services for DoD-provided equipment.

2.1.4 Site Security Enhancements

FY 2006 – FY 2011 Five-Year Plan, Purpose, and Resources: These projects enhance the security of MOD's nuclear weapons storage sites, which include national stockpile sites and operational storage sites of Russia's Navy, Air Force, and SRF. All site security work is coordinated closely with DOE, which also is providing security enhancements at 17 out of 18 SRF sites and 39 Navy sites. Project planning enhances security systems at all permanent storage locations that contain strategic or tactical nuclear weapons. These projects also include the upgrade of security at some temporary storage locations, such as road-to-rail transfer points.

DoD plans to enhance security at up to 42 permanent and temporary storage sites by installing security systems based on vulnerability assessments. Comprehensive security upgrades will include portions, or all, of the approved objective suite of equipment. Completing all 42 sites continues to depend on MOD identification of, and DoD access to, approximately 26 remaining weapons storage sites. The goal when installing physical security enhancements is to make security standards consistent with those at U.S. nuclear weapons storage facilities.

The total estimated cost of these projects increased from \$669.7 million to \$862.7 million through the end of the FYDP. This increase is due to increased average costs per site for equipment procurement and installation based on the designs minimizing vulnerability identified during visits to sites. The first DoD visits to sites occurred in late FY 2003. If these additional costs result in funding shortfalls, they will be addressed in future budget submissions.

Description of CTR Activities Carried Out in FY 2004: Security equipment procured by BNI and delivered to MOD 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 3 additional MOD nuclear weapons storage sites, completed preliminary site designs for comprehensive upgrades for the first 10 sites, and began the design for 2 sites. About 80 percent of the selected suite of security equipment has been ordered and is being received at the sites.

Locations: All 123 Quick Fix sets have been transferred to MOD custody. Both DoD and DOE will install the fencing, if not already installed, at sites where they are providing comprehensive security upgrades. At least one Quick Fix equipment set is located at each of 24 sites in the west and 19 sites in the east.

Program Management: Management and technical teams made eight trips. Teams made the first site visits to six MOD nuclear weapons storage sites. During these visits, NWSS technical teams assessed the completeness and accuracy of Russian subcontractor vulnerability assessments. At each site, MOD selected four vantage points for the team to enable them to verify the vulnerability of the technical territory area perimeter, local zone perimeters, personnel and vehicle entry control points, guard force command and control buildings, watchtower locations, and weapons emplacements. These site visits helped define the total scope of work required for comprehensive security enhancements.

Technical teams met with contractors and MOD officials to discuss test preparation and evaluation of command and control systems and design and test preparation of camera and

lighting systems. Teams also participated in guided tours of the SATC and observed all installed security equipment on location.

DoD participated in the fifth and sixth semi-annual meetings of the Joint Coordination Group, which included representatives from DOE and Russia's MOD, Navy, SRF, and 12th Main Directorate for coordination of security enhancements to Russia's nuclear weapons storage sites. Discussions included the division of labor between DoD and DOE for security enhancements to specific sites and requirements for comprehensive training and sustainment.

Finally, the CLS contractor made six site visits and performed TOC services for DoD-provided equipment.

2.1.5 Far East Training Center (FETC)

FY 2006 – FY 2011 Five-Year Plan, Purpose, and Resources: This project will establish a FETC to complement the existing SATC at Sergiev Posad and the Kola Technical Center. The FETC will serve as a training facility for all branches of MOD involved with providing security for WMD in the Far East region specifically supporting the operators, maintainers, and system administrators of the approved "objective suite" of physical security equipment. The FETC will serve as a regional depot-level maintenance facility for that equipment.

The estimated cost of this program is \$10.3 million.

Location: The location of the FETC has yet to be determined. The 12th Main Directorate has requested that DoD refurbish one of its training facilities in Khabarovsk to serve as the FETC. Oak Ridge National Laboratory has been tasked to complete an assessment of the overall requirements for training and sustainability support and to determine the optimum location.

Program Management: A management and technical team met with specialists from the 12th Main Directorate and Oak Ridge National Laboratory to determine the best way to proceed on conducting a needs assessment.

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 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.

Program Management: A team made one trip to familiarize the new Deputy Director of DTRA with the CTR Program and DTRA efforts in Russia.

2.2.1 Nuclear Weapons Transportation

FY 2006 – FY 2011 Five-Year Plan, Purpose, and Resources: This project assists MOD in shipping nuclear warheads to dismantlement locations or to more secure sites for storage while awaiting dismantlement. Shipments are expected to be 70-72 trains per year through FY 2011.

The total estimated cost for this project increased from \$188.7 million to \$226.2 million. A projected 6 percent increase in the tariff rate and a projected 6 percent increase in the ruble exchange rate through 2011 is the reason for this revised estimate.

Description of CTR Activities Carried Out in FY 2004: RTSC, the integrating agent for this project, supported the movement of 45 train shipments. The number of shipments was sharply reduced from previous years due to temporary stop-work periods totaling over 4 months caused by MOD delays in signing a funding amendment, with attached conditions, to the NWTS Implementing Agreement. The amendment signed in July 2004 requires MOD to destroy two existing cargo railcars for each new railcar procured by DoD.

Locations: Weapons movement services are conducted throughout Russia, but are managed centrally from Moscow.

Program Management: No program management visits were made.

2.2.2 Railcar Maintenance and Procurement

FY 2006 – FY 2011 Five-Year Plan, Purpose, and Resources: This project supports Russian 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. If requested by Russia, this project will also fund cargo railcar service life extensions to the maximum extent feasible to maintain 100 heated railcars in service. When service life extensions are no longer feasible, this project will procure one replacement cargo railcar (up to 100) for each two current cars destroyed by MOD. This project will procure 15 guard railcars to replace guard railcars retired due to service life expiration.

The total estimated cost for this project increased from \$45.3 million to \$54.6 million. The estimates for railcar procurements have increased by 19 percent due to a cost increase in materials and equipment.

Description of CTR Activities Carried Out in FY 2004: The Tver Railcar Factory performed depot level maintenance on and certified 34 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: A technical team made one trip to meet with MOD representatives to discuss the procurement of 15 guard railcars. The team also conducted technical and administrative discussions regarding railcar maintenance.

A&E: During the period February 7-13, 2004, a team conducted a review of service maintenance documentation and equipment related to the Railcar Maintenance and Procurement project at the Tver Railcar factory.

Equipment Accountability: DoD provided a list of 20 cargo railcars and requested that MOD present at least 10 for inspection. The team completed a physical inventory and examination of eleven cargo railcars that were on the list of 20 requested, and was presented with logbooks for each cargo railcar observed.

Equipment Serviceability: The team reported that of the eleven railcars observed nine showed some indication of corrosion around the antenna entry port in the railcar front ceiling. This concern was discussed with the CTR technical team and management of the Tver railcar assembly plant and they are researching potential design changes to fix this problem.

Equipment Usage: A review of logbooks and examination of the railcars indicated use 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 2006 – FY 2011 Five-Year Plan, Purpose, and Resources: This project enhanced MOD's accident mitigation capability in support of transportation of nuclear weapons to dismantlement sites. Emergency response 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 when 10 additional trucks and 78 tents are procured to upgrade existing shelter at potential accident sites.

The estimated total cost for this project has decreased from \$17.3 million to \$12.5 million due to a decision not to procure underwater emergency response equipment.

Description of CTR Activities Carried Out in FY 2004: DoD procured six Russian-made Kamaz transport trucks and delivered one for the transport of emergency support equipment modules to respond to accidents or emergencies. The delivery schedule was delayed temporarily by the Russian contractor pending resolution of a lost payment for the first vehicle. DoD completed tracer action and has reissued payment.

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

Program Management: A management team made one trip to obtain an updated status on the procurement and delivery of module transport vehicles and other emergency response equipment. In addition, the CLS contractor made one trip and provided TOC support for DoD-provided equipment.

2.2.4 Supercontainers and Emergency Support Equipment (Completed Projects)

These projects assisted Russia to transport nuclear warheads safely and securely from operational sites to secure storage and dismantlement facilities. The Supercontainers provide ballistic, thermal, and abnormal event protection to warheads. The Emergency Support Equipment (ESE) augments Russia's capability to respond to and 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.

Program Management: No program management visits were made.

A&E #1: During the period February 7-13, 2004, a team reviewed equipment and service maintenance documentation related to the Supercontainers project at the Abramovo Logistics base near Sergiev Posad, Russia.

Equipment Accountability: In the 30-day notification cable, DoD provided a list of 25 Supercontainers and requested that MOD present at least 15 for inspection. The team completed a physical inventory of 15 Supercontainers that were on the list of 25. In addition, the team examined two abnormal event lifting beams, three ancillary tool kits, three spare parts tool kits, and a sample of lashing chains.

Equipment Serviceability: The team did not report any serviceability concerns related to the Supercontainers or complementary equipment.

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

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

A&E #2: During the period June 21-24, 2004, a team conducted a review of NWTS equipment, specifically four Pomoshnik vehicles, provided to Russia's MOD as a means to respond to nuclear weapons accidents. The team requested that MOD provide ESE Module 4 for inspection. Due to operational readiness concerns, MOD stated in the Letter of Invitation that ESE Module 4 would not be available for inspection during the dates of the mission, but offered to take photos of the requested ESE Module using the Special Arrangements developed to audit NWSS equipment located at secure storage sites. The team declined to accept the photos, concerned that it would set an unsuitable precedent for the conduct of NWTS A&Es.

Equipment Accountability: The team observed four Pomoshnik vehicles located at Sergiev Posad and accounted for all associated equipment.

Equipment Serviceability: The four vehicles appeared to be fully serviceable and in excellent condition.

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

A&E Summary: Accountability, serviceability, and usage of the equipment examined appeared to be in good order in accordance with applicable agreements. The team noted that the site personnel were fully prepared for the visit, were extremely cooperative, and ensured the team had access to all equipment and records. DoD is including as a special interest item at the February 2005 Executive Review the failure of MOD to deliver Module 4 for audit.

2.3 FISSILE MATERIAL STORAGE FACILITY (FMSF) PROGRAM – RUSSIA

In accordance with the Fissile Material Storage Facility (FMSF) Construction Implementing Agreement, the FMSF will provide centralized, safe, secure, and ecologically sound storage for weapons grade fissile material.

2.3.1 Fissile Material Storage Facility Transparency — Russia

FY 2005 - FY 2009 Five-Year Plan, Purpose, and Resources: The U.S. and Russia are negotiating a Transparency Protocol that will permit DoD to monitor what is loaded in the FMSF. 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 solely fissile material with agreed attributes, e.g., weapons-grade plutonium or enriched uranium. The USG draft Transparency Protocol permits such a measurement system to be used by DoD during monitoring visits to the FMSF. After the Transparency Protocol is signed, DoD will work with Rosatom to develop and install a certified Inventory Sampling Measurement System (ISMS) that will initially enable the monitors to take isotopic measurements, followed by enhancement of the ISMS to measure that the containers are loaded with weapons grade plutonium or enriched uranium. BNI has supported this effort. An integrating contractor may be used to develop and install the ISMS. Four DOE laboratories have also supported this project and will continue to do so during the implementation period.

The cost for negotiation and demonstration of a system to perform the measurements, as well as design, fabrication, and implementation of this system, will be determined after the Transparency Protocol for the system is signed. Prior year funds in the amount of \$23.0 million were transferred to this project from the FMSF construction project. These funds were delegated for the transparency demonstration, other technical support, and travel.

Description of CTR Activities for Transparency in FY 2004: The National Laboratories have supported further development of the sampling plan for transparency implementation at the FMSF and their statistics experts have met with Russian counterparts, under the aegis of CTR Policy, to discuss this plan. The National Laboratories have demonstrated two concepts for use of the electronic pulser in calibrating the ISMS and have tested the Gamma Detection Module of the ISMS to evaluate its reliability under simulated FMSF operating conditions. All other work was curtailed pending outcome of the Transparency Protocol negotiations.

Unresolved DoD Concerns with the Absence of a Transparency Protocol:

As reported last year, DoD continues to negotiate with Rosatom to finalize a Transparency Protocol that will demonstrate that the material stored in the FMSF is solely fissile material with agreed attributes. DoD conducted another round of negotiations in Moscow in November 2004 and made significant progress; follow-on negotiations will likely take place in Moscow in February 2005. DoD will continue to press at senior levels for a timely completion of the negotiations during FY 2005.

Program Management: The program manager and Systems Engineering and Technical Assistance (SETA) personnel supported preparation for, and conduct of, the transparency negotiations.

2.3.2 Fissile Material Storage Facility Construction — Russia (Completed Project)

In accordance with the FMSF Construction Implementing Agreement, the FMSF will provide centralized, safe, secure, and ecologically sound storage for weapons grade fissile material. The facility was commissioned on December 11, 2003.

Location: Mayak.

Program Management: Management and technical teams made two trips prior to the facility commissioning. Management teams met with MinAtom and Mayak officials and U.S. and Russian contractors to ensure the facility would be completed as scheduled. Teams also met with MinAtom officials regarding actions and documentation to ensure that the facility would be safe, secure, ecologically sound, operationally ready, and able to sustain operations prior to facility turnover. The CLS contractor made two site visits to perform TOC support.

2.4 WEAPONS OF MASS DESTRUCTION INFRASTRUCTURE ELIMINATION PROGRAM – KAZAKHSTAN

In accordance with the WMDIE Implementing Agreement, the CTR Program assists the Government of 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 2006 – FY 2011 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, packaging the sources, and transporting them to secure storage. This project will be completed in FY 2005.

The total estimated cost for this project remains \$14.3 million.

Description of CTR Activities Carried Out in FY 2004: This activity plan is classified.

Locations: Various.

Program Management: Management and technical teams made nine trips. Teams held technical and programmatic discussions related to ongoing and new proposed projects. Discussions included defining projects, placing them in priority, potential scopes of work, the Government of Kazakhstan safety plan, and policy issues. Teams also conducted contract negotiations and a contract for additional work was completed. Teams also made site visits and facility tours to review work in progress and gather information related to new proposed work.

2.5 BIOLOGICAL WEAPONS PROLIFERATION PREVENTION (BWPP) PROGRAM – FSU

(See paragraph 1.6 for BWPP program information.)

2.5.1 Biosecurity and Biosafety (BS&S)

FY 2006 – FY 2011 Five-Year Plan, Purpose, and Resources: This project provides BS&S upgrades at institutes engaged in legitimate work with especially dangerous pathogens, facilitating their consolidation into these secured facilities. BS&S upgrades are necessary at

some sites to permit safe performance of Cooperative Biological Research (CBR) projects and at institutes involved in the Threat Agent Detection and Response (TADR) project. BS&S projects provide capabilities to prevent proliferation of BW materials and technologies and to permit secure and safe storage and handling of especially dangerous pathogens. Tasks include identification and implementation of necessary structural improvements for physical security and consolidation of especially dangerous pathogen collections.

The BS&S project is designed to provide the following benefits to the U.S.:

- Promote the application of U.S. BS&S standards;
- Attempt to counter both insider and outsider threats;
- Consolidate and secure, or eliminate, dangerous pathogen collections at biological research institutes; and
- Reduce the risk of accidental pathogen release and increase biosafety for U.S. and Allied scientific research collaborators.

In Russia, work will focus on executing Interim Security and Safety Upgrades at Vladimir – Federal Center for Animal Health Protection, Kazan – All-Russian Scientific Research Veterinary Institute, Golitsino – All-Russian Research Institute of Phytopathology, Pokrov – Pokrov Biologics Plant based on the engineering assessments initiated in 2004/2005; reassessing requirements for BS&S enhancements to support CBR projects at Vector to protect against smallpox; and performing follow-on maintenance of systems funded by DoD for a period not to exceed 5 years.

In the non-Russia FSU states, BS&S efforts are integrated with the TADR project, addressed in objective four of this report. BS&S work will be conducted in conjunction with the establishment of the TADR system in each recipient state and the implementation of CBR projects related to TADR efforts. This project will focus on Interim Security and Safety Upgrades required to enhance security of pathogens and improve biosafety practices while construction of a Central Pathogen Repository and Laboratory is underway. One BS&S project is currently budgeted for Ukraine, pending signing of the Biological Threat Reduction Implementing Agreement. Following completion of the TADR system, maintenance of BS&S systems funded by DoD will occur for a period not to exceed 5 years.

For the following institutes BS&S will be integrated with TADR:

- Kazakhstan:
 - Almaty – Kazakh Scientific Center for Quarantine and Zoonotic Diseases (KSCQZD)
 - Almaty – Central Sanitary and Epidemiologic Service Laboratory
 - Almaty – Ministry of Defense Medical Department
 - Astana – Central Veterinary Laboratory
 - Otar – Scientific Research Agricultural Institute (SRAI) of the National Biotechnology Center
 - Various – Sentinel Stations associated with KSCQZD and the Sanitary and Epidemiologic Service system
- Uzbekistan:
 - Samarkand – Scientific Research Institute of the Veterinary Sciences
 - Tashkent – Research Institute of Virology

Tashkent – Center for Prophylaxis and Quarantine of Most Hazardous Infections (CPQMHI)

Tashkent – Research Institute of Epidemiology, Microbiology, and Infectious Diseases (RIEMID)

Tashkent – Central Veterinary Laboratory

Tashkent – Ministry of Defense Medical Department

Various – Sentinel Stations associated with CPQMHI and RIEMID

- Georgia

Tbilisi – National Center for Disease Control of Georgia

Tbilisi – Eliava Institute of Bacteriophage, Microbiology and Virology

Tbilisi – Georgia Center for Veterinary Diagnostics and Expertise

The total estimated cost decreased from \$212.0 million to \$71.3 million. This decrease is due to shifting of activities for the BS&S project to the TADR project, prioritization of Interim Security and Safety Upgrades over larger-scale upgrades, and termination of plans for future work at Obolensk.

Description of CTR Activities Carried Out in FY 2004:

Russia: RTSC, the integrating contractor for the Russia BWPP program, developed technical and management plans for upcoming interim biosafety and biosecurity projects at four sites (Vector, Golitsino, Pokrov, and Kazan) and initiated assessment at one site (Vladimir).

Non-Russia FSU States: BNI continued as the non-Russia FSU states integrating contractor and completed vulnerability assessments at 13 sites in Kazakhstan, Uzbekistan, and Georgia. In Georgia, DoD completed interim biosafety and biosecurity upgrades at the National Center for Disease Control, the site of the temporary CRL and national pathogen repository, while the permanent CRL is being constructed.

Locations: Koltsovo, Golitsino, Pokrov, Kazan, Vladimir, Almaty, Astana, Tashkent, Samarkand, and Tbilisi.

Program Management: Management and technical teams made eight trips. In October 2003, a team traveled to Georgia to introduce BNI as the new BWPP integrating contractor for BWPP. The team visited the National Center for Disease Control, Eliava Bacteriophage Institute, the Ministry of Defense, and the Georgian Center for Veterinary Diagnostics and Expertise and attended the U.S.-Caucasus Grant Workmanship Workshop. Another team visited Vector, Pokrov, Golitsino, Kazan, Vladimir, and the ISTC to discuss BS&S project development.

In November 2003, a team escorted the DATSD CD&TR director to Vector in Russia, KSCQZD and SRAI in Kazakhstan, and Research Institute of Virology and CPQMHI in Uzbekistan to observe site progress. A team also traveled to Golitsino, Kazan, Pokrov, Vector, and Vladimir in Russia to discuss the progress of security upgrades. A team attended a BS&S Program Review for the entire BWPP program in Budapest with a DoD technical delegation participating, while another team traveled to SRAI, KSCQZD, and Republican Sanitary Epidemiological Service in Kazakhstan and RIEMID, Research Institute of Virology, and Republican Veterinary Laboratory in Uzbekistan to review projects.

In June 2004, a technical team reviewed ongoing work during visits to the Ministries of Health and Agriculture, KSCQZD, Sanitary and Epidemiologic Service, and SRAI in Kazakhstan; and the Ministry of Health and CPQMHI in Uzbekistan.

In September 2004, a technical team visited Kazakhstan to review the assessment progress for 14 sites within the country and the status of the amendment to the implementing agreement. Another team traveled to Uzbekistan to assess BS&S progress with the Ministries of Emergency Situations, Water and Agriculture, Health, and Defense.

DoD provides on-site U.S. contractors who visit project sites about 10 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 May 31 - June 4, 2004, a team reviewed security upgrades provided to the Research Institute for Virology and the Center for Prophylaxis and Quarantine of Most Hazardous Infections in Tashkent; plus the Scientific Research Institute of Veterinary Science in Samarkand, Uzbekistan.

Security Upgrades & Equipment Accountability: The team visually examined each of the security upgrades provided to these Institutes. A review of the consumables inventory was performed at each site with only minor discrepancies noted.

Security Upgrades & Equipment Serviceability: The security upgrades and related equipment appeared to be generally well maintained and in good working order. The upgrades functioned as designed except for the following items that were reported to the BWPP technical team. At the Center for Prophylaxis and Quarantine of Most Hazardous Infections, the team was unable to activate the motion detector alarm outside the strain repository. In addition, there was a delay in the sounding of an alarm when the motion sensor detected movement outside the cholera and plague labs. These were subsequently corrected by the integrating contractor. At each of the institutes, the security upgrades were influenced by unstable power supplies. DoD is working with the institutes to remedy this situation through installation of emergency generators.

Security Upgrades & Equipment Usage: On-site A&E did not indicate use other than for the intended purpose.

A&E Summary: Visual inspection and testing of the site security enhancements and equipment at each site increases DoD's confidence that the assistance provided is generally in good working order and is being used for its intended purpose. The team reported that the personnel at each site were professional and helpful to the audit team.

2.6 CHEMICAL WEAPONS DESTRUCTION (CWD) PROGRAM - RUSSIA

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

Pursuant to the CWD Implementing Agreement, this project supports U.S. objectives to prevent proliferation of Russia's CW 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 Russia's CW to terrorists or rogue states.

Locations: Kizner and Planovy CW storage facilities.

Program Management: No program management actions were conducted.

A&E: During the period September 13-21, 2004, a team conducted a review of security upgrades provided to the CW storage sites located at Planovy and Kizner.

Security Upgrades & Equipment Accountability: The team observed site security equipment in operation including site entrance anti-ram barriers, metal detectors, alarm sensors, alarm control panels, guard towers, and fencing. All observed upgrades were in good condition and functioning as intended. At Kizner, the team was able to view the alarm control panel to verify that all sensors and alarms were working properly. At Planovy, the team was not able to view the alarm control panel due to site security concerns; however, they were able to look at an alarm activity report that provided an overview of system status and functionality.

Security Upgrades & Equipment Serviceability: All of the security upgrades appeared to be fully serviceable and installed properly, protected, and maintained.

Security Upgrades & Equipment Usage: All of the upgrades are being used for their intended purposes.

A&E Summary: Accountability, serviceability, and the upgrades appeared to be in good order and used for intended purposes. Site personnel were prepared for the team's visit, were cooperative, and ensured necessary access was provided to complete the A&E successfully.

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 2005	FY 2006	FY07-FY11	* Total
<i>Nuclear Weapons Storage Security (Russia)</i>					
Automated Inventory Control & Management System	\$55.1	\$1.5	\$6.5		\$63.1
Guard Force Equipment and Training	\$25.8	\$0.1	\$8.2	\$8.4	\$42.5
Nuclear Weapons Storage Site Support	\$31.5				\$31.5
Site Security Enhancements	\$302.9	\$62.3	\$59.4	\$438.1	\$862.7
Far East Training Facility	\$0.3	\$10.0			\$10.3
Completed Projects	\$26.0				\$26.0
<i>Nuclear Weapons Transportation Security (Russia)</i>					
Nuclear Weapons Transportation	\$67.3		\$20.9	\$138.0	\$226.2
Railcar Maintenance and Procurement	\$15.2		\$9.1	\$30.3	\$54.6
Weapons Transportation Safety Enhancements	\$12.5				\$12.5
Completed Projects	\$33.0				\$33.0
<i>Fissile Material Storage Facility (Russia)</i>					
Fissile Material Storage Facility Transparency	\$23.0				\$23.0
Completed Projects	\$308.9				\$308.9
<i>WMD Infrastructure Elimination (Kazakhstan)</i>					
Fissile and Radioactive Material Proliferation Prevention	\$14.3				\$14.3
<i>BW Proliferation Prevention (FSU)</i>					
Biosecurity and Biosafety - FSU	\$62.3	\$3.1		\$5.9	\$71.3
<i>Chemical Weapons Destruction (Russia)</i>					
Completed Projects	\$20.0				\$20.0
Budget	\$998.1	\$77.0	\$104.1	\$620.7	\$1799.9
* 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 and evaluation of personnel who have access to nuclear weapons. It also improves their safety by providing dosimeters for radiation and radon detection.

3.1.1 Personnel Reliability and Safety

FY 2006 – FY 2011 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 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 total estimated cost for this project has decreased from \$11.9 million to \$9.5 million. Additional CLS Support and CTRIC management costs are no longer required, and the acquisition of additional polygraphs is no longer planned.

Description of CTR Activities Carried Out in FY 2004: Eighteen polygraph suites, 25 breathalyzers, and 20,000 urinalysis test cups were procured and delivered to MOD. Polygraph training was completed for 40 MOD polygraph specialists. Repairs to the Personnel Reliability Program (PRP) laboratory ventilation and fire suppression system also were completed.

Locations: PRP Fixed Lab at Sergiev Posad and other equipment throughout Russia.

Program Management: Management and technical teams made four trips. Teams discussed prior support requests, particularly concerning the Special Medical Diagnostics Center, which MOD stated was needed to determine duty status of personnel with certain symptoms.

A team participated in a joint PRP technical conference which included representatives from DOE; Russia's 12th Main Directorate, Navy, Strategic Rocket Forces; members of the Kurchatov Institute; and U.S. and Russian contractors. Topics of discussion included polygraph equipment, training, and certification, alcohol and narcotics testing equipment, and infectious disease testing equipment. Meetings with the contractor included discussions on cost, schedule and performance milestones. On one trip, DoD delivered a plan to transition the PRP program entirely to the responsibility of MOD, which was received favorably. Other trips included discussions of the JRIP and discussions of the DoD requirement to obtain a comprehensive equipment database of CTR-provided equipment stored at remote nuclear weapons storage sites.

The CLS contractor made 16 site visits, performed 55 maintenance actions, and conducted certification/TOC services for DoD-provided equipment.

3.2 BIOLOGICAL WEAPONS PROLIFERATION PREVENTION (BWPP) PROGRAM – FSU

(See paragraph 1.6 for BWPP program information.)

The CBR project engages former BW scientists in peaceful pursuits. 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 encourage 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 especially dangerous 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 (CBR) – FSU

FY 2006 – FY 2011 Five-Year Plan, Purpose, and Resources: DoD works with institutes and scientists employed in legitimate research to develop CBR projects involving dangerous pathogens for prophylactic, preventive, or other peaceful purposes. The CBR program is divided into two project areas: CBR Russia and CBR Non-Russia FSU States.

CBR Russia: The 12 Russia CBR projects are:

- 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,
- Magnetometric Immunosensor for Multi-Pathogen Continuous Monitoring,
- Conservation of Genetic Material and Study of Genomic Structure of Different Variola Virus Strain,

- Search for Antivirals for Treating and Prevention of Orthopoxviral Infections Including Smallpox, and
- Combinatorial Antibody Libraries to Orthopoxviruses.

The last three projects are projects to protect against smallpox funded jointly and managed by DoD and the Department of Health and Human Services.

The total estimated cost for the CBR Russia project is \$46.8 million.

CBR Non-Russia FSU States: Three CBR projects are underway (two in Uzbekistan and one in Kazakhstan) with one additional project (Georgia) ready for MDA approval of implementation. Three concepts are in final stages of development and seven have been presented to the DoD CBR Advisory Board for approval to develop into full CBR projects.

Projects in execution include:

- Ecological and Socio-Economic Factors of Anthrax Foci Activity and Improvement of its Diagnosis and Prophylaxis in Kazakhstan;
- Epizootological and Epidemiological Mapping of Anthrax, Plague, and Tularemia in Uzbekistan; and
- Development of a Viral Diagnostic Facility in Uzbekistan.

Projects ready for MDA review:

- The Ecology, Genetic Clustering, and Virulence of *Yersinia pestis* Strains Isolated from Natural Foci of Plague in Georgia.

Concepts approved for development:

- The Epidemiological Surveillance of Crimean-Congo Hemorrhagic Fever Virus and Hemorrhagic Fever Viruses with Renal Syndrome in Kazakhstan;
- An Ecological Study of Various Biotypes of *Brucella* within Five Regions of the Republic of Kazakhstan (South Kazakhstan, Almaty, Zhambyl, Kyzylorda, and east Kazakhstan oblasts) Bordering on Central Asian nations and China; and
- The Nature of Spreading and Features of Brucellosis Pathogens, Isolated from Different Pestholes on the Territory of Uzbekistan in Present-day, Methods of Enhancement of Surveillance and Control of Brucellosis Morbidity.

The total estimated cost for the CBR Non-Russia FSU States project is \$50.8 million.

Description of CTR Activities Carried Out in FY 2004: Contract options were awarded to the National Academy of Sciences for general program support and scientific oversight and to the Civilian Research and Development Foundation for management of three Kazakhstan and Uzbekistan projects. DoD policy guidance for CBR projects in Russia includes a more robust approach to oversight. For projects involving dangerous pathogen work, DoD requires that a DoD-designated collaborator be in the laboratory at all times when DoD-funded research on dangerous pathogens is being conducted. In order to expand efforts to place qualified scientists on-site, DoD awarded a new contract to the University Strategic Partnership, led by the University of New Mexico and Pennsylvania State University, to recruit these on-site collaborators, also referred to as visiting scientists. The criteria for selection of visiting scientists are academic and scientific experience, maturity, and ability to demonstrate leadership and

oversight in the specific laboratory/research project environment. Under the CBR Visiting Scientist Program, the University Strategic Partnership has two active visiting scientists and has identified five candidates who are in the process of being assigned. BWPP employs RTSC in Russia and BNI for CBR work in Kazakhstan, Uzbekistan, and Georgia. These CTRIC contractors have teams of subcontractors supporting development and execution of CBR projects with recipient state institutes. The CBR Annual Scientific Review was held in July 2004 in St. Petersburg, Russia.

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

Program Management: Management and technical teams made 13 trips. On several trips, teams traveled to Moscow, Obolensk, St. Petersburg, Novosibirsk, Yekaterinburg, and Serpukhov to conduct CBR project programmatic discussions and site visits. Teams traveled to various Georgia and Russia institutes to introduce the U.S. integrating contractors to institute personnel and government officials. In addition, a team visited institutes and discussed commitments to non-proliferation in Russia. Teams made trips in support of University Strategic Partnership missions to Pennsylvania State University, the University of New Mexico, and the University of Buffalo to discuss future requirements for the CBR Visiting Scientist Program. Management teams participated in a Nonproliferation Workshop in Baltimore and an American Society for Microbiology General meeting in New Orleans to promote opportunities as U.S. collaborators or visiting collaborators on projects in FSU states. In FY 2004, DoD received 549 signed pledges in Russia, 121 in Kazakhstan, 172 in Uzbekistan, and 184 in Georgia.

DoD's U.S. contractors visit project sites about 10 days per month to assess scientific relevance and credibility of work at the institutes and to assist project management with environmental analysis, design, safety procedures, implementation assistance, and project support. U.S. contractors submit bi-weekly status reports and monthly cost/performance reports.

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 2005	FY 2006	FY07-FY11	* Total
<i>Nuclear Weapons Storage Security (Russia)</i>					
Personnel Reliability and Safety	\$9.5				\$9.5
<i>BW Proliferation Prevention (FSU)</i>					
Cooperative Biological Research - FSU	\$53.3	\$10.4	\$7.8	\$26.1	\$97.6
Budget	\$62.8	\$10.4	\$7.8	\$26.1	\$107.1
* 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

(See paragraph 1.6 for BWPP program information.)

4.1.1 BW Threat Agent Detection and Response (TADR)

FY 2006 – FY 2011 Five-Year Plan, Purpose, and Resources: The TADR projects in Kazakhstan, Uzbekistan, and Georgia strengthen dangerous pathogen detection and response networks, enabling discovery of diversion or accidental release of biological materials. A BWPP Agreement is pending in Ukraine, and DoD plans to begin discussions with Azerbaijan and Kyrgyzstan. TADR also removes pathogen collections from multiple Soviet-era “sentinel stations” through secure transport to a central laboratory for consolidation. This helps prevent proliferation of dangerous pathogens and BW-related expertise by integrating recipient state scientists and institutes with skills in BW-related research and production into the international scientific community. The focus of monitoring and consolidation efforts is on dangerous pathogens posing particular risks for theft, diversion, accidental release, or use by terrorists. The TADR project also has the collateral benefit of promoting force health protection for U.S. troops stationed in this region.

In addition to secure consolidation, TADR plans to modernize diagnostic capabilities to: minimize the need for pathogen retention at vulnerable field stations; provide real-time disease information; enhance forensic microbiology capabilities; promote transparency of research and diagnosis of highly dangerous pathogens in recipient states; and develop a network of trained, ethical scientists to prevent, deter, and contain a bioattack. In each country the strengthened network is intended to include:

- Secure central reference laboratories to rapidly diagnose viral and bacterial diseases (human and animal), equipped with modern diagnostic capabilities and operated at U.S. BS&S standards;
- A system of oblast-level human and veterinary Epidemiological Monitoring Modules, without dangerous pathogen collections, including networked sentinel stations with trained personnel to detect and respond to suspicious outbreaks among human and animal populations;
- Standardized, quality-assured diagnostic and surveillance procedures that ensure consistent and reliable results that can be accessed in real time via links to DoD and the U.S. Centers for Disease Control and Prevention’s Laboratory Resource Network;
- State of the art diagnostic tests that provide definitive results at the oblast level, thus minimizing transport of dangerous pathogens and eliminating the need to store dangerous pathogens for diagnostic purposes at multiple field stations;
- Communications and data storage systems to analyze, interpret, manage, and disseminate rapidly data generated by the surveillance system;
- Secure, safe, and efficient pathogen transportation capabilities that follow U.S. standards of biosafety and biosecurity; and

- Initial and recurring training of personnel in biosecurity, biosafety, bioethics, proliferation prevention, diagnostics, epidemiology, information technology, facilities and equipment operations, maintenance, and quality control and assurance.

Sites engaged include:

- Kazakhstan:
 - Almaty – Kazakh Scientific Center for Quarantine and Zoonotic Diseases (KSCQZD)
 - Almaty – Central Sanitary and Epidemiologic Service Laboratory
 - Almaty – Ministry of Defense Medical Department
 - Astana – Central Veterinary Laboratory
 - Otar – Scientific Research Agricultural Institute of the National Biotechnology Center
 - Various – Sentinel Stations associated with KSCQZD and the Sanitary and Epidemiologic Service System
- Uzbekistan:
 - Samarkand – Scientific Research Institute of the Veterinary Sciences
 - Tashkent – Research Institute of Virology
 - Tashkent – Center for Prophylaxis and Quarantine of Most Hazardous Infections (CPQMHI)
 - Tashkent – Research Institute of Epidemiology, Microbiology, and Infectious Diseases (RIEMID)
 - Tashkent – Central Veterinary Laboratory
 - Tashkent – Ministry of Defense Medical Department
 - Various – Sentinel Stations associated with CPQMHI and RIEMID
- Georgia:
 - Tbilisi – National Center for Disease Control of Georgia
 - Tbilisi – Eliava Institute of Bacteriophage, Microbiology and Virology
 - Tbilisi – Georgia Center for Veterinary Diagnostics and Expertise
 - Tbilisi – Central Veterinary Laboratory
 - Various – Sentinel Stations associated with the National Center for Disease Control
- Ukraine, Azerbaijan, and Kyrgyzstan:
 - TBD

Before the on-site surveys, the estimated cost of these projects was \$122.9 million. Based on in-country surveys of actual requirements and a preliminary design concept for the Central Reference Laboratories, the new estimate is \$586.1 million.

Description of CTR Activities Carried Out in FY 2004: TADR workshops and IPTs of USG, contractor, and recipient state personnel were conducted in Kazakhstan and Uzbekistan. A similar workshop was held in Georgia in March 2004. The four IPTs (Laboratory, Epidemiology and Surveillance, Communications and Information Technology, and Rules and Regulations) and an Overarching IPT (OIPT), comprised of CTR Policy, DATSD CD&TR, BWPP program Office, and key recipient state ministers, have achieved the following:

- Conducted “gap analysis” of existing TADR-like systems for human and veterinary disease diagnosis and surveillance in Kazakhstan, Uzbekistan, and Georgia;

- Completed conceptual design for CRLs in Kazakhstan, Uzbekistan, and Georgia -- in Uzbekistan and Georgia, there will be a joint facility for human and veterinary diseases on a common campus with shared safety, security, and operations support;
- Held a workshop in Kazakhstan in July 2004 on Brucellosis, a disease found in humans and animals in all three countries, that brought focus to TADR requirements for the interface between human and veterinary surveillance networks in any one country and the connections needed between countries in the TADR system;
- Completed requirements generation for entire TADR system;
- Integrated Department of Health and Human Services/Centers for Disease Control and Prevention, Armed Forces Institute of Pathology, Walter Reed Army Institute of Research, and U.S. Army Medical Research Institute of Infectious Diseases into the TADR planning and implementation effort;
- Established a prototype Epidemiological Monitoring Station at the National Center for Disease Control in Tbilisi, Georgia that will also function as an interim CRL; and
- Identified locations of the CRLs and the Epidemiological Monitoring Modules in Georgia, Uzbekistan, and Kazakhstan.

Locations: Almaty, Astana, Tashkent, Samarkand, and Tbilisi.

Program Management: Management and technical teams made 23 trips. The TADR program was formally introduced to Georgia, Kazakhstan, and Uzbekistan by convening initial planning meetings in each country. Teams traveled to Georgia, Kazakhstan, and Uzbekistan to meet with principals of various ministries, discuss joint requirements, and outline specific responsibilities for implementation of the TADR program. As a result of these discussions, OIPTs were created in each country. Each OIPT includes key recipient state ministers and DoD representatives to oversee TADR program implementation.

Numerous working level IPTs were created that include key recipient state personnel and other U.S. technical experts to further refine TADR program requirements. These requirements are further defined in JRIPs that have been introduced in Kazakhstan and Uzbekistan and will be in Georgia. Teams attended technical project reviews and representatives travelled to Atlanta to discuss TADR program requirements with principals of the Center for Disease Control.

4.2 WEAPONS OF MASS DESTRUCTION-PROLIFERATION PREVENTION INITIATIVE (WMD-PPI) PROGRAM-FSU, EXCEPT RUSSIA

The WMD-PPI program is designed to address the vulnerability of the FSU states' porous borders to WMD smuggling. Currently, DoD intends to build the capabilities of Kazakhstan, Azerbaijan, Ukraine, and Uzbekistan to stem the potential proliferation of WMD. The vision is to have the FSU states possess a fully functional, self-sustaining, multi-agency capability to prevent the proliferation of WMD related materials and technologies to terrorists and proliferant states. Decisions to proceed in various FSU states are based on threat, evolving relations with potential recipient states, and status of complementary DoD and other U.S. related efforts. CTR Program assistance will be coordinated with other USG and international programs to leverage their assistance and to avoid duplication of effort. The WMD-PPI program is implemented incrementally to provide maximum flexibility.

4.2.1 Caspian Sea Maritime Proliferation Prevention (Azerbaijan)

FY 2006 – FY 2011 Five-Year Plan, Purpose, and Resources: In accordance with the WMD-PPI Implementing Agreement, this project intends to develop comprehensive maritime proliferation prevention surveillance and interdiction capabilities for the Caspian Sea maritime border. This project will focus on increasing Azerbaijan’s abilities to detect and interdict WMD on vessels transiting adjacent waters of the Caspian Sea. It will improve maritime surveillance equipment and procedures, repair and upgrade existing vessels, provide equipment for boarding crews including WMD detection devices, construct, repair, or upgrade command and control, maintenance, and logistics facilities, and construct coastal operating locations along the Azerbaijan southern coast to improve on-station time and expand the patrol areas of the Maritime Border Guard craft.

This project will be implemented under a single contract using an incremental approach. Increment 1 objectives are task definition and establishment of an Initial Operational Capability to include establishing an Interim Joint Command and Control Center, ensuring operational capability through repair or upgrade of patrol and support craft, providing WMD detection equipment, installing radars and a data network, and enhancing maintenance, logistics, and training systems. Increment 1 is to be complete within 12 months after contract award and also provides for initial sustainment. Follow on sustainment support will be provided in follow on increments. A continual assessment process will be used to determine future increments. The entire project is expected to last no more than 5 years.

The estimated cost is \$63.4 million.

Description of CTR Activities Carried Out in FY 2004: DoD focused on determining specific requirements, developing an implementation approach and acquisition strategy, determining requirements for a “Quick Equipment Support Package,” and awarding a contract.

Locations: Astara, Baku, and Tici Region.

Program Management: Management and technical teams made three trips. The teams reviewed status of quick delivery equipment purchases, discussed the draft Joint Requirements Implementation Plan with Azerbaijan officials, tabled draft amendments to the Implementing Agreement, met with State Border Services personnel, and visited the Maritime Brigade base and radar sites to determine operational and equipment capabilities and staff training.

The management and technical teams conducted numerous IPT meetings to develop acquisition strategies, minimize risks, define requirements, address costs, establish baselines, and resolve other issues. A team conducted an initial Program Management Review and an inventory of quantities and status of items included in the quick delivery equipment purchase. The team also has participated with the contractor and the recipient nation technical representatives in an initial assessment conference to set the stage for working IPTs. Some key events:

- “Quick Equipment Support Package” deliveries started in April 2004,
- Contract (\$20 million) was awarded to WGI on July 28, 2004,
- WGI commenced operations in Azerbaijan on August 11, 2004,
- The Director of DTRA’s CTR Directorate participated in the October 21-22, 2004 Program Management Review,

- Quarterly Assessment Conference October 25-26, 2004, and
- Project Status and Metrics Review December 1-2, 2004.

4.2.2 Caspian Sea Maritime Proliferation Prevention (Kazakhstan)

FY 2006 – FY 2011 Five-Year Plan, Purpose, and Resources: In accordance with an amendment to the WMDIE Implementing Agreement being negotiated with Kazakhstan, DoD will establish a WMD-PPI program that will provide a comprehensive WMD detection and interdiction capability on the Caspian Sea maritime border. It will parallel the effort with Azerbaijan and include the same steps to build new capabilities. The entire project is expected to last no more than 5 years.

The estimated cost is \$60.6 million.

Description of CTR Activities Carried Out in FY 2004: The focus of DoD efforts has been in developing a draft acquisition strategy that will support policy guidance. A draft list of potential quick deliverable items was developed in coordination with other USG agencies and the U.S. Embassy in Almaty.

Locations: Potential sites for assistance — Atyrau, Bautino, Aktau, and Yereleyev.

Program Management: DoD officials made one trip to Almaty and Astana to discuss and table an amendment to the WMDIE Implementing Agreement to cover the WMD-PPI project. DoD management, technical, and policy teams conducted several IPT meetings throughout the year to develop acquisition strategies, minimize risks, define requirements, address costs, establish baselines, and resolve other issues.

4.2.3 Land Border/Maritime Proliferation Prevention (Ukraine)

FY 2006 – FY 2011 Five-Year Plan, Purpose, and Resources: In accordance with the Export Control Implementing Agreement, DoD will provide a comprehensive WMD and related materials detection and interdiction capability to detect and interdict WMD transiting Ukraine's border with Moldova. The project will expand to address maritime proliferation prevention on the Black Sea. Ukraine will achieve these capabilities by enhancing WMD detection and interdiction, surveillance, communications/data storage, training, maintenance, and sustainment capabilities using DoD's Doctrine, Organization, Training, Material, Leadership, Personnel, and Facilities capabilities analysis. This will include provision of a 5-year WMD related data storage, incident reporting, and response capability and WMD-related training for equipment operation and maintenance.

This project will be integrated with nuclear detection portal monitors installed by the DOE's Second Line of Defense and is intended to provide for monitoring 90-95 percent of all in/out traffic through Ukraine's international and state ports of entry on its land border (including green borders and waterways forming parts of the border) with Moldova.

The estimated cost is \$53.8 million.

Description of CTR Activities Carried Out in FY 2004: DoD efforts focused on developing specific requirements, implementation approach and acquisition strategy, and for "Quick Equipment Support Package" requirements and contract award on August 17, 2004.

Locations: Timkova, Platonove, and Kuchurgan.

Program Management: Management and technical teams made four trips. To take advantage of terrain similar to Ukraine region, a team traveled to the Vermont-Canadian border to gain insight into Border Patrol and Point of Entry operations. A team also traveled to Ukraine and met with Border Guard personnel to discuss contractor-acquired material transfer procedures and held working level meetings to further define future project priorities.

A team traveled to Kiev to discuss the development of a JRIP, including the roles of DoD and the Ukraine Ministry of Economics. A team traveled to Odessa to introduce the U.S. integrating contractor to Border Guard and Customs Service officials. Finally, a team met with Border Guard, Customs Service, in-country representatives of other complementary U.S. programs, U.S. CTR Program contractors, and European Union personnel to coordinate projects and share “lessons learned” for activities in Ukraine.

The management and technical personnel participated in numerous IPT meetings throughout the year to develop acquisition strategies, minimize risks, define requirements, address costs, establish baselines, and resolve other issues. In particular, DoD established an implementation level working IPT, which includes representatives from USG and international agencies who are executing border security initiatives in Ukraine. The goal of this group is to communicate project information and lessons learned primarily to ensure efforts are complementary and do not overlap or conflict.

4.2.4 Portal Monitoring (Uzbekistan)

FY 2006 – FY 2011 Five-Year Plan, Purpose, and Resources: In accordance with the Border Security Assistance Implementing Agreement with Uzbekistan, DoD will provide equipment and logistics support, training, and other support to those Uzbekistan agencies vested with the authority to monitor borders for illegal transport of WMD or related materials. Specifically, DoD will provide portal monitors and associated hand-held detection equipment, installation, training, and other support to the State Customs Service of Uzbekistan and the Committee for Guarding the State Border of the Republic of Uzbekistan. This will enhance Uzbekistan’s ability to monitor its borders for the illegal transport of fissile and radioactive material. DoD will work closely with DOE, which will assume the long-term sustainment of portal monitoring equipment installed by DoD. The program will be executed in three phases.

Phase 1 consisted of a threat assessment, ports of entry prioritization, and selected site surveys by Lawrence Livermore National Laboratory. The resulting analysis provided a “most at risk” ports of entry ranking against the nuclear smuggling threat, which became the basis for determining the ports of entry that should receive portal monitors in priority order. This was followed by the Phase 2 contract to WGI for installation of portal monitors, delivery of hand-held detectors, upgrades to communication and data storage, additional traffic analysis, training improvements, and development of an Employee Trustworthiness Program. Phase 3 will transition the sustainment to DOE’s Second Line of Defense Program.

The estimated cost is \$31.8 million.

Description of CTR Activities Carried Out in FY 2004: DoD focus has been on completing the necessary work to develop the acquisition strategy for the project, select appropriate contractors, and achieve contract award for both the first and second phases of implementation. These steps were accomplished, Phase 1 was completed, and the MDA

approved award of the contract and proceeding with the second phase of the project plan. The contract was awarded on September 17, 2004.

Locations: (Phase 1, Increment 1) Alat, Ayritom, Dustlik, Gisht-Kuprik, Karakalpakia, Khodjidorovlet, Khojayli, Navoi, Tashkent, and Yallama.

Program Management: Management and technical teams made three trips. The first trip was for initial requirements development. Follow-on trip objectives included visiting various railroad, pedestrian, and vehicular ports of entry in order to establish contract requirements and produce a preliminary cost estimate. Teams also met with Uzbekistan Government and Border Guard officials to explain the objectives of the program and discuss issues.

Management and technical teams conducted numerous IPT meetings throughout the year with appropriate program stakeholders to develop acquisition strategies, minimize risks, define requirements, address costs, establish baselines, and resolve other issues.

4.2.5 Expanded WMD-PPI Project Areas

Based on experience, robust new CTR initiatives can be executed within 6 to 12 months from an interagency-coordinated, DoD decision to implement. “Quick response packages” can be implemented if needed to demonstrate timely resolve. Factors that are used in the development and timing to proceed with new initiatives in various FSU states include: threat, political considerations, evolving relations with recipient or potential recipient nations, status of complementary DoD and other U.S. related efforts. The WMD-PPI program is structured to be implemented incrementally to provide maximum flexibility, optimize the use of funds, and respond quickly to changing requirements.

The estimated cost for future initiatives is \$150.1 million.

Description of CTR Activities Carried Out in FY 2004: None.

Location: N/A.

Program Management: N/A.

4.3 DEFENSE AND MILITARY CONTACTS (DMC)

FY 2006 – FY 2011 Five-Year Plan, Purpose, and Resources: In accordance with the Defense and Military Contacts instruments identified in Appendix A, this program develops active and positive relationships between the defense, military, and security communities of the U.S. and FSU states directly supporting DoD’s security cooperation goal of building defense relationships that promote specific U.S. security interests. In Russia, these interests include stemming the proliferation of WMD, supporting implementation of the new strategic framework, and enhancing the U.S.-Russia partnership. In other CTR Program-eligible FSU states, these objectives include stemming the proliferation of WMD and increasing U.S. access by strengthening defense partnerships.

Future events will include Bilateral Defense Consultations; exchange visits between the Secretary of Defense and the Chairman of the Joint Chiefs of Staff, and their FSU states counterparts; and Consultative Staff Talks between U.S. Combatant Commanders and key military leaders. In support of U.S. counterproliferation goals, this program will sponsor

exercises and Traveling Contact Teams (TCTs) for maritime interdiction and NBC warning and detection. In support of U.S. counterterrorism objectives, this program will sponsor events such as Special Forces air interoperability familiarizations, intelligence operation TCT, and anti-terror TCT. In the traditional areas of promoting defense reform and democratic military institutions, activities include visits of senior and mid-level officers; visits among naval, air, and ground units; bilateral exercises; and ship visits.

The estimated cost decreased from \$107.1 million to \$104.6 million. This decrease reflects an alignment of FY 2005 and out-year funds to the FY 2004 execution level.

Description of CTR Activities Carried Out in FY 2004: A total of 235 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. This program also supported key DoD and U.S. Combatant Command regional security initiatives in the Caspian Sea, Black Sea, and Caucasus regions.

Locations: Armenia, Azerbaijan, Georgia, Kazakhstan, Kyrgyzstan, Moldova, Russia, Tajikistan, Ukraine, and Uzbekistan.

Program Management: This program is developed within the Office of the Assistant Secretary of Defense for International Security Policy in close coordination with the Joint Staff, the Combatant Commands, and the military services to ensure that scheduled events support the Secretary of Defense’s Security Cooperation Guidance and regional command’s country and regional campaign plans. In addition to an approved annual plan, this program can accommodate requests throughout the year for events to meet emerging requirements.

4.4 CHEMICAL WEAPONS ELIMINATION – ALBANIA

This project will maintain DOS installed security systems and eliminate a recently disclosed stockpile of chemical weapons agent in Albania comprised of bulk-agent mustard, lewisite, and minimal quantities of arsenical compounds. The CTR Program effort will dispose of the chemical agents in accordance with Albania requirements under the Chemical Weapons Convention. DoD will provide project management and oversight support for this elimination.

Phase I will develop a plan and include a site visit to Albania to survey the storage location, infrastructure, and available support. A programmatic acquisition strategy will be developed to document life-cycle funding requirements, contracting strategy, and life-cycle schedule for the project. The planning phase has already begun.

Phase II of the project will be the award of an operations contract, which we anticipate will be awarded under CTRIC or other existing DoD contract vehicle. The contract will provide for limited site preparation, chemical agent elimination, and close out of the destruction system in Albania. Phase II is scheduled to follow Phase I with contract award in September 2005.

Phase III includes the procurement of an elimination system, site preparation, deployment to Albania, set-up, elimination operations, closeout and return of the system to the U.S. when the contract and integration tasks will be complete. Phase III will be completed in November 2006.

The estimated cost is \$18.2M.

Description of CTR Activities Carried Out in FY 2004: DoD concluded the CWD Implementing Agreement with Albania's MOD in December 2004.

Location: N/A.

Program Management: N/A.

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 2005	FY 2006	FY07-FY11	* Total
<i>BW Proliferation Prevention (FSU)</i>					
BW Threat Agent Detection and Response - FSU	\$84.1	\$55.2	\$53.0	\$393.8	\$586.1
<i>WMD Proliferation Prevention</i>					
Caspian Sea Maritime Proliferation Prevention (Azerbaijan)	\$31.2	\$11.3	\$13.6	\$7.3	\$63.4
Caspian Sea Maritime Proliferation Prevention (Kazakhstan)	\$10.1		\$20.2	\$30.3	\$60.6
Land Border/Maritime Proliferation Prevention (Ukraine)	\$15.1	\$10.0	\$6.3	\$22.4	\$53.8
Portal Monitoring (Uzbekistan)	\$12.8	\$18.5	\$0.5		\$31.8
Expanded WMD-PPI Project Areas				\$150.1	\$150.1
<i>Defense and Military Contacts</i>					
Defense & Military Contacts	\$48.6	\$8.0	\$8.0	\$40.0	\$104.6
<i>Chemical Weapons Destruction Albania</i>					
Chemical Weapons Destruction	\$14.5	\$3.7			\$18.2
Budget	\$216.4	\$106.7	\$101.6	\$643.9	\$1,068.6
* 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

FY 2006 – FY 2011 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 3 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 3 years after expiration of the umbrella agreement.

The estimated cost for this project remains \$6.8 million.

Description of CTR Activities Carried Out in FY 2004: DoD conducted 12 A&Es: 10 in Russia, 1 in Ukraine, and 1 in Uzbekistan. Through FY 2004, the U.S. has conducted 157 A&Es in the recipient states.

Program Management/Administration

FY 2006 – FY 2011 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 team travel expenses, translator/interpreter support, contracted SETA, and CTR Program personnel at U.S. embassies in recipient states.

The estimated cost increased from \$222.2 million to \$241.5 million. This increase will provide program management and administrative support for 2010 and 2011, and additional embassy support in Baku, Azerbaijan and Tbilisi, Georgia.

Description of CTR Activities Carried Out in FY 2004: SETA support through an incrementally funded contract was provided by the Threat Reduction Support Center (TRSC) team, which included: SAIC, 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 2005	FY 2006	FY07-FY11	* Total
Audits and Examinations	\$3.3	\$0.5	\$0.5	\$2.5	\$6.8
Program Management/Administration	\$141.7	\$2.9	\$14.1	\$82.8	\$241.5
Budget	\$145.0	\$3.4	\$14.6	\$85.3	\$248.3
* Estimated Program FYDP Total					
** FY 2005 total includes the \$313 thousand reduction as reflected in Public law 108-447, FY 2005 Consolidated Appropriations Act					

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

Objective	Prior Year	**FY 2005	FY 2006	FY07-FY11	* Total
1. Dismantle former Soviet Union WMD and Associated Infrastructure	\$2,464.7	\$210.4	\$187.4	\$447.9	\$3,310.4
2. Consolidate and secure FSU WMD and related technology and materials	\$998.1	\$77.0	\$104.1	\$620.7	\$1,799.9
3. Increase transparency and encourage higher standards of conduct	\$62.8	\$10.4	\$7.8	\$26.1	\$107.1
4. Support defense and military cooperation with objective of preventing proliferation	\$216.4	\$106.7	\$101.6	\$643.9	\$1,068.6
Other Program Support	\$145.0	\$3.4	\$14.6	\$85.3	\$248.3
CTR Programs that are complete or require no additional funding	\$792.9				\$792.9
Total Budget	\$4,679.9	\$407.9	\$415.5	\$1,823.9	\$7,327.2
* Estimated Program FYDP Total					
** FY 2005 total includes the \$313 thousand reduction as reflected in Public law 108-447, FY 2005 Consolidated Appropriations Act					

CTR Accountability Actions by Project for FY 2004

The Table of CTR Accountability Actions by Project for FY 2004 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 table highlights significant items of concern with paragraphs referenced to project narratives. The table key:

- * Each Defense & Military Contacts event includes USG participation and has a designated event officer responsible for costs and activities. These military exchange events are not counted as CTR Management Actions in this summary table, as they are not contract/project management activities.
- ** CTR PMs travel to locations in FSU states to review project status, provide support to CTR Policy, review/accept deliverables, negotiate contracts, meet with executive agents and U.S. contractors, etc. PMs made 165 trips to FSU states during FY 2004. Many trips supported multiple objectives and have been counted against more than one program/project.
- *** CLS make site visits to perform corrective/preventive maintenance actions and/or provide letter of verification/TOC 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 2004

Paragraph Reference	Program (<i>Bold, Italic Text</i>) / Project****	A&E(s)		PM Trips **	CLS		U.S. On-Site Support	Concerns
		Planned	Completed		Visits ***	Maintenance Actions		
1.1	<i>Strategic Offensive Arms Elimination - Russia</i>			5				
1.1.1	Emergency Response Support Equipment				5	36		
1.1.2	ICBM/SLBM and Mobile Launcher Elimination	1	1	28	19	141	Y	
1.1.3	Liquid Propellant ICBM and Silo Elimination	2	2	8	24	302	Y	A&E of IMTCs found six used for other than intended purposes.
1.1.4	SLBM Launcher Elimination/SSBN Dismantlement			8	24	316		
1.1.5	Spent Naval Fuel Disposition			6				
1.1.6	Liquid Propellant SLBM Elimination			5	10	97	Y	
1.1.7	Liquid Propellant Disposition Systems				5	1		
N/A	Solid Propellant Disposition Facility	1						
2.1, 3.1	<i>Nuclear Weapons Storage Security - Russia</i>	3	3	2				MOD has not complied with requirements to provide inventories with the location of assistance provided. (Recurring concern)
2.1.1	Automated Inventory Control & Management System (AICMS)			3	20			
2.1.2	Guard Force Equipment and Training				6	558		
2.1.3	Nuclear Weapons Storage Site Support			1	2			
2.1.4	Site Security Enhancements			8	6			
3.1.1	Personnel Reliability and Safety			4	16	55		
2.2	<i>Nuclear Weapons Transportation Security - Russia</i>			1				USG has identified a need for greater transparency. Options under discussion.
2.2.1	Nuclear Weapons Transportation							
2.2.2	Railcar Maintenance and Procurement	1	1	1				
2.2.3	Transportation Safety Enhancements	1		1	1			
2.2.4	Supercontainers	1	1					
2.2.4	Emergency Support Equipment	1	1					
2.3, 2.3.2	<i>Fissile Material Storage Facility - Russia</i>	2		2	2			Transparency agreement and audit arrangements with Russia are in negotiation. Loading has not started.
2.3.1	Fissile Material Storage Facility Transparency - Russia							
2.3.3	<i>Fissile Material Containers - Russia</i>				2			
1.2	<i>Chemical Weapons Destruction - Russia</i>			5				
1.2.1	Chemical Weapons Destruction Facility			6	1		Y	
1.2.2	Chemical Weapons Production Facility Demilitarization			8				Russia has not provided its share of funding for Thermal Treatment Units resulting in anticipated delays. Alternatives under consideration.
1.2.3	Chemical Agent Analytical Monitoring			1	2	33		
2.6, 2.6.1	<i>Chemical Weapons Site Security</i>	1	1					
	Russia Total**	14	10	103	143	1,539		

CTR ACCOUNTABILITY ACTIONS BY PROJECT FOR FY 2004

Paragraph Reference	Program (<i>Bold, Italic Text</i>) / Project****	A&E(s)		PM Trips **	CLS		U.S. On-Site Support	Concerns
		Planned	Completed		Visits ***	Maintenance Actions		
	CEDT			12	37	332		
1.3	<i>Strategic Nuclear Arms Elimination - Ukraine</i>	1	1	2				
1.3.1	SS-24 Missile Disassembly, Storage, and Elimination				24	251		
1.3.2	Bomber & Air-to-Surface Missile Elimination			10	149	1,010	Y	
1.4	<i>WMD Infrastructure Elimination - Ukraine</i>				71	521		
1.4.1	National Nuclear Storage Site Elimination			10			Y	
1.4.2	Liquid Missile Propellant and Storage Facility Elimination			1			Y	
1.4.3	Strategic Airbase Infrastructure Elimination			1				
	Ukraine Total	1	1	36	281	2,114		
1.5, 2.4	<i>Weapons of Mass Destruction Infrastructure Elimination - Kazakhstan</i>							
1.5.1	Liquid Missile Propellant and Storage Facility Elimination			1	4	23		
2.4.1	Fissile and Radioactive Materials Prevention of Proliferation			9				
	Kazakhstan Total	0	0	10	4	23		
1.6, 2.5, 3.2, 4.1	<i>BW Proliferation Prevention - Former Soviet Union</i>			4				
1.6, 1.6.1	BW Infrastructure Elimination			8			Y	
2.5.1	Biosecurity & Biosafety	2	1	8			Y	
3.2.1	Cooperative Biological Research			13			Y	VAT paid with USG funds violated ISTC project agreements. (Recurring concern) Negative affects on efficiency of BW Projects caused by lack of BW Implementing Agreement with Russia (recurring concern)
4.1.1	BW Threat Agent Detection and Response (TADR)			23				
4.3*	<i>Defense & Military Contacts - Former Soviet Union</i>							
4.2	<i>WMD Proliferation Prevention Initiative - FSU</i>							
4.2.1	Caspian Sea Maritime Proliferation Prevention (AZ)			3				
4.2.2	Caspian Sea Maritime Proliferation Prevention (KZ)							
4.2.3	Land Border Proliferation Prevention (UP)			4				
4.2.4	Portal Monitoring (UZ)			3				
4.2.5	Expanded WMD Proliferation Prevention (FSU) Activities							
	FSU - Former Soviet Union Programs Total	2	1	66	0	0		
	Grand Totals	17	12	215	428	3,676		

Accounting Activities Planned for FY 2005

DoD uses a collaborative effort to develop the annual A&E schedule. A key component of the process is the completion of a Government Accountability Office 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 Teams were key elements in the development of the A&E schedule for FY 2005.

DoD plans to conduct A&Es for FY 2005 (see Figure 8) in Russia, Ukraine, and Georgia 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 two audits in the TBD column represent a BW site security audit that will be conducted in Kazakhstan or Uzbekistan and an A&E scheduled to address unanticipated concerns of DoD management.

Figure 8 A&E Monthly Activities for FY 2005.

Month	Russia	Ukraine	Georgia	TBD	FY 2005
October					
November					
December					
January	2				2
February					
March	1				1
April	2				2
May	3				3
June			1		1
July		1		1	2
August	1			1	2
September	3				3
Total	12	1	1	2	16

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 Albania, 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.

ALBANIA

Agreement Between the Government of the United States of America and the Government of the Republic of Albania Concerning Cooperation in the Area of the Prevention of Proliferation of Weapons of Mass Destruction, and the Promotion of Defense and Military Relations, dated May 12, 2003. (Preventing Proliferation of Weapons of Mass Destruction Agreement)

Agreement Between the Department of Defense of the United States of America and the Ministry of Defense of the Republic of Albania Concerning the Safe, Secure, and Ecologically Sound Destruction of Chemical Weapons, dated December 30, 2004. (CWD Implementing Agreement)

AZERBAIJAN

Agreement between the Government of the United States of America and the Government of the Republic of Azerbaijan Concerning Cooperation in the Area of Counterproliferation of Weapons of Mass Destruction and Defense activities of September 28, 1999. (U.S.-Azerbaijan CTR Umbrella Agreement)

Agreement Between the Department of Defense of the United States of America and the Cabinet of Ministers of the Republic of Azerbaijan Concerning Cooperation in Preventing the Proliferation of Weapons of Mass Destruction, dated January 2, 2004, as amended October 28, 2004. (WMD-PPI Implementing Agreement)

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, as amended March 23, 2004 and August 30, 2004. (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, as amended July 1, 1995 and June 10, 1996. (SOAE 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, as amended June 30, 1995 and 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, as 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 and Mineral Resources of the Republic of Kazakhstan Concerning the Elimination of Infrastructure for Weapons of Mass Destruction, dated October 3, 1995, as amended June 10, 1996, September 9, 1998, December 17, 1999, July 29, 2000, May 31, 2002, April 2, 2003, June 28, 2004, and December 7, 2004. (WMDIE Implementing 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, as 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, as 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 Federal Agency for Industry Concerning the Safe, Secure and Ecologically Sound Destruction of Chemical Weapons, dated July 30, 1992, as 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, 2003, March 18, 2003, September 23, 2003, and July 28, 2004. (Chemical Weapons Destruction Implementing Agreement)

Agreement Establishing an International Science and Technology Center, dated November 27, 1992. (ISTC 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, as 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 Federal Space Agency of the Russian Federation Concerning Cooperation in the Elimination of Strategic Offensive Arms, dated August 26, 1993, as amended April 3, 1995, June 19, 1995, May 27, 1996,

April 11, 1997, February 11, 1998, June 9, 1998, August 16, 1999, August 8, 2000, June 9, 2003, September 25, 2003, and January 14, 2005, and as amended and extended August 30, 2002. (SOAE 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, as 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, as 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, as amended March 18, 1994, and 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, as amended June 21, 1995, May 27, 1996, June 12, 2000, February 28, 2002, September 19, 2002, March 26, 2003, March 5, 2004, and July 12, 2004, 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, as amended June 21, 1995, May 27, 1996, April 8, 1997, January 14, 1999, November 1, 1999, June 12, 2000, September 19, 2002, July 12, 2004, 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, as amended August 27, 2002 and September 18, 2003, and extended July 29, 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, as 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. (SNAE Implementing Agreement)

Agreement Between the Department of Defense of the United States of America and Ministry of Economy and European Integration of Ukraine Issues on the Provision of assistance to Ukraine in Establishing an Export Control System in Order to Prevent the Proliferation From Ukraine of Weapons of Mass Destruction, dated October 22, 2001, and amended March 26, 2004. (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, as 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, as amended June 4, 1996, and extended June 12, 1998 and October 30, 2001. (WMDIE 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, as 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, as amended October 17, 2003 and October 22, 2004. (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, as amended July 29, 2003, May 17, 2004, and September 10, 2004. (Biological Threat Reduction Implementing Agreement - Uzbekistan)

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

	Program	Project	FY 2004	*FY 2005	FY 2006	FY 2007
A.	Strategic	Offensive Arms Elimination (R)	\$55,600	\$52,495	\$78,900	\$76,985
		Emergency Response Support Equipment	\$413	\$400	\$400	\$400
		Solid Propellant ICBM/SLBM and Mobile Launcher Elimination	\$27,623	\$36,585	\$49,655	\$42,286
		Liquid Propellant ICBM and Silo Elimination	\$762	\$12,815	\$20,930	\$18,797
		SLBM Launcher Elimination/SSBN Dismantlement	\$22,246	\$1,868	\$4,235	\$9,592
		Spent Naval Fuel Disposition	\$3,923	\$419	\$231	\$3,845
		Liquid Propellant SLBM Elimination	\$633	\$408	\$3,449	\$2,065
B.	Nuclear	Weapons Storage Security (R)	\$48,000	\$73,899	\$74,100	\$87,100
		Automated Inventory Control & Management System	\$1,297	\$1,500	\$6,522	
		Guard Force Equipment and Training	\$5,279	\$100	\$8,223	\$8,355
		Site Security Enhancements	\$41,424	\$62,317	\$59,355	\$78,745
		Far East Training Center		\$9,982		
C.	Nuclear	Weapons Transportation Security (R)	\$23,200		\$30,000	\$33,000
		Nuclear Weapons Transportation	\$17,971		\$20,858	\$21,933
		Railcar Maintenance and Procurement	\$2,916		\$9,142	\$11,067
		Weapons Transportation Safety Enhancements	\$2,313			
D.	Chemical	Weapons Destruction (R)	\$200,300	\$157,875	\$108,500	\$42,700
		Chemical Weapons Destruction Facility	\$190,300	\$154,675	\$108,500	\$42,700
		CW Production Facility Demilitarization	\$10,000	\$3,200		
E.	BW	Proliferation Prevention (FSU)	\$67,750	\$68,699	\$60,849	\$65,800
		BW Infrastructure Elimination - FSU	\$17,060			
		Biosecurity and Biosafety - FSU	\$14,622	\$3,065		\$1,125
		Cooperative Biological Research - FSU	\$16,035	\$10,438	\$7,853	\$10,622
		BW Threat Agent Detection and Response - FSU	\$20,033	\$55,196	\$52,996	\$54,053
F.	WMD	Proliferation Prevention	\$29,400	\$39,900	\$40,600	\$37,486
		Caspian Sea Maritime Proliferation Prevention (Azerbaijan)	\$10,138	\$11,340	\$13,552	\$7,287
		Caspian Sea Maritime Proliferation Prevention (Kazakhstan)	\$8,812		\$20,249	\$15,233
		Land Border/Maritime Proliferation Prevention (Ukraine)	\$7,096	\$10,049	\$6,333	\$14,966
		Portal Monitoring (Uzbekistan)	\$3,354	\$18,511	\$466	
G.	Defense & Military	Contacts (FSU)	\$945	\$7,963	\$8,000	\$8,000
		Defense & Military Contacts	\$945	\$7,963	\$8,000	\$8,000
H.	Other Assessments/Administrative	Costs (O)	\$13,100	\$3,387	\$14,600	\$16,000
		Audits and Examinations	\$500	\$500	\$500	\$500
		Program Management/Administration	\$12,600	\$2,887	\$14,100	\$15,500
I.	Chemical	Weapons Destruction Albania	\$10,350	\$3,655		
		Chemical Weapons Destruction Albania	\$10,350	\$3,655		
	Total		\$448,645	\$407,873	\$415,549	\$367,071

* FY 2005 total includes the \$313 thousand reduction as reflected in Public law 108-447, FY 2005 Consolidated Appropriations Act

APPENDIX C: FINANCIAL COMMITMENTS FOR FY 2005 FROM THE INTERNATIONAL COMMUNITY AND RUSSIA FOR THE CHEMICAL WEAPONS DESTRUCTION FACILITY AT SHCHUCH'YE, RUSSIA

FY 2005 Financial Commitment from the International Community

The international community plans to commit over \$122.0 million in U.S. dollars¹ to fund high-priority infrastructure projects to support operation of the CWDF at Shchuch'ye:

- Canada has committed \$27.6 million (CAN \$33.0 million) to build a railway link between the Planovy CW storage facility and the Shchuch'ye destruction facility. Canada intends to commit \$60.8 million (CAN \$72.6 million) over 3 years to procure equipment for the second drill, drain, and neutralization building at Shchuch'ye (Building 101A), patrol and access roads, a local warning system, and an intra-site communications project.
- Czech Republic contributed \$76,000 to procure equipment for the electrical substation, and further committed \$74,000 that likely will be used to procure equipment for Building 101A.
- European Union has committed up to \$2.4 million for the infrastructure projects.
- Italy has committed \$6.1 million for infrastructure projects.
- New Zealand has committed \$650,000 for infrastructure projects.
- Norway has committed \$2.6 million for infrastructure projects.
- The Nuclear Threat Initiative, a non-governmental organization, has committed \$1.0 million to assist the Canadian railway project.
- Switzerland intends to undertake a sanitary hygiene monitoring project at Shchuch'ye, but has not yet committed to a specific funding amount.
- The United Kingdom will continue an annual commitment of about \$7.4 million (£4.0 million) over the next 3 years for projects to include equipment for Building 101A, and may commit \$14.8 million (£8.0 million) over 2 years for other projects.

Other countries continue to indicate interest in supporting Shchuch'ye and additional contributions for the CWDF project in FY 2005 are possible.

FY 2005 Financial Commitment from the Russian Federation

Russia spent \$29.3 million (839.9 million RUR) for social and engineering infrastructure projects and Building 101A construction in 2004. The preliminary amount for all Russian chemical weapons destruction in 2005 is \$389.3 million. Of that total, Russia plans to commit at least \$25.0 million to fund Building 101A, engineering infrastructure, and social infrastructure.

¹ Amounts stated in U.S. dollars are approximate because of the fluctuation of currency exchange rates. The total international commitment includes non-U.S. and non-Russia commitments that extend over a three-year period.

APPENDIX D: 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 has drafted Guidelines to Account for Proceeds from Scrap and Other Marketable By-Products Generated by the CTR SOAE Projects. These procedures have been discussed with Roscosmos officials during multiple meetings including the February and June Executive Reviews. The finalized guidelines will be presented to Roscosmos during the November 2004 Implementation Program Review. When signed procedures are in place, DoD expects that Roscosmos will issue its first report on scrap revenues for the year ended December 31, 2004. DoD has scheduled an Audit and Examination in FY 2005 to verify the data in this report.

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. The Government of Ukraine will provide a report to DoD summarizing the amount of scrap revenue generated by the Bomber Elimination and the Government of Ukraine's use of these funds. DoD will validate this data through the performance of an A&E during FY 2005.

APPENDIX E: 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 Contacts (DMC) program is a policy tool used to promote USG and DoD-specific objectives in the former Soviet Union states that are eligible for CTR Program assistance. These bilateral activities are designed to engage the military and defense officials of FSU states in activities that promote demilitarization and defense reform, further proliferation prevention efforts, and endorse regional stability and cooperation. Specifically, DMC activities in Russia seek to stem proliferation of Russia's 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 Program-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 FSU states while also furthering U.S. national security strategy interests. The DMC program is one of a number of policy tools and activities, all of which are designed to build security cooperation with the Eurasian states. In FY 2004, DoD executed 235 events. Bilateral Defense Consultations took place throughout Eurasia. Representative events in each individual country include:

- Armenia: Training/Exchange on Transportation for Peacekeeping Operations; Bilateral Defense Consultation
- Azerbaijan: Development Planning for Caspian Guard (with Kazakhstan) National Command and Control Center; Maritime Force Structure Staff Talks
- Georgia: Development Planning for the Sustainment and Stability Operations Program
- Kazakhstan: NCO and Subject Matter Expert Development and Training Exercises (including Personnel Management, Logistics, and Equipment Maintenance)
- Kyrgyzstan: NCO and Subject Matter Expert Development and Training Exercises (including Mountain Warfare, Infantry Tactics, and Equipment Maintenance)
- Moldova: Implementation of Defense Reform; National/Strategic Security Analysis Familiarization; NBC Defense and Training Program Familiarization
- Russia: Planning Conferences for Exercise Northern Eagle, a bilateral Naval exercise on maritime interdiction that was agreed to by President Bush and President Putin
- Tajikistan: NCO Professional Development System Information exchange; NBC Rapid Reaction Team visit; Military Decision Making Process Orientation
- Ukraine: Implementation of the Defense Reform Plan and NATO-Interoperable Peacekeeping Brigade
- Uzbekistan: Officer Professional Development Exchange; Pilot Training Familiarization; NCO Development Exchange

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

	Program	Project	FY 2004	*FY 2005	FY 2006	FY 2007
A.	Strategic	Offensive Arms Elimination (R)	\$55,600	\$52,495	\$78,900	\$76,985
		Emergency Response Support Equipment	\$413	\$400	\$400	\$400
		Solid Propellant ICBM/SLBM and Mobile Launcher Elimination	\$27,623	\$36,585	\$49,655	\$42,286
		Liquid Propellant ICBM and Silo Elimination	\$762	\$12,815	\$20,930	\$18,797
		SLBM Launcher Elimination/SSBN Dismantlement	\$22,246	\$1,868	\$4,235	\$9,592
		Spent Naval Fuel Disposition	\$3,923	\$419	\$231	\$3,845
		Liquid Propellant SLBM Elimination	\$633	\$408	\$3,449	\$2,065
B.	Nuclear	Weapons Storage Security (R)	\$48,000	\$73,899	\$74,100	\$87,100
		Automated Inventory Control & Management System	\$1,297	\$1,500	\$6,522	
		Guard Force Equipment and Training	\$5,279	\$100	\$8,223	\$8,355
		Site Security Enhancements	\$41,424	\$62,317	\$59,355	\$78,745
		Far East Training Center		\$9,982		
C.	Nuclear	Weapons Transportation Security (R)	\$23,200		\$30,000	\$33,000
		Nuclear Weapons Transportation	\$17,971		\$20,858	\$21,933
		Railcar Maintenance and Procurement	\$2,916		\$9,142	\$11,067
		Weapons Transportation Safety Enhancements	\$2,313			
D.	Chemical	Weapons Destruction (R)	\$200,300	\$157,875	\$108,500	\$42,700
		Chemical Weapons Destruction Facility	\$190,300	\$154,675	\$108,500	\$42,700
		CW Production Facility Demilitarization	\$10,000	\$3,200		
E.	BW	Proliferation Prevention (FSU)	\$67,750	\$68,699	\$60,849	\$65,800
		BW Infrastructure Elimination - FSU	\$17,060			
		Biosecurity and Biosafety - FSU	\$14,622	\$3,065		\$1,125
		Cooperative Biological Research - FSU	\$16,035	\$10,438	\$7,853	\$10,622
		BW Threat Agent Detection and Response - FSU	\$20,033	\$55,196	\$52,996	\$54,053
F.	WMD	Proliferation Prevention	\$29,400	\$39,900	\$40,600	\$37,486
		Caspian Sea Maritime Proliferation Prevention (Azerbaijan)	\$10,138	\$11,340	\$13,552	\$7,287
		Caspian Sea Maritime Proliferation Prevention (Kazakhstan)	\$8,812		\$20,249	\$15,233
		Land Border/Maritime Proliferation Prevention (Ukraine)	\$7,096	\$10,049	\$6,333	\$14,966
		Portal Monitoring (Uzbekistan)	\$3,354	\$18,511	\$466	
G.	Defense & Military	Contacts (FSU)	\$945	\$7,963	\$8,000	\$8,000
		Defense & Military Contacts	\$945	\$7,963	\$8,000	\$8,000
H.	Other Assessments/Administrative	Costs (O)	\$13,100	\$3,387	\$14,600	\$16,000
		Audits and Examinations	\$500	\$500	\$500	\$500
		Program Management/Administration	\$12,600	\$2,887	\$14,100	\$15,500
I.	Chemical	Weapons Destruction Albania	\$10,350	\$3,655		
		Chemical Weapons Destruction Albania	\$10,350	\$3,655		
	Total		\$448,645	\$407,873	\$415,549	\$367,071

* FY 2005 total includes the \$313 thousand reduction as reflected in Public law 108-447, FY 2005 Consolidated Appropriations Act

APPENDIX G: REPORT ON COOPERATIVE THREAT REDUCTION MOSCOW TREATY 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 Treaty on Strategic Offensive Arms (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)).

I. Overview

The Moscow Treaty, which entered into force on June 1, 2003, obligates each party to reduce its aggregate number of strategic nuclear warheads to 1700-2200 by December 31, 2012. DoD’s CTR Program assists former Soviet Union states to reduce and prevent proliferation of WMD, delivery systems, and related materials, technologies, and expertise. CTR projects support dismantlement of: ICBMs; silo launchers and road- and rail-mobile ICBM launchers; SLBMs, SLBM launchers and associated submarines; and related strategic infrastructure. CTR projects also assist with consolidation, securing, and accounting for nuclear weapons and fissile material removed from nuclear weapons. CTR Program activities that address Russia’s strategic nuclear systems and infrastructure specifically will support implementation of the Moscow Treaty.

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

This report provides information on CTR Program activities underway in the “current year” (FY 2005) 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 Russia 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 2005) 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 ICBMs, ICBM silos, SLBMs, SLBM launchers, and related infrastructure. DoD will also support dismantlement of road- and rail-mobile missiles and missile-launcher systems in accordance with certain protections to CTR Program assistance agreed to by Russia and contained in agency-level agreements negotiated in May and September 2003. The CTR Program also supports the placement of spent naval reactor fuel from SSBNs being prepared for elimination into casks designed for long-term storage. As required by legislation, DoD has appointed an Interim On-Site manager who will monitor a list of Russian critical activities that are prerequisites to the continued CTR program support of the Solid Propellant ICBM/SLBM and Mobile Launcher Elimination project and the Liquid Propellant ICBM and Silo Elimination project. The following projects supported this activity in FY 2005:

Solid Propellant ICBM/SLBM and Mobile Launcher Elimination. Ten SS-N-20 SLBMs, 14 SS-24 ICBMs, 9 rail-mobile ICBM launchers, and 16 launch-associated railcars are expected to be eliminated in FY 2005. Renovating, equipping, and commissioning of SS-25 missile disassembly and elimination facilities in Votkinsk and SS-25 road-mobile launcher elimination and support vehicle demilitarization facilities in Piban'shur will be completed. Nine SS-25 ICBMs and 9 SS-25 road-mobile launchers are expected to be eliminated at these facilities in FY 2005. Forty-four SS-25 support vehicles are to be demilitarized at the Piban'shur facility. Elimination of facilities for three SS-25 regiments will begin in FY 2005.

Liquid Propellant ICBM and Silo Elimination. In FY 2005, 12 SS-18 ICBMs will be removed from silos, defueled, and shipped to a storage facility. Approximately 650 MTs of fuel and 1,620 MTs of oxidizer will be shipped to storage facilities. Fifteen SS-18 and 5 SS-19 ICBMs, 12 SS-18 ICBM silos, 3 LCC silos, and 1 training silo will be eliminated in FY 2005.

SLBM Launcher Elimination/SSBN Dismantlement. DoD will complete elimination of 28 SLBM launchers and dismantlement of 3 SSBNs. Elimination of an additional 20 SLBM launchers included in a contract awarded in FY 2004 will not be completed until FY 2006.

SNF Disposition. Production of 35 casks to store SNF will begin in FY 2005. An escort railcar to assist in the transport of SNF from shipyards to centralized storage will be completed.

Liquid Propellant SLBM Elimination. Seventeen SLBMs will be dismantled and eliminated at Krasnoyarsk.

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 2005.

AICMS. This project enhances the MOD's ability to account for and track nuclear weapons scheduled for dismantlement. The operational integrated system consists of hardware and off-the-shelf software in modular facilities. In FY 2005, 16 AICMS sites will be completed.

Site Security Enhancements. This project enhances the safety and security of Russia's nuclear weapons storage at national stockpile sites, Air Force sites, and some SRF, and possibly, Navy, operational storage sites. This CTR project is closely coordinated with DOE projects to enhance security at several of Russia's Navy and SRF sites. MOD has provided a database depicting 52 NWSAs of various sizes and configurations. Since DOE is upgrading some SRF

and Navy sites, DoD expects to provide security upgrades for up to 30 NWSAs. MOD has also identified temporary storage security requirements at road-to-rail transfer points. Depending on the sites, security enhancements may include equipment to improve rapidly guard force capabilities, installation of “quick fix” fencing to improve perimeter security, and comprehensive security upgrades. Assistance includes training to operate and sustain security enhancements. Work has also begun on the first 11 sites that will receive comprehensive security upgrades. DoD expects to complete the equipment procurement for the 11 sites in FY 2005.

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 and to dismantlement. This initiative supports the following projects in FY 2005.

Nuclear Weapons Transportation. This project assists MOD in the shipment of nuclear warheads from deployment sites to central storage and on to dismantlement locations. In FY 2005, there is uncertainty relative to the number of train shipments the project will support. DoD and MOD are working to reach agreement on transparency concerning origination/destination of train shipments. DoD will fund shipments from selected origins.

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 15 guard railcars exceeded their service life in 2003, and were permanently removed from service. A contract for the procurement of 15 replacement guard railcars was put in place with Oakridge National Laboratories; however, none of the guard railcars will be delivered in FY 2005.

Fissile Material Storage Facility (FMSF): 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, accounting, and transparency, which requires confidence that stored weapons grade fissile material is safe and secure, and that fissile material declared excess to military needs will not be re-used for nuclear weapons.

The FMSF was completed and commissioned on December 11, 2003. It is anticipate that a transparency agreement with Russia will be signed in FY 2005 and the development of the transparency system that will measure certain characteristics of the material will begin after the agreement is signed. It is anticipated that Russia will begin loading the FMSF in late FY 2005.

APPENDIX H: ANNUAL CERTIFICATION ON USE OF FACILITIES BEING CONSTRUCTED FOR COOPERATIVE THREAT REDUCTION PROJECTS OR ACTIVITIES

Project: Automated Inventory Control and Management System (AICMS) - Russia

Description: DoD began construction of the AICMS primary Central Control Point, CCP-1, on July 15, 2003. The facility was completed on October 31, 2004. CCP-1 will serve as the primary facility for operation and maintenance of the database for the inventory and management of Russia's nuclear weapons scheduled for dismantlement.

Certification on Use of Facilities Being Constructed:

- (1) Certification of Intended Use:** DoD provided assistance constructing the CCP-1 facility for MOD pursuant to the 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, which requires that, "MOD shall use all material, services, and training provided under this Agreement exclusively for the purpose of insuring the security of nuclear weapons storage in connection with the destruction of nuclear weapons." This Agreement, with the 12th Main Directorate's commitments and other information obtained during detailed Executive Reviews and technical discussions, has assured DoD that CCP-1 will be used for its intended purpose. Indeed, the role of CCP-1 in the AICMS architecture is so fundamental that the integration of the entire AICMS system depends upon CCP-1 being utilized for its intended purpose.
- (2) Certification of Russia's Commitment:** MOD has demonstrated its commitment to the use of CCP-1 for its intended purpose by providing the land and obtaining the required construction permits. MOD has consistently engaged DoD on facility requirements, including involvement in the facility design, construction, and security measures. This activity by Russia has cleared administrative delays and obstacles to the start of construction and eventual completion. Flag Officers, including the Chief of Staff and First Deputy of MOD's 12th Main Directorate, were present at each tour of the CCP-1 and technical exchange in Moscow in 2004, to show commitment and project support.
- (3) Certification of Security:** All actions required to ensure security at CCP-1 have been incorporated into the building design and have been implemented. These measures include closed circuit cameras at entrances, interior security doors requiring positive identity verification for entry, and computer security procedures for all information systems. There are no materials, substances, or weapons being shipped to, from, or within the CCP-1 facility for which secure transportation is required.

Project: Site Security Enhancements - Russia

Description: DoD projects providing physical security upgrades at Russia's nuclear weapons storage sites involve construction of access control and guard force facilities at 12

permanent and temporary MOD nuclear weapons storage sites. Construction began in April 2004 and will be completed in November 2005. The access control facility provides entry and circulation control over authorized pedestrian and vehicle site users, and it is equipped with the site's electronic security identification badging system. The guard force/command and control facility houses the site's security leadership and response forces, and it is also the central point at which the site's access control, intrusion detection, closed circuit television, fire detection, and communication systems are integrated and networked.

Certification on Use of Facilities Being Constructed:

- (1) Certification of Intended Use:** DoD is providing assistance in constructing the access control and guard force facilities for MOD pursuant to the 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, which requires that, "MOD shall use all material, services, and training provided under this Agreement exclusively for the purpose of insuring the security of nuclear weapons storage in connection with the destruction of nuclear weapons." This Agreement, combined with 12th Main Directorate's commitments, involvement, and other information obtained during site visits and detailed Executive Reviews and technical discussions, has assured DoD that the unique design features of the access control and guard force facilities will be used solely for the building's intended purpose. The access control and guard force facilities are integral to the physical security of each storage site and it would be counterproductive to use those facilities for anything other than their intended purpose.
- (2) Certification of Russia's Commitment:** MOD has demonstrated its commitment to the construction of the access control and guard force facilities. MOD provided the land and supported DoD efforts by obtaining the permits required for construction. MOD has consistently engaged DoD on facility requirements, including involvement in the facility design, construction, and security measures; and has cleared administrative delays and obstacles, resulting in timely construction commencement. In January 2004, the 12th Main Directorate's Director and Deputy Director (flag officer level) paved the way toward establishing a transparent design review process and a responsive configuration control board; expediting and solidifying a mutually agreeable common facility design.
- (3) Certification of Security:** The access control and guard force facilities are essential components of the overall physical security upgrades at each site. Their composition and location are based on the design for each site that resulted from a comprehensive site vulnerability analysis. All actions required to ensure security at these facilities will be incorporated into the building design and implemented, including installation of a robust integrated command and control system with redundant and protected data communication lines. Multiple security sub-systems will report to the command and control system and will include access control, intrusion detection, closed circuit television, and fire alarm detection systems at the access control and guard force buildings. The integrated security system will be monitored by trained MOD security officers on a rotating shift 24 hours per day. Intrusion detection sensor alarm signals and video images are immediately displayed to a security officer manning the command and

control station, while a digital video recorder will record video images in pre-alarm and routine assessment operational modes. The access control system will allow access to authorized users. When used in concert with the closed circuit television system, the integrated system will detect and deny unauthorized attempts to penetrate the site. All facility interiors, exterior approaches, personnel and vehicle entrapment areas, and external building entrances areas will have a closed circuit television assessment system.

Project: Chemical Weapons Destruction Facility (CWDF) - Russia

Description: Under the CWDF project, DoD provides assistance to Rosprom, formerly the Russian Munitions Agency, to design and construct a facility at Shchuch'ye, Russia to eliminate its most proliferable nerve agent weapons. The design is based on the Russian CW destruction technology of "neutralization followed by bituminization." Once constructed, the facility will have the capacity to destroy millions of Russia's CW munitions, specifically the artillery delivered nerve agent filled munitions, prior to 2012 in compliance with the CWC regime. This will equate to approximately 28 percent (over 10,000 metric tons) of Russia's total nerve agent stockpile, composed of rocket warheads, tube artillery, and missile warheads stored at the Planovy military base and the Kizner chemical weapons storage site. The U.S. is assisting Russia in designing and constructing the first munitions destruction building, the bituminization building, and the support structures. Russia is responsible for regional social infrastructure, industrial infrastructure, and a second munitions destruction building at Shchuch'ye. DoD began construction of the CWDF in March 2003 and expects to complete the facility by July 2008.

Certification on Use of Facilities Being Constructed:

(1) Certification of Intended Use: DoD is providing assistance in constructing the CWDF pursuant to the Agreement Between the Department of Defense of the United States of America and the Russian Munitions Agency Concerning the Safe, Secure and Ecologically Sound Destruction of Chemical Weapons, which commits Rosprom to "complete the elimination of all nerve agents of the RF at a single chemical weapons destruction site located in the area of Shchuch'ye in the Kurgan region, unless otherwise agreed in writing by the parties." (While in some cases the neutralization stage of the destruction process for air-delivered nerve agent filled munitions may be carried out at other declared chemical weapons destruction facilities, the final stage of the destruction process, bituminization, shall be completed at Shchuch'ye.) The Russia CTR Executive Agent signed a joint plan that defines U.S. and Russia responsibilities for facility construction.

DoD and Rosprom signed an amendment to the implementing agreement with an effective date of July 28, 2004 that further strengthened this commitment by amending Article I of the Agreement to include an additional commitment to "use the bituminization facility for its intended purpose, which is to complete the elimination of all nerve agents in the Planovy and Kizner stockpiles." The amendment includes several commitments for Rosprom to complete on time the portions of the project for which they are responsible, so the facility is ready for operation when the U.S. completes its portion.

Recent oral communications with Russian officials indicate that Russia now intends to build a CW destruction facility at Kizner to demilitarize the Kizner stockpile. They indicated that Russia does not believe permits to transport any neutralized reaction masses from Kizner or the three air-delivered CW munitions sites to Shchuch'ye for final disposition will be granted by local authorities along the route. Confirmation of these concerns awaits Russia's formal submission of its practical plan for CW destruction.

- (2) **Certification of Russia's Commitment:** The Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on Their Destruction ("Chemical Weapons Convention," or "CWC"), ratified or acceded to by 158 states over the past decade, establishes a verifiable CW abolition regime. A Joint Schedule that transfers CWDF custody Russia in July 2008 was signed October 11, 2004.

Rosprom and its predecessor Russia CTR Executive Agents demonstrated that Russia is committed to destroy its CW using the CWDF by providing the land and obtaining the required permits. Construction has proceeded in earnest and is progressing as expected within the program baseline. Rosprom has signed a joint project plan that defines the responsibilities of the U.S. and Russia regarding facility construction. Rosprom has consistently engaged DoD on facility requirements, including involvement in the facility design, construction, and security measures. Russia has spent more than \$20 million of its own funds each year since 2001 on social infrastructure, industrial infrastructure, and construction of the second munitions destruction building.

- (3) **Certification of Security:** U.S.-funded security provisions in the CWDF design included an inner perimeter fence. The signed joint plan states that Russia is responsible for the overall security of the CWDF and will provide additional security measures. The CWDF agreement commits the Rosprom to using CTR assistance "for the secure storage of chemical weapons pending their destruction." In 2003, DoD agreed to assist with security improvements for the two artillery-delivered nerve agent munitions stockpile sites at Planovy and Kizner, Russia. DoD provided \$20 million in security upgrades to the perimeter security and inner areas, which Rosprom accepted in December 2003.

Under the CWDF agreement, Russia is responsible for facility operation, including transportation of chemical weapons into and within the facility. Under an amendment signed in September 2003, Rosprom is developing a "practical plan for the destruction of the Russian Federation's stockpile of nerve agents." DoD expects this plan to be developed with federal and local entities to ensure safety and security requirements for successful facility operation, including transportation of munitions, are met.

Project: SS-24/SS-25 ICBM and Solid Rocket Motor Storage Facility at Perm - Russia

Description: DoD began construction of the SS-24/SS-25 ICBM and SRM Storage Facility at the Kirov Scientific Production Association in Perm, Russia on October 22, 2003. The facility, completed in June 2004, has been in service since August 2004 to store temporarily SS-24 and SS-25 ICBMs pending their dismantlement and to store temporarily SS-24 and SS-25 SRMs until the solid propellant can be burned from them. The facility is located adjacent to the SS-24 disassembly facilities at the Perm Machine Building Plant and the SRM

burn stands at the Scientific Research Institute for Polymeric Materials and will support SS-24 eliminations through 2007 and SS-25 eliminations through 2016.

Certification on Use of Facilities Being Constructed:

- (1) Certification of Intended Use:** Pursuant to the Agreement Between the Department of Defense of the United States of America and the Russian Federation Concerning the Safe and Secure Transportation, Storage, and Destruction of Weapons and the Prevention of Proliferation (Umbrella Arrangement) and Agreement Between the Department of Defense of the United States of America and the Russian Aviation and Space Agency Concerning Cooperation in the Elimination of Strategic Offensive Arms (SOAE Agreement), DoD is assisting Roscosmos, formerly RASA, to eliminate the SS-24 and SS-25 ICBM systems. In May/June 2003, Article I of the SOAE Agreement was amended to include the following paragraph 6 - "RASA shall use the interim storage facilities built in the Russian Federation with DoD assistance only to store SS-24 and SS-25 ICBMs removed from their launchers and from which the motor's propellant cannot immediately be removed by burning in the missile test stands, missile test facilities or other facilities mutually agreed upon by the Parties. Unless otherwise agreed by DoD in writing, RASA shall render unusable for any purpose the interim storage facilities built with DoD assistance when DoD confirms to RASA in writing that such facilities are no longer required."
- (2) Certification of Russia's Commitment:** Roscosmos has demonstrated its commitment to the use of the SS-24/SS-25 ICBM and SRM Storage Facility for its intended purpose by providing the land, obtaining required permits, and agreeing to amend the SOAE Agreement as noted above. In August and September 2004, the Roscosmos placed a total of two SS-24 and nine SS-25 ICBMs in the newly completed facility. Roscosmos is a member of an Integrated Project Team that is responsible for integrating the many projects that interface with the SRM Storage Facility; has consistently engaged DoD on facility requirements, including involvement in facility design, construction, and security measures; and is an active bilateral partner in semiannual meetings during which joint requirements and responsibilities for all SOAE projects are discussed and agreed upon.
- (3) Certification of Security:** All actions required to ensure security at the SS-24/SS-25 ICBM and SRM Storage Facility at Kirov Scientific Production Association (Perm) have been incorporated into the facility design and are implemented. Russia is responsible for the overall security of the facility and uses measures such as closed circuit TV cameras at entrances, interior and exterior security fencing and barricades, manned and roving guard posts, intrusion detection devices along the perimeter, and a resident guard response force. The facility is bounded on two sides by other secure installations, providing additional in-depth security. Transportation of missiles in/out of the facility is accomplished by isothermal railcars accompanied by armored escort railcars manned by security personnel. The railcars are loaded and unloaded within the facility boundaries.

Project: SS-24 ICBM Elimination - Russia

Description: This project eliminates the SS-24 rail-mobile ICBM system in accordance with the provisions of START. The START Conversion or Elimination (C or E) Protocol requires that specific components of each SS-24 missile be cut into essentially equal pieces in the presence of inspectors. To do this, it was necessary to construct and equip a building at the Perm Machine Building Plant where facilities are also located for disassembling SS-24 ICBMs. The facility is adjacent to the Scientific Research Institute for Polymeric Materials, where SS-24 burn stands for burning propellant from SRMs are located and the Kirov Scientific Production Association where SS-24 and SS-25 storage has been constructed. DoD initiated design of the building in October 2003, began construction on September 15, 2004, and construction/equipping of the building is planned to be completed by December 31, 2004. Use of the building and equipment is planned to continue through March 2008, when all SS-24 ICBMs are scheduled to have been eliminated.

Certification on Use of Facilities Being Constructed:

- (1) Certification of Intended Use:** Pursuant to the Agreement Between the Department of Defense of the United States of America and the Russian Federation Concerning the Safe and Secure Transportation, Storage, and Destruction of Weapons and the Prevention of Proliferation (Umbrella Arrangement) and Agreement Between the Department of Defense of the United States of America and the Russian Aviation and Space Agency Concerning Cooperation in the Elimination of Strategic Offensive Arms (SOAE Agreement), DoD is assisting Roscosmos to eliminate the SS-24 rail-mobile ICBM system in accordance with the provisions of START. In September 2003, Article I of the SOAE Agreement was amended to include the following language in paragraph 6. L. – “Disassembly and elimination of all SS-24 and SS-25 ICBMs and ICBM launchers shall be carried out in accordance with the provisions of the START Conversion or Elimination Protocol.” DoD is providing assistance in constructing and equipping a building at Perm to be used to cut SS-24 ICBM components in accordance with the START C or E Protocol.
- (2) Certification of Russia’s Commitment:** Roscosmos has demonstrated a commitment to use the building to eliminate SS-24 ICBM components in accordance with the START C or E Protocol by providing the land and obtaining the required permits and agreeing to amend the SOAE Agreement to include the language quoted above. In September 2004, Russia eliminated the components of six SS-24 ICBMs by using rudimentary, temporary, labor-intensive means. Roscosmos is an active bilateral partner in semiannual meetings at which joint requirements and responsibilities for SOAE projects are agreed upon.
- (3) Certification of Security:** All actions required to ensure security at the SS-24 ICBM component elimination building at Perm have been incorporated into the facility design and are being implemented during construction. Russia is responsible for overall security and uses measures such as closed circuit TV cameras at entrances, interior and exterior security fencing and barricades, manned and roving guard posts, intrusion detection devices along the perimeter, and a resident guard response force. The Perm Machine Building Plant, where the building is located, is bounded on two sides by other secure

installations, providing additional in-depth security. Since the facility is in the security area of the disassembly site, it is used to cut missile components from which solid fuel and sensitive components have been removed and the elimination effort is complete once the cutting operation is performed. No additional security measures are required for the transportation of missile components within the facility.

Project: Fissile Material Storage Facility (FMSF) - Russia

Description: DoD began construction of the FMSF at Mayak, Russia in 1995. The FMSF was designed to store up to 25,344 containers of weapons origin fissile material, including up to 34 MTs of plutonium. As originally agreed, fissile material stored in the FMSF was to be declared by Russia as “excess to military needs, “and never to be reused in nuclear weapons. As part of the Administration’s review of this project following 9/11, it was concluded that it will serve U.S. proliferation prevention goals whether the fissile material stored in the facility is weapons-origin or weapons-grade plutonium or highly enriched uranium. A 2003 DoD thermal analysis indicated the FMSF will be able to store significantly more material than required in the original design — up to 100 MT of plutonium. (However, Russia will require some empirical data to validate this analysis before considering loading the FMSF beyond the original design requirement). The FMSF was completed and commissioned by MinAtom in December 2003. In May 2004, MinAtom was disestablished and replaced by Rosatom.

Certification on Use of Facilities Being Constructed:

(1) **Certification of Intended Use:** There are no provisions in the 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 Materials, 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 explicitly committing MinAtom to use the FMSF for its intended purpose, neither is there a commitment to store a specific quantity of fissile material. However, the Minister of Atomic Energy, as the Russia CTR Executive Agent for the FMSF, cited in a letter dated July 1, 2003 to Deputy Secretary of Defense Wolfowitz that, “The very title of the agreement reflects our responsibility with respect to the use of the FMSF.” He further writes, “...we are planning to store in the FMSF 25 tons of excess plutonium (in pure metal form) which the Russian side has on hand.” Lastly, he notes that, “I believe the recently signed, high level, U.S.-Russia agreement on reduction of strategic offensive potential will allow our countries to declare new quantities of fissile material as excess to defense needs. In such event, these materials could also be stored in the FMSF.”

In the FY 1998 NDAA, Congress conditioned continued funding for the FMSF on an agreement with Russia that commits it to “the principle of transparency with respect to the use of the facility.” Russia agreed and a protocol to detail monitoring (transparency) activities is under negotiation with Rosatom. At negotiations on November 9/10, 2004, progress was made on finalizing details of the transparency protocol.

(2) **Certification of Russia’s Commitment:** Russia’s contribution of \$126.0 million for land clearing, foundation construction, utilities, commissioning, and support facilities

(including a boiler plant to heat the FMSF) shows a commitment to use the facility. In a January 19, 2004 letter to Deputy Secretary Wolfowitz, MinAtom Deputy Minister Kamenskikh stated, "In 2004, after technical inspections of all systems have been completed, the FMSF will begin storing fissile material received from dismantled nuclear weapons and deemed excess to defense purposes." Based on information from senior Russian officials, as of November 2004 the FMSF is continuing to hire and train personnel. U.S. personnel have not been to the FMSF since January 2004, but anecdotal information indicates training is incomplete and no fissile material is yet stored there.

- (3) Certification of Security:** A Safeguards Analysis conducted by Los Alamos National Laboratory confirmed that the FMSF will provide secure storage of fissile material. Based on analysis of equipment supplied for security of the FMSF and the construction of security fences, barricades, and entrances, Russia is serious about providing maximum protection and has implemented a material protection, control, and accountability system comparable to that routinely employed in the U.S. Personnel entering the FMSF are examined with retinal and hand scanners and require badges. Intrusion detection devices are along the perimeter and a resident guard response force is available. In a statement issued December 11, 2003 in conjunction with Russia's commissioning of the FMSF, Deputy Minister Kamenskikh stated that, "This unique project was associated with multiple issues since we were designing it for many years to avoid any potential fissile material storage problems and thus ensure all safety features inherent in facility of this type, including fire safety, explosive safety, and protection from lethal devices and artillery shells. Consequently, physical security of the FMSF is very solid."

Under the FMSF Construction Implementing Agreement, Russia is responsible for operation of the FMSF, including transportation of fissile material into and within the FMSF. Therefore, the U.S. had no transparency into the security of the transportation process. However, DoD provided MinAtom with Fissile Material Containers — the AT-402R bolted closure containment vessel for transporting fissile materials bound for the FMSF and the AT-401R welded closure containment vessel for long term storage within the facility. Provided at MinAtom's request under the 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, these containers, based on a Russian design in cooperation with Sandia National Laboratory, give us some confidence in storage and transport safety and security. A major design element of the containers included normal and accident condition testing associated with a transport environment. The fissile material containers contribute to the safe transport and storage within the FMSF and at other locations in the processing pipeline.

ACRONYMS & ABBREVIATIONS

A&E.....	Audit and Examination
AICMS.....	Automated Inventory Control & Management System
ALCM.....	Air-Launched Cruise Missile
Altay.....	Federal Research and Production Complex Altay
ASM.....	Air-to-Surface Missile
BNI.....	Bechtel National, Inc.
BS&S.....	Biosecurity and Biosafety
BW.....	Biological Weapons
BWIE.....	Biological Weapons Infrastructure Elimination
BWPP.....	Biological Weapons Proliferation Prevention
C or E.....	Conversion or Elimination
CAM.....	Contractor-Acquired Material
CBR.....	Cooperative Biological Research
CCP.....	Central Control Point
CEDT.....	Cooperative Equipment Disposition Team
CLS.....	CTR Logistics Support
CPQMHI.....	Center for Prophylaxis and Quarantine of Most Hazardous Infections
CRL.....	Central Reference Laboratory
CTR.....	Cooperative Threat Reduction
CTRIC.....	CTR Integrating Contract
CW.....	Chemical Weapons
CWC.....	Chemical Weapons Convention
CWD.....	Chemical Weapons Destruction
CWDF.....	Chemical Weapons Destruction Facility
CWPF.....	Chemical Weapons Production Facility
DATSD CD&TR.....	Deputy Assistant to the Secretary of Defense for Chemical Demilitarization and Threat Reduction
DCAA.....	Defense Contract Audit Agency
DCMA.....	Defense Contract Management Agency
DEF.....	Defense Enterprise Fund
DMC.....	Defense and Military Contacts
DoD.....	Department of Defense
DOE.....	Department of Energy
DOS.....	Department of State
DTRA.....	Defense Threat Reduction Agency
ESE.....	Emergency Support Equipment
FAR.....	Federal Acquisition Regulations
FETC.....	Far East Training Center
FMSF.....	Fissile Material Storage Facility

FSU	former Soviet Union
FY	Fiscal Year
FYDP	Future Years Defense Plan
ICBM	Intercontinental Ballistic Missile
IMTC.....	Intermodal Tank Container
IPT.....	Integrated Process Team
ISMS	Inventory Sampling Measurement System
ISTC	International Science and Technology Center
JRIP.....	Joint Requirements and Implementation Plan
KSCQZD.....	Kazakh Scientific Center for Quarantine and Zoonotic Diseases
LCC.....	Launch Control Center
LMC.....	Loaded Motor Case
MDA	Milestone Decision Authority
MDR	Milestone Decision Review
MinAtom.....	Ministry of Atomic Energy
MOD	Ministry of Defense
Moscow Treaty	Treaty on Strategic Offensive Reductions
MT.....	Metric Ton
NDAA	National Defense Authorization Act
NWSA.....	Nuclear Weapons Storage Area
NWSS	Nuclear Weapons Storage Security
NWTS	Nuclear Weapons Transportation Security
OIPT.....	Overarching Integrated Process Team
PM.....	Program/Project Manager
PRP	Personnel Reliability Program
RASA	Russian Aviation and Space Agency
RF.....	Russian Federation
RIEMID	Research Institute of Epidemiology, Microbiology, and Infectious Diseases
RMA	Russian Munitions Agency
Rosatom	Federal Atomic Energy Agency
Roscosmos	Federal Space Agency
Rosprom.....	Federal Agency for Industry
RTSC.....	Raytheon Technical Services Company
SAIC	Science Applications International Corporation
SATC	Security Assessment and Training Center
SATS.....	Small Arms Training Systems
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
SRAI	Scientific Research Agricultural Institute
SRF	Strategic Rocket Forces
SRM	Solid Rocket Motor
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
TCT.....	Traveling Contact Team
TOC.....	Transfer of Custody
TRSC.....	Threat Reduction Support Center
TTU.....	Thermal Treatment Unit
U.S.	United States
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