

# **Cooperative Threat Reduction Annual Report to Congress Fiscal Year 2007**



### FY 2007 CTR ANNUAL REPORT TO CONGRESS

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#### I. INTRODUCTION

#### **Recurring Requirements Addressed in This Report**

The Annual Report to Congress on Cooperative Threat Reduction (CTR<sup>1</sup>) activities (CTR Annual Report) for FY 2007 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 2007–FY 2011), the FY 2005 requirement for "Accounting for CTR Program Assistance to States of the Former Soviet Union (FSU)," and the Treaty on Strategic Offensive Reductions (Moscow Treaty) Report (Senate Executive Report 108-1, Section 2(1)), dated March 6, 2003 (Appendix F). It also addresses Annual Certifications on use of facilities being constructed for CTR projects or activities, as required by Section 1307 of the NDAA for FY 2004 (Appendix G).

#### **Administrative Note**

All data and narratives related to the Five-Year CTR Program Implementation Plan, the Moscow Treaty Report, funding requests, and obligation authority are current through December 31, 2005. The project narrative descriptions that account for FY 2005 CTR Program Activities and Assistance describe CTR Program activities through September 30, 2005.

#### **CTR Program and United States National Security**

In December 2002, the President issued a National Security Presidential Directive on the National Strategy to Combat Weapons of Mass Destruction. It states that weapons of mass destruction (WMD) in the possession of hostile states and terrorists constitute one of the greatest security challenges facing the United States (U.S.). It further states that the U.S. must pursue a comprehensive strategy to counter this threat. The Strategy calls on U.S. agencies to take full advantage of today's opportunities, including application of new technologies, increasing emphasis on intelligence collection and analysis, strengthening alliances, and establishing new partnerships with former adversaries. In April 2004, the President issued a National Security Presidential Directive on Biodefense for the 21<sup>st</sup> Century to guide efforts against biological weapons threats. In April 2005, the President issued a Directive on Domestic Nuclear Detection that provides guidance on global nuclear detection architecture. The CTR Program supports these National Security Presidential Directives 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 in handling FSU WMD, and
<i>Objective 4:</i>	Support defense and military cooperation with the objective of preventing proliferation.

<sup>&</sup>lt;sup>1</sup> Acronyms and abbreviations are listed on pages 66-67.

The Department of Defense (DoD) supports these objectives through the CTR Program in Russia and in other FSU states as they become full partners in the Global War on Terrorism. CTR activities support the Global War on Terrorism by helping to deny rogue states and terrorists access to WMD and related materials, technologies, and expertise while contributing to stability, cooperation, and expanding U.S. influence in 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 at risk for theft, diversion, accidental release, or use by terrorists; engages former biological weapons scientists in peaceful research; helps prevent trafficking of WMD across non-Russian FSU states' borders; and facilitates defense and military contacts to encourage military reform.

#### **CTR Funding**

CTR Program assistance totals \$5,498.4 million in obligation authority through FY 2006. In FY 2005, \$519.6 million was obligated. The CTR Program's budget request for FY 2007 is \$372.1 million, and the estimated total amount that will be required to achieve the objectives of the CTR Program through FY 2011 is \$7,348.8 million. Programs and projects that require funding beyond the Future Years Defense Plan (FYDP) (FY 2011) will be identified in future CTR Annual Reports.

#### **CTR Program Accomplishments in FY 2005**

In Russia and Ukraine, the CTR Program continued to eliminate strategic missile and launcher systems (See Figure 1). It assisted transfer of nuclear warheads from operational bases to storage and dismantlement facilities by shipping 25 trainloads of nuclear warheads and components. The Automated Inventory Control & Management System (AICMS) that was provided to Russia's Ministry of Defense (MOD) to account for and track strategic and tactical nuclear weapons slated for dismantlement achieved full operational capability. The CTR Program completed the Guard Force Equipment and Training project that provided specialized equipment, training aids, associated training, and logistical support to enhance the MOD's guard force capability to deny access to nuclear weapons storage areas. Security enhancements at Russian nuclear weapons storage sites were completed at one site, continued at 11 sites, and contracts were awarded for 4 additional sites.

Construction of Russia's first Chemical Weapons Destruction Facility (CWDF) for nerve-agent-filled, proliferable weapons continued. Construction of the administration, bituminization, main destruction, and material storage buildings began. The fire station and transformer substation were completed. A contract to eliminate all chemical weapons agents in Albania was awarded and site preparation initiated.

Biological Weapons Proliferation Prevention (BWPP) program implementing agreements with Azerbaijan and Ukraine were concluded. Threat Agent Detection and Response (TADR) accomplishments in Kazakhstan, Uzbekistan, and Georgia included completion of a Concept of Operations, installation of an electronic Pathogen Access Control System, cataloguing of especially dangerous pathogen (EDP) strain data, and completion of renovations and construction at several Epidemiological Monitoring Stations (EMSs) and Sentinel Sites. The Central Reference Laboratories (CRLs) for Georgia and Uzbekistan are complete through the 90 percent design phase, and permits and licenses for construction are being sought. In Georgia, all EDPs known to the CTR Program are now consolidated in a secure facility with appropriate safety and security equipment, and specialists who work with EDPs received Biosecurity and Biosafety (BS&S), bioethics, and nonproliferation training. Cooperative Biological Research (CBR) projects developed new antiviral compounds, including for smallpox infections; investigated the relationships of different virus strains to understand their evolution into more dangerous pathogens; mapped disease foci in recipient states; genetically characterized strains endemic to the FSU; and researched vaccines and new therapies for pathogenic bacterial infections. CBR activities engaged 627 scientists at 18 institutes.

Ukraine, Kazakhstan, and Belarus are Nuclear Weapons Free									
CATEGORY	BASE LINE	Goals	FY 2005 Reductions	Current Cumulative Reduction	Per Cent	CY 2007 Target for Reductions	CY 2012 Target for Reductions		
Warheads Deactivated	13,300	9,029	337	6,828 76 7,347		7,347	9,029		
ICBMs Destroyed	1,473	1,162	42	611	53	776	1,162		
ICBM Silos Eliminated	831	612	16	485	79	503	612		
ICBM Mobile Launchers Destroyed	442	344	31	55	16	120	344		
Bombers Eliminated	233	155	16	152	98	155	155		
Nuclear ASMs Destroyed	906	906	95	865	95	906	906		
SLBM Launchers Eliminated	728	572	28	436	76	456	572		
SLBMs Eliminated	936	695	21	563	81	598	695		
SSBNs Destroyed	48	39	1	29	74	32	39		
Nuclear Test Tunnels/Holes Sealed	194	194	0	194	100	194	194		
CATEGORY	BASE LINE	Goals	FY 2005 Completed	Current Cumulative Completions	Per Cent	CY 2007 Target for Completion	CY 2012 Target for Completion		
Nuclear Weapons Transport Train Shipments	N/A	572	25	284	50	380	620		
Nuclear Weapons Storage Site Security Upgrades	N/A	24	1	1	4	16	24		
TADR Epidemiological Monitoring Stations Built and Equipped*	TBD	36	6	6	17	22	36		
CWDF Design (Percent Completed)	100	100	8	89	89	100	100		
CWDF Construction (Percent Completed)	100	100	17	25	25	100	100		

Figure 1: CTR Program-assisted reductions to date (Current as of December 31, 2005).

\* Data for Georgia, Kazakhstan, and Uzbekistan

The Weapons of Mass Destruction Proliferation Prevention Initiative (WMD-PPI) program is designed to enhance the ability of non-Russian FSU states to prevent proliferation of WMD across their borders. One new project, to assist Ukraine in securing its maritime borders, was begun, and three ongoing projects were continued. In Ukraine, the first increment of assistance to enhance border guards' and customs officials' WMD detection and interdiction capabilities was completed along Ukraine's land border with Moldova. In Azerbaijan, WMD-PPI continued to assist in developing its comprehensive maritime WMD proliferation prevention surveillance and interdiction capabilities on the Caspian Sea. In Uzbekistan, portal monitors at

11 ports of entry (POEs) were installed. In addition, DoD concluded an amendment with Kazakhstan that will permit provision of WMD-PPI assistance for a Caspian Sea Maritime Proliferation Prevention project, and an agreement is being negotiated with Moldova to enable it to receive WMD-PPI assistance to increase WMD proliferation prevention land border security.

The Defense and Military Contacts (DMC) program conducted more than 200 events with FSU states, including major exercises, exchanges, assessments, familiarizations on Non-Commissioned Officer development, and mountain warfare.

#### **Compliance and Accounting Concerns**

CTR Program assistance to recipient states is fully accounted for: DoD can report that its assistance is being used efficiently and effectively for its intended purpose. With minor exceptions, compliance and accounting concerns have been or are being resolved. Unresolved concerns reported in prior CTR Annual Reports are detailed in discussions of the Biological Weapons Proliferation Prevention – FSU (1.5), Nuclear Weapons Storage Security (2.1), and Fissile Material Storage Facility Transparency (2.3.1) programs in Section III. New unresolved concerns that DoD is addressing include the following:

- BWPP program Value Added Tax (VAT) and Excise Tax: The CTR umbrella agreements with each FSU country include a provision exempting DoD from the payment of taxes on goods and services. However, the BS&S/TADR project in Kazakhstan has experienced difficulties in receiving tax exemptions for equipment supplied, and VAT has been paid despite its exemption under the umbrella agreement.
- CWDF ("Shchuch'ye") Construction Schedule: Several events have impacted the schedule, including shortages in the qualified construction labor subcontractor pool and an eight-month delay in receiving customs clearances for the Automatic Process Control System equipment. Further delays occurred in finalizing the Hazard Protection Zone design and from project design changes.

#### **II. CTR PROGRAM IMPLEMENTATION AND EXECUTION**

DoD provides CTR Program assistance consisting of goods and services through U.S. contractors whenever feasible. U.S. contractors procure hardware, provide consolidated logistics support, and function as integrating contractors with U.S. and FSU subcontractors. These contracts are executed, managed, and reviewed in accordance with DoD and Federal Acquisition Regulations (FAR) requirements.

In some cases (e.g., dismantlement of strategic nuclear submarines), DoD negotiates fixed-price contracts with local enterprises in recipient states to accomplish the work. Fixed-price contracts, with payment upon completion of work specified in the contract, are the only contract vehicle used in these situations.

#### **Interagency Responsibilities**

CTR umbrella agreements are in place for Russia, Ukraine, Kazakhstan, Moldova, Georgia, Uzbekistan, Azerbaijan, and Albania. These agreements establish a comprehensive set of rights, exemptions, and protections for U.S. assistance, personnel, and the CTR Program's activities, and they designate DoD as the U.S. CTR Executive Agent. As the Executive Agent, DoD negotiates the implementing agreements and other implementing arrangements necessary to implement CTR Program activities with the designated CTR Executive Agent of the recipient state. All reports to Congress regarding the proposed obligation of funds, as required by Section 1205 of the NDAA for FY 1996, reference the applicable implementing agreements. In addition, this report notes the applicable agreement for each program that is included in the five-year plan or for which an audit and examination (A&E) was conducted in FY 2005.

Other Executive Branch Departments are pursuing related programs. The Department of State (DOS) funds the International Science and Technology Center (ISTC) and the Science and Technology Center in Ukraine, which employ FSU WMD scientists in peaceful research activities. DoD is an ISTC partner and manages its BWPP projects in Russia through the ISTC because there is no CTR Biological Threat Reduction Implementing Agreement with Russia. DOS funds the Export Control and Related Border Security Program, which seeks to improve FSU states' export control capabilities to prevent the proliferation of WMD and WMD components, technology, and delivery systems. Other U.S. agencies, including the Department of Commerce, Department of Energy (DOE), U.S. Customs and Border Protection Service, and U.S. Coast Guard, help implement the Export Control and Related Border Security Program. DOE funds its Second Line of Defense Program to place radiation detection systems at POEs. The CTR Program's WMD-PPI, which is designed to upgrade abilities of non-Russian FSU states to deter and interdict smuggling of WMD and related materials, coordinates with these related programs and other DoD programs, including the International Counterproliferation Program that conducts activities together with the Federal Bureau of Investigation and the Department of Homeland Security's Bureau of Customs and Border Security. DoD ensures that its activities do not overlap with those of other agencies. DoD uses standard interagency coordination processes under National Security Council staff oversight for this purpose. Special attention is paid to coordination of assistance for border security.

#### **DoD Responsibilities**

The Office of the Under Secretary of Defense for Policy, through its CTR Policy Office, provides strategic policy guidance defining the CTR Program's objectives, scope, and direction; conducts long-range planning; and provides policy oversight. The CTR Policy Office, under the supervision of the Office of the Under Secretary of Defense for Policy, undertakes policy activities with recipient states, including the negotiation and conclusion of CTR implementing agreements and arrangements. The Under Secretary of Defense for Policy, through the Deputy Assistant Secretary of Defense for Negotiations Policy and 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 provides strategic implementation guidance and acquisition oversight for the CTR Program to the Defense Threat Reduction Agency (DTRA). DTRA is the implementing agency for the CTR Program and is responsible for all aspects of program, contract, and funds management and implementation.

#### Accounting for CTR Assistance

Key components of DoD's system of accounting for CTR Program assistance include: frequent on-site observation of CTR Program assistance by DoD representatives and contractors; application of the FAR, appropriate DoD regulations, and disciplined acquisition procedures in contracting; Defense Contract Audit Agency (DCAA)/Defense Contract Management Agency (DCMA) audits; and use of national technical means. In accordance with the CTR umbrella and implementing agreements, the U.S. has the right to examine the use of any material, training, or service provided. Through FY 2005, a total of 162 A&Es have been conducted in Russia, Ukraine, Kazakhstan, Belarus, Uzbekistan, and Georgia. Results of the five A&Es conducted in FY 2005 appear in this report with the corresponding CTR project narratives. DoD cancelled several scheduled audits in FY 2005 for reasons discussed in the narratives. These include two contingency audits scheduled in case of emerging audit requirements, but they were not needed.

#### **Defense Contract Audit Agency/Defense Contract Management Agency Audits and Services**

DCAA and DCMA support the administration of the CTR Program. DCAA performs contract audits for DoD, and it provides accounting services in connection with administration of contracts to DoD components responsible for procurement. DCMA provides a wide range of services, including contract administration, invoice payment, and support in contract closeout.

#### **U.S. Federal Acquisition Regulations (FAR) and Good Business Practices**

The following conditions are important in providing and accounting for CTR Program assistance:

- Rigorous discussion of requirements and site access with recipient states, whenever possible, before work is contracted, to ascertain the scope of the task and possible solutions;
- Development of an Independent Government Cost Estimate to support each procurement;

- Prohibition against transferring CTR Program assistance to entities not specifically designated in applicable agreements without written U.S. Government (USG) approval;
- Compliance with the Competition in Contracting Act;
- Government-to-Government ("umbrella") agreements to ensure tax and customs exemptions, liability protections, privileges and immunities for the U.S. and its citizens, and the right to verify that assistance is used for intended purposes;
- Use of implementing agreements between the U.S. and recipient states to convert assumptions or responsibilities into firm, binding commitments;
- Enabling private FSU companies to compete for CTR contracts, but only on a firm fixed price basis due to the lack of a reliable cost accounting capability necessary for the use of cost-reimbursable contracts and to mitigate potential risk of cost growth to the USG;
- Requiring U.S. project managers' review of the contractor's cost, schedule, and performance for cost-reimbursable contracts;
- Training of FSU counterparts in project management techniques to facilitate a common understanding of project performance;
- Allowing payment to a recipient state's contractors/subcontractors only after work is completed and only after inspection and acceptance by a USG representative;
- Holding regularly scheduled meetings with recipient states' CTR Executive and Implementing Agents to jointly discuss and develop solutions to project challenges; and
- Requiring that only generally accepted Western financial accounting methods are used for cost-reimbursable contracts.

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

During FY 2005, 174 management team trips were made to: develop requirements; negotiate agreements, arrangements, and contracts; monitor contractor performance; resolve program concerns; and assess whether the services, materials, and equipment DoD provided were used for their intended purpose in an efficient and effective manner. On-site project management support is provided by USG representatives and U.S. contractors who reside "in-country" and who frequently submit written project status reports to CTR program managers.

Site visits by the CTR Integrated Services (CIS) contractor, Raytheon Technical Services Company LLC (RTSC), to maintain and inventory DoD-supplied equipment and oversee the Transfer of Custody process provide additional oversight. During FY 2005, CIS teams from logistics support bases in Russia and Ukraine made 324 visits to CTR project locations and performed 2,522 maintenance actions. In addition, the CIS contractor reported that the equipment was generally available for use in CTR projects and did not report any misuse of assistance. A breakout of CIS contractor support by program and project is detailed in Figure 8.

#### Enhancing the Efficiency and Effectiveness of the CTR Program

The NDAA for FY 2002 directs DoD to include in the CTR Annual Report a description of the "means (including program management, audits, examinations and other means) used" 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." The following means enhanced the effectiveness and efficiency of CTR Program implementation:

- During February and June 2005, DoD conducted Executive Reviews of each major CTR Program in Russia with the four Russian CTR Executive Agents: Federal Space Agency (FSA); MOD; Federal Atomic Energy Agency (FAEA); and Federal Agency for Industry (FAI). The Executive Reviews provided an opportunity jointly to evaluate CTR assistance, project assumptions, and objectives; clarify each party's responsibilities; and adjust program plans to ensure that U.S. national security interests and resources are protected. In September 2005, DoD conducted the first Executive Review of major programs in Uzbekistan with the Executive Agent, Uzbekistan's MOD, and key Implementing Agents. Also in September, DoD conducted the first Executive Review of the WMD-PPI program in Ukraine with the Executive Agent, the Ministry of Economy and European Integration of Ukraine Issues, and the Implementing Agent.
- DoD continues to refine the Joint Requirements and Implementation Plan (JRIP) process to better define the responsibilities of recipient states and DoD.
- DoD adopted a spiral development strategy for the WMD-PPI program to reduce project risks through phased implementation.
- DoD continually evaluates whether equipment provided to recipient states is necessary to accomplish CTR objectives. As CTR activities in Ukraine and at the Zvezda Far East Shipyard in Russia have diminished, DoD ended logistics support, reducing costs by approximately \$4.2 million per year. Excess equipment is transferred from less active to more active worksites.
- Section 1305 of the NDAA for FY 2004 requires on-site managers at FSU project sites involving dismantlement, destruction, storage facilities, or construction where DoD's investment is expected to exceed \$50.0 million. DoD has established on-site managers for applicable Strategic Offensive Arms Elimination (SOAE) projects and the CWDF project in Russia. On-site managers have also been appointed for BWPP projects in Uzbekistan and Georgia.
- DoD continues to use Integrated Process Teams to improve CTR project management. When a requirement for a new acquisition is identified, DoD forms an Integrated Process Team led by a project manager who identifies and invites all stakeholders into the process. The Integrated Process Team converts policy guidance into cost, schedule, and performance objectives and is used to manage the project through its life cycle.
- DoD's acquisition process requires the designation of a Milestone Decision Authority (MDA) for each new CTR project. The MDA provides oversight and approves a project's cost, schedule, and performance baselines. The MDA chairs quarterly program reviews, appoints program managers, and approves acquisition and implementation strategies. Along

with the use of Integrated Process Teams, MDAs provide additional management controls and improved transparency for senior-level oversight.

- DoD coordinates its efforts with DOS, Department of Agriculture, DOE, Department of Health and Human Services, and Department of Homeland Security and with ministries and other agencies of the United Kingdom, Canada, other Group of Eight (G-8) and donor nations of the Global Partnership, and the European Union to maximize leverage with FSU states and to avoid duplication of effort.
- DoD continued to conduct independent validations of the five CTR Integrating Contract (CTRIC) contractors' Earned Value Management Systems. Three of the five are validated; fieldwork has been completed and the corrective action phase for a fourth is underway. The fifth contractor does not have a task order requiring a validated Earned Value Management System. DCMA will perform routine monitoring of the CTRIC contractors' systems.
- DoD developed a two-week program management training course to improve program and project managers' knowledge of acquisition planning, program management, and contract management, including an emphasis on Earned Value Management Systems, to monitor and evaluate contractor performance. This course, specifically designed for the CTR Program's staff (both implementation and policy personnel), includes practical exercises simulating real and plausible CTR scenarios. Through this training, DoD promotes the use of common approaches for project execution throughout the CTR Program.
- DoD is implementing a risk management program to control and minimize risk to the overall CTR Program and to the cost, schedule, and performance of individual projects. This disciplined effort will integrate "best practice" risk management concepts into the daily business decision-making process. The risk management program will be consistent with DoD Directive 5000.1 The Defense Acquisition System, DoD Instruction 5000.2 Operation of the Defense Acquisition System, and DoD best practices endorsed by the Defense Acquisition University.

#### III. CTR PROGRAM ACTIVITIES AND ASSISTANCE – INCLUDES FIVE-YEAR (FY 2007–FY 2011) IMPLEMENTATION PLAN AND FY 2005 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 activities. This report for FY 2007 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 2007–FY 2011) and the FY 2005 requirement for "Accounting for CTR Program Assistance to States of the Former Soviet Union" 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 2 through 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 2006 from the international community and from Russia for the Chemical Weapons Destruction Facility 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 project description that follow and Appendix B);
- (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 E)"
- (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 (If the current condition or use of DoD provided equipment is compromised, it is included as an item of concern. 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 (See project narratives for descriptions of services, and their status. Methods used to ensure contracts or services are used for their intended purpose are described in the CTR Program Implementation and Execution and specific actions are described throughout this report.);
- (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 Compliance and Accounting Concerns in the Introduction and the follow-up to prior year exceptions in the project narratives.); 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 2005 A&Es are detailed in the project narratives. A schedule of future audits is in Figure 9. DoD also plans to continue the use of validation controls and actions to enhance the Effectiveness and Efficiency of the Program as detailed in Section II of this report.)"

#### Format

The CTR Implementation Plan and Accounting for CTR Program Assistance are organized according to the CTR Program's four objectives. Project descriptions are listed according to program area (e.g., the SOAE program area). Narratives for each program identify active projects, on-site U.S. contractors, Executive Reviews, A&E summaries, and any significant concerns. Project information includes: the FY 2007–FY 2011 Five-Year Plan, Purpose, and Resources; a Description of CTR Activities Carried Out in FY 2005; the Location(s) of CTR assistance; and information on A&Es. The figures show DoD-proposed funding through the FYDP. Projects requiring funding beyond the FYDP (FY 2011) will be identified in future CTR Annual Reports. All equipment referenced in this report was provided by DoD.

#### **Objective 1: Dismantle FSU WMD and Associated Infrastructure**

#### 1.1 STRATEGIC OFFENSIVE ARMS ELIMINATION PROGRAM – RUSSIA

DoD continues 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 Protocol. CTR Program assistance remains an incentive for Russia to draw down its Soviet-legacy nuclear forces, thereby reducing opportunities for their proliferation or use. DoD provides equipment and services to destroy or dismantle ICBMs, ICBM silo launchers, road and rail mobile launchers, SLBMs, SLBM launchers, reactor cores of associated strategic nuclear-powered ballistic missile submarines (SSBNs), and WMD infrastructure. DoD also supports placement of spent fuel from naval nuclear reactors, referred to as Spent Naval Fuel (SNF), prior to its elimination, into casks designed for long-term storage as well as logistical and maintenance support for equipment.

<u>Executive Reviews</u>: DoD conducted Executive Reviews with FSA and FAEA in February and June 2005. The June Executive Review was held in conjunction with an Integrated Program Management Review, which dealt with implementation issues of each project. FSA is the Executive Agent responsible for destruction of strategic systems other than SSBNs. FAEA has assumed responsibility for destruction of SSBNs.

At each Executive Review with FSA, the parties focused on the JRIP as the initial basis for discussion, reviewing assumptions, responsibilities, risks, and schedules. Matters discussed included the division of responsibilities for maintaining the burn stands used to eliminate solid rocket motors and ongoing questions regarding missile storage facilities.

A representative from FAEA came to each Executive Review with FSA to discuss matters related to dismantlement of SSBNs and disposition of SNF. For the SSBN dismantlement project, responsibilities are defined in the implementing agreement. Therefore, discussions with FAEA centered on anticipated schedules for submarine dismantlement, usage of SNF casks for ongoing work with the G-8 partners who are dismantling general purpose nuclear submarines on a non-interference basis, and FAEA's concern with the division of responsibilities for ensuring that each SSBN is dismantled in its entirety.

<u>A&Es</u>: During January 2005, a DoD team reviewed the Emergency Response Support Equipment and Liquid Propellant SLBM Elimination Equipment located at the Krasmash Machine Building Plant in Krasnoyarsk, Russia. The team inventoried all equipment on site, noting minor discrepancies from the Electronic Information Delivery System listing subsequently presented to the CIS contractor for update. The team reviewed documentation of adequate personnel training and equipment maintenance. Site personnel successfully demonstrated operations of the tracked caterpillar excavator, hydro-abrasive cutter system, two (28 and 65 tons) telescoping cranes, hydraulic folding gooseneck trailer, bulldozer, and Kirow railway slewing crane. The audit team also provided feedback on the best use of this equipment to support SOAE program objectives. DoD cancelled a scheduled A&E of proceeds from the sale of scrap materials generated from dismantled Russian SSBNs because reporting requirements have not been established with FAEA, the agency responsible for SSBN dismantlement. DoD will discuss these requirements at a future Executive Review.

#### 1.1.1 Emergency Response Support Equipment

<u>FY 2007–FY 2011 Five-Year Plan, Purpose, and Resources</u>: Equipment provided includes a rail-mounted crane, hydraulic tools, a hydro-abrasive cutter and transport system, concrete pulverizers, and an excavator for an emergency response train for accidents during transportation of ballistic missiles. The equipment supports SLBM and ICBM transportation and dismantlement of SLBMs and ICBMs. Logistical and maintenance support for the equipment will continue through the FYDP.

<u>Description of CTR Activities Carried Out in FY 2005</u>: The CIS contractor performed maintenance on equipment.

Location: Krasnoyarsk.

#### 1.1.2 Solid Propellant ICBM/SLBM and Mobile Launcher Elimination

<u>FY 2007–FY 2011 Five-Year Plan, Purpose, and Resources</u>: This project supports the operation and maintenance of Russia's: SS-N-20, SS-24, and SS-25 missile disassembly and elimination facilities; operation and maintenance of SS-24 and SS-25 mobile launcher elimination facilities; elimination of infrastructure, including START-accountable fixed structures, at three SS-24 and up to nine SS-25 Strategic Rocket Forces deployment bases; rendering SS-24 launch-associated railcars strategically inoperable; and demilitarization of SS-25 launch-associated and special system support vehicles.

This project will assist with limited infrastructure upgrades and provide minimal equipment to prepare the Federal State Unitary Enterprise Scientific Research Institute facility at Krasnoarmeysk to burn SS-25 solid rocket motors (SRMs) and pay a unit cost for burning SS-24 and SS-25 SRMs at the Perm' burn stands and SS-25 SRMs at the Krasnoarmeysk burn stands. Russia will pay to burn SS-N-20 SRMs at the Biysk burn stand. DoD will pay for transporting SS-24/SS-25 missiles and SRMs into and out of the buffer storage facility at Perm', while Russia will pay for the facility's maintenance and general operation.

Current plans are to eliminate 78 SS-N-20, 56 SS-24, and 347 SS-25 missiles and destroy 39 SS-24 rail-mobile and 305 SS-25 road-mobile launchers by the end of FY 2011. This is an increase of 27 SS-N-20 missiles, 10 SS-25 missiles, and 4 SS-25 road-mobile launchers.

Description of CTR Activities Carried Out in FY 2005: Six SS-N-20 missiles were disassembled at Zlatoust, and the SRMs of three missiles were open-burned at Biysk facilities through a contract with Parsons Global Services, Inc. (Parsons). The final SS-24 silo-type ICBM was disassembled. Washington Group International, Inc., (WGI) initiated disassembly of the first rail-mobile-type SS-24 ICBM. Twelve SS-24 missiles were disassembled and 11 eliminated. Ten SS-24 missiles were offloaded from rail-mobile launchers at the Bershet' offloading facility. Twelve rail-mobile launchers were eliminated, and 20 launch-associated

railcars were rendered strategically inoperable at Bryansk. The SS-24 missile componentelimination building at Perm' was commissioned and routine operations initiated. The final SS-24 deployed missiles and launchers were shipped from Kostroma, the last active SS-24 missile deployment base, to the Bershet' ICBM off-loading facility. Three SS-25 regiments, two at Yur'ya and one at Kansk (totaling 27 missiles and 27 road-mobile launchers), were decommissioned. Bechtel National Inc. (BNI) removed all missiles, road-mobile launchers, and support vehicles and shipped them to storage or elimination facilities.

In addition, 41 support vehicles were shipped from Khrizolitovyy to Piban'shur for demilitarization. Work began at the Geodeziya facility at Krasnoarmeysk to repair and equip it to burn SS-25 SRMs. Russia formally commissioned the Votkinsk SS-25 ICBM disassembly and elimination facility and the Piban'shur SS-25 launcher elimination and support vehicle demilitarization facility. Ten SS-25 missiles were disassembled, and elements from 11 missiles previously disassembled by Russia were destroyed. Nineteen SS-25 road-mobile launchers were eliminated, and 58 launch-associated and special system support vehicles were demilitarized.

As required by the NDAA for FY 2004, the On-site Manager, in cooperation with FSA, revised the list of activities critical to achieving the program's disarmament goals. The On-site Manager visited dismantlement, elimination, and storage facilities at Perm' and Votkinsk and met frequently with FSA to seek assurances that activities were completed on schedule. In October 2004, the permit to conduct burning of first stage SS-24 SRMs at Perm' was suspended by local authorities for action needed on a list of corrections. In April 2005, a warning notice informed FSA that the suspension posed a risk to the project and continued DoD assistance. In May 2005, Russia resumed burning first stage SS-24 SRMs after acting on the corrections list.

To oversee work of Russian subcontractors, U.S. contractors maintained offices at Moscow, Perm', Biysk, Votkinsk, Piban'shur, Bryansk, and Zlatoust. The contractors also supervised the design work for construction at Perm', Piban'shur, Bershet', and Votkinsk and for demolition at Nizhniy Tagil, Novosibirsk, Kansk, Yur'ya, and Krasnoyarsk. Local subcontractors performed the design work and reported to U.S. contractor personnel, who provided management oversight and verified reporting.

Locations: Biysk, Barnaul, Bershet', Bryansk, Irkutsk, Kansk, Khrizolitovyy, Kostroma, Krasnoyarsk, Krasnoarmeysk, Nenoksa, Nizhniy Tagil, Novosibirsk, Perm', Piban'shur, Plesetsk, Surovatikha, Votkinsk, Teykovo, Yoshkar-Ola, Yur'ya, and Zlatoust.

<u>Follow-up to Prior Year Concern</u>: The FY 2006 Annual Report to Congress noted that DOS issued sanctions in November 2004 against the Federal Research and Production Complex, Altay, in Biysk, Russia. Altay, a Russian subcontractor to Parsons, was responsible for open burning of propellant from SS-N-20 motors, and the sanctions required termination of the existing contract, which occurred in May 2005. Russia has agreed to fund the burning of SRM propellant from 23 remaining SS-N-20 SLBMs being dismantled under DoD's contract with Parsons. DoD is working with FSA to eliminate these missiles by March 2007.

#### 1.1.3 Liquid Propellant ICBM and Silo Elimination

<u>FY 2007–FY 2011 Five-Year Plan, Purpose, and Resources</u>: This project eliminates ICBM silos and destroys ICBMs. The project has eliminated 78 SS-18 ICBM silo launchers, 12 associated launch control center silos, and 2 training silos, including technical site restoration, and has deactivated 18 additional silo launchers. Up to 60 additional SS-18 silos and 67 SS-19 silos will be eliminated. Current plans are to eliminate 257 SS-18 ICBMs and 171 SS-19 ICBMs and launch canisters through FY 2012. Previously, 119 SS-11 and 98 SS-17 missiles were destroyed.

Description of CTR Activities Carried Out in FY 2005: Twelve SS-18 ICBMs, six SS-18 ICBM silo launchers, and one associated launch control center silo were decommissioned. Twelve SS-18 ICBM silo launchers, three associated launch control center silos, and one associated training silo were eliminated by explosion. The sites were technically restored. Approximately 768 metric tons of propellant and 1,968 metric tons of oxidizer were shipped to storage facilities. Twenty-four SS-18 ICBMs and six SS-19 ICBMs were eliminated at the Missile Elimination and Dismantlement Facility in Surovatikha. One additional SS-19 ICBM was eliminated at Piban'shur with CTR-provided equipment. Kellogg Brown & Root International, Inc. is the project's integrating contractor.

As required by the NDAA for FY 2004, the On-site Manager, in cooperation with FSA, revised the list of activities critical to achieving the project's disarmament goals. During FY 2005, the On-site Manager visited the Missile Elimination and Dismantlement Facility in Surovatikha to observe elimination of SS-18 and SS-19 ICBMs.

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

<u>Follow-up to Prior Year Concern</u>: The FY 2006 Annual Report to Congress noted that an A&E, conducted in August 2004 to validate the contents and use of a DoD-selected sample from intermodal tank containers, determined that six intermodal tank containers contained an ammonium solution rather than missile fuel or oxidizer. Also, the A&E team found that at least 534 of the 670 intermodal tank containers had never been used. To follow up, in March 2005, DoD requested that FSA provide clearer guidance to Russian units maintaining custody of and using CTR Program-provided equipment. DoD's letter to FSA reiterated that it is essential to ensure that equipment is used only for the intended purpose and that proper use is an important factor in judging the CTR Program's effectiveness.

DoD assessed the potential for use of the intermodal tank containers elsewhere in the CTR or other DoD programs. The assessment determined: (1) the containers had reached the end of their warranty period and were no longer being manufactured; (2) the stock of parts procured with the containers was almost depleted, and there was no source of new parts; (3) many of the containers required repair and re-certification, which would use up the few available spare parts; and (4) there was no obvious use for the containers elsewhere. In April 2005, DoD sent FSA a letter transferring ownership of the 670 intermodal tank containers and associated spare parts, 125 flatbed railcars, and 2 of 5 cranes to Russia in their current condition and at their

current location. The remaining three cranes are being re-located to support the elimination of SS-24 and SS-25 ICBMs.

#### 1.1.4 SLBM Launcher Elimination/SSBN Dismantlement

<u>FY 2007–FY 2011 Five-Year Plan, Purpose, and Resources</u>: This project will eliminate 572 SLBM launchers at 4 START-designated SLBM launcher-elimination facilities and dismantle 32 associated SSBNs. An additional seven SSBNs will be dismantled except for their bow and stern sections. CTR Program support includes SSBN towing, SLBM launcher elimination, SNF defueling and transport to interim storage, sectioning and preparation of reactor-core compartments for storage afloat, and low-level radioactive material processing.

Russia eliminated 80 SLBM launchers and 5 of 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.

<u>Description of CTR Activities Carried Out in FY 2005</u>: Dismantlement of two *Typhoon* SSBNs by Federal State Unitary Enterprise Production Association Sevmash and one *Delta III* SSBN by Zvezda Far East Shipyard continued. State Machine Building Enterprise Zvezdochka completed the dismantlement of one *Delta I* SSBN and the construction of additional transient storage facilities for SNF casks at the on-shore defueling facility at Zvezdochka. Zvezda eliminated the SLBM launchers on the *Delta III*. Logistics support for equipment at Zvezda was terminated.

Locations: Zvezdochka, Sevmash, Nerpa, Zvezda, and Northeast Regional Center (formerly Ship Repair Facility 49) shipyards.

#### 1.1.5 Spent Naval Fuel Disposition

<u>FY 2007–FY 2011 Five-Year Plan, Purpose, and Resources</u>: This project supports SLBM launcher elimination and associated SSBN dismantlement through dry storage of SNF removed when defueling SSBNs. The plan is to store in storage/transportation containers or casks the SNF from 8 of the 26 SSBNs that will be dismantled through direct contract. The project has provided special railcars for transportation of SNF from the shipyard to a final storage/disposition location. Russia has assumed responsibility for the storage and disposition of previously offloaded SNF. The plan is to procure 96 casks.

<u>Description of CTR Activities Carried Out in FY 2005</u>: Sevmash Production Association continued production of 35 SNF casks. A contract for the design and fabrication of an escort railcar was awarded to Atomspetstrans.

Locations: Sevmash, Atomspetstrans (Moscow), Tver' Rail Factory, and Mayak Production Association (Ozersk).

#### 1.1.6 Liquid Propellant SLBM Elimination

<u>FY 2007–FY 2011 Five-Year Plan, Purpose, and Resources</u>: This project has destroyed 530 SS-N-6, SS-N-8, SS-N-18, and SS-N-23 SLBMs from Russia's Northern and Pacific Fleets. DoD plans to destroy 87 of the remaining 97 SS-N-18s by FY 2012. The destruction process includes defueling, neutralization, and cutting into pieces all proliferable SLBM components. Russia will fund the shipment of missiles from bases and the fuel and oxidizer removed from these missiles to storage facilities. Russia plans to destroy additional SS-N-18s and SS-N-23s with CTR Program-provided equipment.

<u>Description of CTR Activities Carried Out in FY 2005</u>: Fifteen SLBMs (3 by direct contract and 12 by Russia using CTR Program-provided equipment) were dismantled and eliminated.

Locations: Revda Base, Yuzhnorechensk, Sergiev Posad Design Institute, and Federal State Unitary Enterprise Krasmash facility in Krasnoyarsk.

#### 1.2 CHEMICAL WEAPONS DESTRUCTION PROGRAM – RUSSIA

In accordance with the Chemical Weapons Destruction (CWD) Implementing Agreement, DoD is assisting Russia with the safe, secure, and environmentally sound destruction of the most proliferable portion of its chemical weapons nerve-agent stockpile. The CWDF and the former Chemical Weapons Production Facility demilitarization projects support this effort.

<u>Executive Reviews</u>: In February and June 2005, Executive Reviews were conducted with FAI. In February, the six legislative conditions for CTR Program funding of projects were discussed, and the lack of an approved practical plan for the elimination of Russia's stockpile of nerve agents was addressed. The recurring issues of timely processing of site access requests and issuance of one-year, multi-entry visas also were addressed. Because the specialists camp at the CWDF was complete, the need for an agreement regarding the camp's future occupancy was discussed. Additional topics covered were the need for and funding of a laboratory building, subcontractor performance, bridges, funding for equipment, and a configuration management plan.

During the June Executive Review, discussions again covered the pending amendment to the CWD Implementing Agreement, subsequently concluded on October 6, 2005. The need for an on-site Russian representative empowered to make construction decisions and FAI's failure to meet its commitment to deliver reliable electric power by the joint project milestone date of April 30, 2005 were discussed. Current available power does not affect the overall project schedule, but will in the future if not supplemented. Additional discussions covered funding, program risks, and the Novocheboksarsk Chemical Weapons Production Facility project.

#### 1.2.1 Chemical Weapons Destruction Facility

<u>FY 2007–FY 2011 Five-Year Plan, Purpose, and Resources</u>: The U.S. has agreed to build a CWDF for organophosphorus (nerve) agent-filled munitions. The project covers process development, process/facility design, construction, equipment acquisition and installation, systemization, training, commissioning, and facility start-up.

The CWDF, under construction near the town of Shchuch'ye, is designed to destroy Russia's nerve-agent-filled, man-portable, tube and rocket artillery of up to 220mm caliber as well as 540mm bulk-filled rockets and missile warheads. Approximately 1.9 million warheads, containing 5,449 metric tons of agent, stored nearby at Planovy will be transported to the CWDF for destruction. The CTR Program is constructing one of two main destruction buildings in which nerve agent will be thermally neutralized and facilities to manufacture requisite processing chemicals, bituminize the neutralized nerve agent, and safely store process wastes. Russia, with international assistance, is building the second main destruction building as well as infrastructure needed to support CWDF construction and eventual destruction operations.

The entire complex is designed to destroy up to 1,700 metric tons of nerve agent per year. With this capacity and ideal processing, it will take 3.5 years to destroy the chemical weapons in the Planovy arsenal. The current construction schedule calls for initial live agent operations by December 2008 and complete CWDF transfer of responsibility to Russia by July 2009.

In 2003, the Russia CTR Executive Agent, then the Russian Munitions Agency, now FAI, agreed to complete the elimination of all nerve agents of the Russian Federation at a single chemical weapons destruction site—Shchuch'ye. In its June 27, 2005 report to the Organization for the Prohibition of Chemical Weapons (OPCW), *Information on the Plans for Destruction of Category 1 Chemical Weapons in the Russian Federation*, Russia revised its previous plan to transport chemical weapons from the Kizner stockpile to Shchuch'ye for destruction. This document notes—correctly—that planned destruction capacities at the Shchuch'ye CWDF will not be sufficient to destroy both the Planovy and Kizner stocks by the Chemical Weapons Convention (CWC)-mandated destruction deadline of 2012. During the past year, Russia has made numerous public statements that it will not transport weapons, nerve agent, or reaction mass from other sites to the Shchuch'ye location because of increased cost, public safety concerns, and time constraints imposed by the CWC. Russia now plans to complete the elimination of all nerve agents in the vicinity of their storage locations, including the elimination of the Kizner stocks in the vicinity of Kizner.

<u>Description of CTR Activities Carried Out in FY 2005</u>: Parsons, and its major U.S. subcontractors, WGI and EG&G Technical Services, Inc., continued to provide engineering management services. A major contract modification authorizes construction of the entire facility.

Significant design and construction progress was made over the reporting period. In development of the Destruction Process Line, design documentation was prepared for demilitarization machines two and three, material handling equipment, and the metal parts furnace. Temporary and permanent dewatering networks were installed. Construction commenced for Buildings 101 (Main Destruction Building), 101B (Bituminization Building), 102 (Administration Building), and the material storage building. Construction was started on the boiler house concrete foundation, continued and is nearly complete for the gas rescue station and the water after-treatment station, and was completed on the fire station and transformer substation. Two temporary bridges were completed, one transport bridge was rebuilt, and two other bridges were upgraded to a capacity of 100 metric tons. The purpose of this bridge work is to ensure reliable access to the site for heavy equipment. Development of the Automatic Process

Control System was initiated and continues. Maintenance of drainage networks, temporary access roads, transport, and electrical distribution networks continued.

In October 2004, a requirement for additional laboratory space, above that originally designed into the facility, was identified to ensure full compliance with Russian environmental monitoring laws. An Integrated Process Team considered different options and determined that a building dedicated solely to laboratory space was the best option because it was the most cost effective of the alternatives evaluated and because it could be executed without impacting the schedule. Approximately \$12 million of the program's management reserve will be used to fund the additional facility.

In May 2005, USG and contractor personnel moved into the recently completed specialists camp facility, located approximately five kilometers from the Shchuch'ye CWDF construction site. Their relocation has increased the safety and productivity of the project team as they no longer have a two-hour commute each way to and from Chelyabinsk.

The Training Joint Program Plan was drafted, negotiated, and signed. The JRIP, Configuration Management Plan, Transfer of Responsibility Joint Program Plan, and Commissioning Joint Program Plan were drafted and negotiated. These plans improve project transparency and align assumptions by the U.S. and Russia on project implementation.

DoD project managers and contractor personnel are on-site daily at Shchuch'ye to direct construction and commissioning activities. In-country personnel include individuals from the Defense Threat Reduction Agency, the U.S. Army Corps of Engineers, and Parsons who operate in Moscow, Shchuch'ye, Chelyabinsk, and Volgograd. Restructuring of the DTRA program manager office, following removal of the Chemical Materials Agency from day-to-day project management as a result of the shift in project emphasis from design to construction, is now complete. The On-site Manager, in compliance with Public Law 108-136, Section 1305 of the NDAA for FY 2004, is assigned to the CWDF construction site in Shchuch'ye.

Location: Shchuch'ye.

<u>CWDF Construction Schedule Concerns</u>: One of the larger Russian subcontractors declared bankruptcy. Although no CTR Program funds were lost, this subcontractor's construction efforts slowed and, in some cases, stopped. The Engineering Management Support contractor mitigated this problem to some extent by shifting work to other subcontractors, and DoD's technical team continued working with the Engineering Management Support contractor to mitigate a shortage of qualified construction labor in the subcontractor pool. A reorganization of the Russian Government in 2004 caused an eight-month delay in receiving customs clearances for the Automatic Process Control System equipment and resulted in a breach of the Acquisition Program Baseline. Further delays occurred in finalizing the Hazard Protection Zone design and from other project design changes, resulting in an additional breach of the planned schedule. Since the CWDF project requires daily construction decisions, DoD recommended the presence of a fully empowered, on-site Russian decision maker, which Russia did not provide until November 2005.

To identify and address future challenges, DoD worked to strengthen management control and reporting. It began stand-up of a DCMA-validated Earned Value Management System process. DoD continued imposing strong configuration control and risk-management practices, such as conducting Quarterly Program Reviews by the Office of the Secretary of Defense and DTRA, establishing a risk management Integrated Process Team that meets regularly, and requiring lengthy overlap periods during turnover of on-site project managers, to mitigate cost growth and anticipate baseline changes. Meeting the current threshold schedule will depend on DoD's ability to influence Russia's processes and procedures for commissioning and transferring the responsibility of CWDF operations.

<u>Update of Prior Year Concern</u>: DoD provided two automatic gas chromatographs to satisfy safety requirements for working with live chemical agents at the test facility near the CWDF. Violations of the temporary import provisos that prohibited foreign access to, and control of, this equipment were reported to DOS on May 17, 2004. In coordination with USG export control authorities, DoD will leave the automatic gas chromatographs in place to perform their intended use of monitoring for safety at the Chemical Weapons Storage Depot in Planovy. Future A&Es will be used to confirm that the automatic gas chromatographs continue to be used for their intended purpose. DoD is completing its final voluntary self-disclosure to DOS regarding this error.

#### 1.2.2 Chemical Weapons Production Facility Demilitarization

<u>FY 2007–FY 2011 Five-Year Plan, Purpose, and Resources</u>: 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 project will decontaminate, dismantle, and destroy specialized equipment and special features related to production, transfer, and storage of chemical agents/weapons and their precursors as outlined in the CWC. Demilitarization operations on buildings declared under the CWC are conducted after Russian conversion or destruction plans are approved by the OPCW. All demilitarization at Volgograd is complete.

Phase I at Novocheboksarsk included removal and destruction of specialized munitions equipment in a munitions-preparation building. Phase II, consisting of pre-demilitarization activities, including design, fabrication, and installation of three thermal treatment systems to support the demilitarization of the Vx production and munitions filling complex, is scheduled to be completed in FY 2006. During Phase III, dismantlement and decontamination of all specialized equipment, standard equipment, and interior building structures within Building 350 will occur. Phase III began in FY 2004 and will be completed in FY 2006. The project was rebaselined in July 2005 following schedule delays and cost growth in Phase II. Russia will conduct the Phase IV demolition of Building 350 with its own resources.

<u>Description of CTR Activities Carried Out in FY 2005</u>: Volgograd: The Second Stage Phase III demilitarization of four remaining buildings and two bunkers was completed. Novocheboksarsk: Provision of the thermal treatment systems continued with work being done by Parsons and through direct contracting with Independent Plant #4, OAO Khimprom. All other contract work is being awarded to Independent Plant #4. Locations: Volgograd and Novocheboksarsk.

<u>Resolved Prior Year Concern</u>: The U.S. agreed to provide \$10.0 million for thermal treatment units to help Russia meet its CWC requirements, with Russia bearing any remaining costs. Russia was slow in providing its portion of the funding, so DoD continued its work to ensure the key dismantlement is completed. Due to an increased Estimate at Completion for the thermal treatment units, DoD added \$1.58 million to complete the effort. To offset this cost, DoD cancelled Phase IV assistance to destroy Building 350. There is no current funding concern.

#### **1.3 STRATEGIC NUCLEAR ARMS ELIMINATION PROGRAM – UKRAINE**

CTR Program assistance, consistent with the Strategic Nuclear Arms Elimination (SNAE) Implementing Agreement, includes elimination of Tu-22M Backfire and Tu-142 Bear nuclear-capable maritime patrol aircraft that are modifications of 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 a Propellant Disposition Facility to remove propellant from SS-24 SRMs by water-washout, although DoD did agree to assist Ukraine to store 163 SS-24 SRMs through FY 2005. DoD remains frustrated by Ukraine officials' contrived unwillingness to explore alternatives to water-washout, namely open detonation. Repeated overtures by DoD on this matter have been rebuffed. Significantly, Ukraine officials did not attend a U.S. demonstration of open-detonation technology in Utah. A Russian delegation at this demonstration pronounced itself very impressed with the safety and efficacy of open detonation. DoD will continue to fund storage costs for the 163 SRMs in Ukraine given our commitment to the new Government of Ukraine. We will also continue to press Ukraine to accept open detonation. DoD is concerned, however, that the long delay in resolving this issue may call into question the chemical integrity of the solid fuel, potentially increasing costs and risks when Ukraine ultimately agrees to a solution.

<u>Equipment Disposition Efforts</u>: DoD and Ukraine recognized that, as SNAE and Weapons of Mass Destruction Infrastructure Elimination (WMDIE) projects evolved or were completed, proper disposition of CTR Program equipment was necessary. DoD worked with CTRIC contractors and Ukraine officials to allocate the equipment among CTR projects in Ukraine or remove the equipment from accountability under the CTR Program. In FY 2005:

- Letters were sent to Ukraine's MOD, the National Space Agency, and the Ministry of Industrial Policy approving the transfer of virtually all remaining SNAE, WMDIE, and Defense Conversion equipment to Ukraine and its removal from the CTR Program. The remaining equipment will be transferred as CTR project work is completed.
- The CIS contract in Ukraine was terminated in May 2005. As required, equipment maintenance and repair, as well as equipment processing, accounting, and disposition responsibilities, were transferred to integrating contractors executing the remaining CTR project work. Light vehicles and office furniture were transferred to the WMD-PPI project with the Border Guard in Ukraine.

#### 1.3.1 SS-24 Missile Disassembly, Storage, and Elimination

<u>FY 2007–FY 2011 Five-Year Plan, Purpose, and Resources</u>: The 163 first, second, and third stage SRMs from disassembled SS-24 ICBMs require environmentally controlled storage. DoD extended its support for their storage from September 2005 to December 2006 and plans to extend support to January 31, 2008. If agreement can be reached on the elimination of the SRMs by a low risk, low cost alternative, DoD will consider funding SRM storage and elimination costs until all SRMs are eliminated.

<u>Description of CTR Activities Carried Out in FY 2005</u>: The on-site U.S. contractor, WGI, supported the storage of 163 SRMs.

Locations: Pavlograd.

#### 1.3.2 Bomber and Air-to-Surface Missile Elimination

<u>FY 2007–FY 2011 Five-Year Plan, Purpose, and Resources</u>: This project will eliminate 60 Tu-22M Backfire nuclear bombers, 423 Kh-22 nuclear ASMs, 6 Tu-142 Bear maritime patrol aircraft, and 3 strategic bomber trainers--an increase of 5 Tu-22M and 77 Kh-22 ASMs that Ukraine requested and DoD approved in FY 2005. Previously, 38 heavy bombers (27 Tu-95 and 11 Tu-160), 483 Kh-55 ASMs, and 2 strategic bomber trainers were eliminated. The plan is to complete this project in FY 2006.

<u>Description of CTR Activities Carried Out in FY 2005</u>: RTSC eliminated 12 Tu-22M bombers, 95 Kh-22 ASMs, 4 Tu-142 maritime patrol aircraft, and one strategic bomber trainer as well as associated bomber engines, auxiliary power units, ASM rotary launchers, and external pylons. It also provided oversight at locations where eliminations were performed.

Locations: Kiev, Poltava, Priluki, Nikolayev, Vinnitsya, and Ozernoye.

<u>A&E</u>: In July 2005, an A&E team reviewed documentation provided by Ukraine stating that approximately 830,000 kilograms of scrap metal generated approximately \$515,000 in revenue from the elimination of bombers during CY 2004. DoD audited this report by comparing the quantity of reported scrap metal to documentation provided by U.S. on-site contractors and the per kilogram price reported by Ukraine to industry standards. Each comparison was favorable. Ukraine reported that the proceeds funded the construction of housing for demilitarized military personnel, which DoD deems an acceptable use of funds complementing CTR objectives.

## 1.4 WEAPONS OF MASS DESTRUCTION INFRASTRUCTURE ELIMINATION PROGRAM – UKRAINE

In accordance with the WMDIE Implementing Agreement, the Nuclear Weapons Storage Area project will eliminate infrastructure at sites formerly associated with nuclear weapons and warhead storage, operations, and maintenance that supported the forward-deployed nuclear weapons arsenals of the Soviet armed forces and assist in preventing the proliferation of associated design data, materials, equipment, and technologies.

#### 1.4.1 Nuclear Weapons Storage Area Elimination

<u>FY 2007–FY 2011 Five-Year Plan, Purpose, and Resources</u>: This project eliminated the Raduga Nuclear Weapons Storage Area site and deactivated Nuclear Weapons Storage Areas at Pervomaysk and Khmelnitskiy. Ukraine requested assistance at four additional sites located near Khmelnitskiy, Lutsk, Medzhibozh, and Stryy. DoD plans to support elimination of selected infrastructure at Khmelnitskiy, Lutsk, and Stryy sites but determined the Medzhibozh site was not a sufficient threat to warrant elimination.

<u>Description of CTR Activities Carried Out in FY 2005</u>: DoD exchanged letters with MOD, made site visits, and developed technical requirements and cost estimates for the additional work at Khmelnitskiy, Lutsk, and Stryy.

Locations: Raduga, Khmelnitskiy, Lutsk, and Stryy.

#### **1.5 BIOLOGICAL WEAPONS PROLIFERATION PREVENTION PROGRAM – FSU**

The BWPP program's objectives are to reduce the risk of bioterrorism and prevent the proliferation of biological weapons (BW) technology, expertise, and extremely dangerous pathogens (EDPs). The U.S. has CTR implementing agreements with Kazakhstan, Uzbekistan, Georgia, Azerbaijan, and Ukraine to assist them in preventing the proliferation of BW materials and expertise to rogue states and terrorist groups, increase transparency, encourage high standards of conduct by scientists, and preempt a "brain drain" of bio-related expertise. 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 have been signed with Uzbekistan, Georgia, Azerbaijan, and Ukraine. This program is executed through three projects, each of which serves a different objective of the CTR Program:

- Biological Weapons Infrastructure Elimination Objective 1,
- Biosecurity and Biosafety (BS&S) and Threat Agent Detection and Response (TADR) Network Objective 2, and
- Cooperative Biological Research Objective 3.

DoD contracts with BNI for work in non-Russian FSU states and with RTSC for work in Russia. They are the integrating contractors for all projects at institutes in FSU states.

<u>Executive Reviews</u>: In September 2005, DoD held the first Executive Review of the BWPP program in Uzbekistan, hosted by the First Deputy Minister of Emergency Situations, the Implementing Agent. It was attended by Uzbekistan policy and implementation decision makers. Assumptions and mutual responsibilities for each project were reviewed and agreed.

<u>Unresolved Prior Year Concern</u>: As reported last year, Russian purchasing agents and subcontractors failed to exercise rights provided under the ISTC Agreement, signed on November 27, 1992, and some funding for ISTC projects was used to pay VAT. In July 2005, DoD raised this concern with a focus group of USG Interagency officials and ISTC Financial Management Personnel and is working with them and Russian officials to resolve this concern.

<u>Unresolved Prior Year Concern</u>: As reported last year, the BWPP program with Russia is not governed by a CTR implementing agreement. Rather, it uses a Memorandum of Agreement between the U.S. and the ISTC to provide equivalent protections, exemptions, and A&E rights. The ISTC is an international body that funds scientific research via grants but is not well suited to implement engineering and construction projects. Therefore, DoD has limited the types of projects it is willing to initiate, absent significant policy changes by Russia.

#### 1.5.1 Biological Weapons Infrastructure Elimination

<u>FY 2007–FY 2011 Five-Year Plan, Purpose, and Resources</u>: This project seeks to eliminate former BW facilities in FSU states through the removal of dual-use equipment or destruction of the facility. DoD continues to assess former BW facilities and bioresearch institutes where access is granted and to identify additional BW facilities and institutes for engagement. The assessments produce vulnerability analyses for each facility and support recommendations for elimination or engagement by other BWPP projects.

DoD continues to eliminate a war-readiness anthrax production plant in Stepnogorsk, Kazakhstan. Elimination will be completed by April 2007, when two former production buildings are dismantled. Another project, to remove and destroy dual-use equipment at Biokombinat in Tbilisi, Georgia, will be completed by February 2007. This facility produced vaccines for both foot and mouth disease and rabies from 1979 until 2003, but had a mobilization capacity much greater than needed for vaccine production. Plans to demolish buildings at this site were cancelled because of increased costs associated with asbestos removal. DoD is confident that the proliferation threat associated with this facility's dual-use equipment will be eliminated through the removal and destruction of all dual-use equipment.

<u>Description of CTR Activities Carried Out in FY 2005</u>: This year, DoD terminated the combined Biological Weapons Production Facility Dismantlement/Defense Conversion project to produce a sour-milk product line with anti-bacterial properties at State Research Center of Virology and Biotechnology in Russia because of poor performance and unsupportable cost escalation (the "bifido" project).

DoD continued demolition of Buildings 221 and 600 at Stepnogorsk. At Biokombinat in Georgia, DoD inventoried all dual-use equipment, conducted asbestos abatement training, destroyed remaining foot and mouth disease vaccine concentrate, repaired the site access road to facilitate destruction activities, and decontaminated effluent waste and the external surfaces of the dual-use equipment to prepare for dismantlement.

BNI and RTSC assisted DTRA project managers with environmental analysis, design, safety procedures, implementation assistance, and project support and provided bi-weekly status and monthly cost and performance reports. They maintained offices in Moscow, Russia; Almaty, Kazakhstan; Tashkent, Uzbekistan; and Tbilisi, Georgia. BNI also provided on-site management and oversight at Stepnogorsk with a small staff. BNI employed a variety of local subcontractors for demolition and destruction work. All local subcontractors reported to the U.S. contractor's management personnel, who provided management oversight and verified reporting.

Locations: Novosibirsk, Russia; Stepnogorsk, Kazakhstan; and Tbilisi, Georgia.

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

Implementing Agreement / Project	Prior Year	FY 2006	FY 2007	FY08-FY11	* Total
Strategic Offensive Arms Elimination (Russia)					
Emergency Response Support Equipment	\$9.4	\$0.4	\$0.4	\$1.6	\$11.8
Solid Propellant ICBM/SLBM and Mobile Launcher Elimination	\$285.4	\$31.3	\$55.3	\$219.9	\$591.9
Liquid Propellant ICBM and Silo Elimination	\$212.3	\$8.1	\$16.0	\$33.0	\$269.4
SLBM Launcher Elimination/SSBN Dismantlement	\$305.7	\$21.8	\$2.6	\$52.4	\$382.5
Spent Naval Fuel Disposition	\$25.4	\$0.3	\$0.2	\$12.8	\$38.7
Liquid Propellant SLBM Elimination	\$32.5	\$0.8	\$2.5	\$8.5	\$44.3
Completed/Terminated Projects	\$262.3				\$262.3
Chemical Weapons Destruction (Russia)					
Chemical Weapons Destruction Facility	\$888.0	\$108.5	\$42.7		\$1,039.2
CW Production Facility Demilitarization	\$45.3				\$45.3
Completed Projects	\$30.2				\$30.2
Strategic Nuclear Arms Elimination (Ukraine)					
SS-24 Missile Disassembly, Storage, and Elimination	\$96.1	\$1.1			\$97.2
Bomber and ALCM Elimination	\$33.9				\$33.9
Completed/Terminated Projects	\$365.0				\$365.0
WMD Infrastructure Elimination (Ukraine)					
Nuclear Weapons Storage Area Elimination	\$6.0				\$6.0
Completed Projects	\$19.1				\$19.1
BW Proliferation (FSU)					
BW Infrastructure Elimination	\$19.3	\$1.5	\$1.7		\$22.5
Budget	\$2,635.9	\$173.8	\$121.4	\$328.2	\$3,259.3
* Estimated Program FYDP Total					

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

#### 2.1 NUCLEAR WEAPONS STORAGE SECURITY PROGRAM – RUSSIA

In accordance with the Nuclear Weapons Storage Security (NWSS) Implementing Agreement, this program helps support proliferation prevention by providing enhancements to the security systems of nuclear weapons storage sites. In 1997, DoD and MOD concluded Special Arrangements that allow the audit of equipment provided prior to 2003 through alternative means, including data on locations (by site designator) of equipment, photographs, documentation, letters from MOD attesting to intended use, and examination of sample equipment. A Protocol on Limited Access and a Protocol on Protection of Sensitive Information, signed in 2003, allow DoD to satisfy the FAR by providing limited access to storage sites for installation of security enhancements, AICMS, and the Small Arms Training System (SATS).

The Personnel Reliability Program project was completed in August 2005 with delivery of the final 5,000 test cups. MOD's 12<sup>th</sup> Main Directorate assumed full responsibility for the project using a formal transition plan developed by Kellogg Brown & Root International, Inc. This transition was mandated by DoD's 2003-2004 rescoping review of the CTR Program, which sought to increase Russia's responsibility for the success of CTR activities, among other issues.

<u>Executive Reviews</u>: In 2005, DoD held Executive Reviews in February and June with the Russian MOD, the Executive Agent responsible for security of nuclear weapons in storage and during transport. The June Executive Review was held in conjunction with a Program Management Review, during which implementation issues for each individual project were reviewed in detail. Assumptions and responsibilities for storage security and transportation security programs were discussed, as was the status of amendments for the implementing agreements. During the June Executive Review, MOD made a proposal for future cooperation in upgrading the remaining nuclear weapons storage sites and other work related to transportation or site security.

<u>A&Es</u>: During January–February 2005, a DoD A&E team reviewed NWSS equipment located at MOD-secured storage sites West-9 and East-32 in accordance with the NWSS Special Arrangements. The team accounted for equipment provided to the sites through documentation and/or photographic review. All equipment audited by photograph appeared to be operational. Senior Russian MOD officials provided a certificate verifying that all equipment was being used for its intended purpose and was functioning properly, with the exception of one SATS computer located at West-9. Documentation and photographic review of the equipment provided to sites West-9 and East-32 enhances DoD's confidence that it is being used for its intended purpose.

Because the NWSS A&E Special Arrangements create a time gap between audit in-brief and review of photographs from secured sites, DoD inserts an additional audit in this gap to ensure efficient use of team resources. Two additional NWSS site audits included in the FY 2005 schedule were cancelled when separate BS&S A&Es, to be conducted simultaneously, were cancelled. <u>Unresolved Prior Year Concern</u>: Article 2 of the NWSS A&E Special Arrangements requires MOD to provide to DoD, within 60 days of equipment transfer, a list of the locations of all transferred equipment using the East and West region designators. This list must be renewed at least once a year or more frequently if a significant transfer of equipment has occurred. As reported for the last two years, MOD has not complied. In FY 2004, DoD provided MOD with computers and a list of all equipment provided to date to help populate an inventory database with location designators. This database would enable DoD to conduct limited audits of multiple CTR projects and assist planning for comprehensive security enhancements at individual sites. The list MOD provided at the February 2005 Executive Review did not satisfy the requirement. DoD continues to address this accountability requirement with MOD.

#### 2.1.1 Automated Inventory Control & Management System

<u>FY 2007–FY 2011 Five-Year Plan, Purpose, and Resources</u>: This project enhances MOD's capability to account for and track strategic and tactical nuclear weapons slated for dismantlement. Its operational configuration provides 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 at the Security Assessment and Training Center (SATC) is used for training, testing, and demonstration only and has no system operational capabilities.

DoD conducted a proof of concept, by installing hardware and software in an approved modular facility at the SATC, to simplify certification at individual sites. AICMS reached full operational capability in September 2005 with installation of required hardware and software at 16 AICMS nodes, CCP-1, and CCP-2; completion of initial training and data entry; and system certification to MOD standards. Life-cycle support will be provided through September 2006.

<u>Description of CTR Activities Carried Out in FY 2005</u>: System hardware and software operations and maintenance training were completed by Black and Veatch International. Approved design documents for all 16 AICMS modules have been received, and all modules have been installed, accepted, and commissioned. DoD met with MOD to develop A&E procedures for the AICMS modules to be in place in FY 2006.

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

#### 2.1.2 Guard Force Equipment and Training

<u>FY 2007–FY 2011 Five-Year Plan, Purpose, and Resources</u>: This project provided specialized equipment, training aids, training, and logistics support to improve the ability of MOD's guard force to deny access to Nuclear Weapons Storage Areas. Firearms Training Systems, Inc. supplied: 60 SATS; 3 stations to create simulator scenarios; and instructor training for system installation, operation, and maintenance. Live-fire shooting ranges procured from Caswell International include 12 sets for outdoor operation, 30 pop-up target mechanisms per range, spare components, and training for instructors. In October 2005, DoD informed MOD that a previously approved request to procure and install up to 59 modular buildings to house

SATS was cancelled due to an unresolved on-site work verification issue and MOD's objection to DoD's contracting approach. Therefore, this project is complete.

<u>Description of CTR Activities Carried Out in FY 2005</u>: Caswell, Inc. completed the training of instructors on the live-fire shooting range equipment required to close the contract.

<u>Locations</u>: 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.

#### 2.1.3 Site Security Enhancements

<u>FY 2007–FY 2011 Five-Year Plan, Purpose, and Resources</u>: This project enhances the security of MOD's nuclear weapons storage sites that include national stockpile sites and operational base storage sites under the control of, or supporting, Russia's 12<sup>th</sup> Main Directorate, Navy, Air Force, and Strategic Rocket Forces. All site security work is coordinated with DOE, which is also enhancing security at 25 of 26 Strategic Rocket Forces storage sites, 6 storage sites and 33 related facilities for the Navy, and 9 12<sup>th</sup> Main Directorate storage sites. Security systems and infrastructure to bring security to standards consistent with U.S. nuclear weapons storage facilities will be installed based on vulnerability assessments for each site. The plan is to enhance security systems at all permanent storage locations that contain strategic or tactical nuclear weapons and procure armored vehicles and communications equipment for, and install security upgrades at, some temporary storage areas, such as road-to-rail transfer points. DoD and DOE require access to the weapons storage sites to do this work.

During the Bratislava Summit in February 2005, Presidents Bush and Putin agreed to expand cooperation on nuclear security as a counter to the grave threat of WMD terrorism. As a result, MOD quickly identified all remaining sites for which it requires U.S. assistance for security upgrades. The information provided by Russia was coordinated fully with all relevant USG agencies. This National Security Council staff-led effort resulted in U.S. agreement to upgrade security at 15 additional sites: 8 by DoD and 7 by DOE. The original Russian list of 42 sites included entries related to warhead transport, sites where U.S. assistance is already in progress (or completed), and other entries that required clarification. The U.S. understanding is that the current list for site security upgrades represents the plan for completing all U.S.-Russia cooperative work in this assistance area. The U.S. committed to a schedule that will complete all upgrades by CY 2008.

<u>Description of CTR Activities Carried Out in FY 2005</u>: DoD made 10 site visits and completed detailed site designs for the first 12 comprehensive upgrades. Upgrades at one site were completed, and it was turned over to MOD. The equipment for the 11 incomplete sites was ordered and is being received and installed.

<u>Locations</u>: Of the 16 sites currently under contract for upgrades, 11 are in the western region, 3 in Siberia, and 2 in the Far East.

#### 2.1.4 Far East Training Center

<u>FY 2007–FY 2011 Five-Year Plan, Purpose, and Resources</u>: This project will establish a Far East Training Center to complement the existing SATC at Sergiev Posad and the Kola Technical Center, funded by DOE. The Far East Training Center will be a training facility for all branches of MOD responsible for WMD security in the Far East region to support the operators, maintainers, and system administrators of physical security equipment and to be a regional depot-level maintenance facility for security equipment. DoD agreed to locate the Far East Training Center at Khabarovsk in October 2005.

<u>Description of CTR Activities Carried Out in FY 2005</u>: DoD approved the acquisition strategy for this project. Phase One, a needs assessment by Oak Ridge National Laboratory, will review MOD's requirements for training and sustainability support.

Location: Khabarovsk.

#### 2.2 NUCLEAR WEAPONS TRANSPORTATION SECURITY PROGRAM – RUSSIA

In accordance with the Nuclear Weapons Transportation Security (NWTS) Implementing Agreement, this program supports proliferation prevention by enhancing the security and safety of nuclear weapons during shipment. Much of the DoD-provided equipment is located at sensitive MOD locations. It is shipped to less sensitive locations when DoD conducts A&Es. The unclassified DoD/MOD database under development to track equipment provided by the NWSS program will also support the management and accountability of this equipment.

<u>A&E #1</u>: During March 2005, a DoD team reviewed NWTS equipment located at Severomorsk and Sergiev Posad. The team observed three Pomoshchnik emergency response vehicles and one Emergency Support Equipment Module at Severomorsk and one Pomoshchnik vehicle at Abramovo. The Pomoshchnik and Emergency Support Equipment Module sets were complete and appeared in excellent condition. The team reviewed Transfer of Custody and property control documents as well as training and maintenance records. The site Commander at Severomorsk reported that the equipment is used twice per month for emergency response exercises of two to three days. Severomorsk site personnel performed successful operational demonstrations of the jaws of life cutter and an abrasive wheel cutter. The team also observed the loading of an Emergency Support Equipment Module onto a transport truck. The audit enhances DoD's confidence that the equipment provided is used for its intended purpose.

<u>A&E #2</u>: During May 2005, a DoD team reviewed NWTS equipment located at Khabarovsk, Tver', and Sergiev Posad, including 4 Pomoshchnik vehicles at Khabarovsk, 3 VG-124 railcars at Tver', and 7 VG-124 railcars plus 15 supercontainers at Abramovo. All, including the emergency response equipment associated with the four Pomoshchnik vehicles, were physically inventoried with the exception of a few items that were certified, as supported by MOD's property control records, at a different location. The team also reviewed personnel training and equipment maintenance documentation. The training records show that the Pomoshchniks are used 14 to 16 times a year during emergency response exercises. Site personnel performed operational demonstrations of the spreader-cutter and pneumatic jack with associated motorized pump, pneumatic tent with associated generator, heater and lighting

system, a gas-powered saw with wheel cutter attachment, and a portable radio. MOD officials provided a certificate stating that the equipment is used for its intended purpose. This audit also enhances DoD's confidence that the equipment provided is used for its intended purpose.

A third scheduled A&E of assistance provided by the NWTS program was cancelled because significant scheduled audit objectives had been accomplished by DoD technical teams and because the remaining objectives did not justify another A&E.

#### 2.2.1 Nuclear Weapons Transportation

<u>FY 2007–FY 2011 Five-Year Plan, Purpose, and Resources</u>: This project assists MOD in shipping nuclear warheads to dismantlement locations or to more secure storage sites pending dismantlement. Consistent with U.S. policy against assisting modernization of Russia's strategic forces while maximizing the nonproliferation benefit from ensuring that nuclear warheads are transported from operational sites to dismantlement facilities or consolidated storage sites and from storage sites to dismantlement facilities, CTR Program-assisted shipments were reduced from a maximum of six to four per month.

<u>Description of CTR Activities Carried Out in FY 2005</u>: RTSC supported 25 train shipments. The number of shipments decreased in FY 2005 because DoD required increased transparency, and CTR Program assistance stopped from November 2004 to May 2005 while the issue was being resolved. DoD and MOD concluded the amendment to the implementing arrangement on June 14, 2005.

Locations: Weapons-movement services are conducted throughout Russia.

#### 2.2.2 Railcar Maintenance and Procurement

<u>FY 2007–FY 2011 Five-Year Plan, Purpose, and Resources</u>: This project supports depot and capital maintenance for 200 nuclear-weapons cargo railcars to comply with Russian Railway certification requirements. The CIS contractor is evaluating Russian contractors to provide the required depot maintenance. This project will procure up to 100 heated cargo railcars to replace railcars at the end of their service life. MOD will destroy two old cargo railcars for each new railcar that is built. This project is procuring 15 guard railcars to replace those retired due to service life expiration, with delivery expected in February-April 2006.

<u>Description of CTR Activities Carried Out in FY 2005</u>: Responsibility for depot maintenance transitioned from Sandia National Laboratories to the CIS contractor. Fifteen guard railcars are in production. DoD approved the procurement of up to 100 new cargo railcars, and technical discussions with MOD are ongoing.

<u>Locations</u>: Certification maintenance is transitioning from the Tver' Railcar Factory to a location or locations selected by the CIS contractor. Railcars are distributed to garrisons associated with nuclear weapons storage sites throughout Russia.

#### 2.2.3 Transportation Safety Enhancements

<u>FY 2007–FY 2011 Five-Year Plan, Purpose, and Resources</u>: This project enhances MOD's accident mitigation capability for transportation of nuclear weapons to dismantlement sites. Emergency response vehicles, the key component of this project, contain hydraulic cutting tools, pneumatic jacks, and safety gear. Meteorological, radiation detection and monitoring, and communications equipment is also provided. This project will be complete in FY 2006 when 14 additional trucks to transport emergency support modules and 78 tents are supplied to upgrade existing shelters for use at accident sites.

<u>Description of CTR Activities Carried Out in FY 2005</u>: DoD contracted with the CIS contractor to procure Russian-made Kamaz transport trucks and 78 tents.

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

#### 2.3 FISSILE MATERIAL STORAGE FACILITY PROGRAM – RUSSIA

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

#### 2.3.1 Fissile Material Storage Facility Transparency

<u>FY 2007–FY 2011 Five-Year Plan, Purpose, and Resources</u>: The U.S. and Russia are negotiating a Transparency Protocol that will permit DoD to monitor the nuclear emissions of the material in fissile material containers to increase its confidence that the stored material is solely fissile material with agreed attributes, i.e., that it is weapons-grade plutonium or enriched uranium. The draft Transparency Protocol permits the measurement system to be used by DoD on monitoring visits to the FMSF. After the Transparency Protocol is signed, DoD will work with FAEA to develop and install a certified Inventory Sampling Measurement System to enable the monitors to make isotopic measurements. Subsequently, the Inventory Sampling Measurement System will be enhanced to confirm containers are loaded with an acceptable quantity of weapons-grade plutonium or enriched uranium. DOE laboratories will support implementation of the project.

<u>Description of CTR Activities Carried Out in FY 2005</u>: Lawrence Livermore National Laboratory tested the Gamma Detection Module of the Inventory Sampling Measurement System to evaluate its reliability under simulated operating conditions. All other work was curtailed pending outcome of the negotiations on the Transparency Protocol. Two scheduled audits of the FMSF were cancelled due to the absence of a Transparency Protocol and follow-on A&E Arrangements. DoD is still negotiating these arrangements with FAEA.

<u>Unresolved DoD Concerns</u>: Significant progress was made during negotiations in Moscow during November 2004 and March and June 2005 to finalize a Protocol. The few remaining technical issues should be resolved without additional formal negotiation. The legal framework governing application of the Protocol is currently under discussion. DoD remains concerned that, despite having turned over the FMSF to the Russian Federation in December 2003, the facility remains empty. DoD has expressed concern at the Under Secretary of Defense

level that loading has not yet begun. DoD will continue to press the FAEA for a definite timetable for loading the FMSF with weapons-grade fissile material.

Location: Mayak.

#### 2.4 BIOLOGICAL WEAPONS PROLIFERATION PREVENTION PROGRAM – FSU

(See paragraph 1.5 for BWPP program information.)

#### 2.4.1 Biosecurity and Biosafety and Threat Agent Detection and Response

<u>FY 2007–FY 2011 Five-Year Plan, Purpose, and Resources</u>: DoD combined BS&S and TADR into one project because of their close relationship and common objective. Their goals are: prevent the theft, sale, diversion, and accidental or intentional release of pathogens; consolidate pathogen collections and work at safe, secure centralized repositories; and strengthen the recipient states' detection and response networks for dangerous pathogens. Combining them enables a more integrated and streamlined approach to engaging institutes in the BWPP program. BS&S/TADR efforts target dangerous pathogens that pose particular risks for theft, diversion, accidental release, or use by terrorists. In Russia, work is focused on BS&S enhancements, with no plans to create a TADR system.

<u>Description of CTR Activities Carried Out in FY 2005</u>: Building renovation and equipment installation, including the Pathogen Access Control System, were completed at the two interim EMS/CRLs and an additional site in Uzbekistan. DoD also renovated three EMSs in these recipient states and five Sentinel Stations in Georgia. Georgia's especially dangerous pathogen collections were consolidated into the safe, secure repository at the EMS/CRL. Designs for permanent CRLs in Georgia and Uzbekistan are 90 percent complete. DoD trained 450 recipient state personnel in laboratory and biological safety practices and began diagnostic and epidemiology training.

In Kazakhstan, DoD agreed on the sites for the human and veterinary CRLs and provided safety and security enhancements at one site in Almaty. DoD initiated activities in both Azerbaijan and Ukraine by conducing safety and security assessments (seven in Azerbaijan and two in Ukraine). In Russia, DoD conducted assessments and created Analyses of Alternatives for BS&S upgrades at Golitsino and Pokrov. At Golitsino, upgrades are in progress and the Pathogen Access Control System was installed. Biosafety training was completed at Golitsino, Obolensk, Serpukov, and the St. Petersburg Institute of Highly Pure Preparations.

As required by the NDAA for FY 2004, on-site managers in Tbilisi, Georgia and Tashkent, Uzbekistan met with Georgia and Uzbekistan representatives to discuss ways to expedite projects. The on-site managers also provided timely notice of issues and recommendations to DoD. On-site U.S. contractors (RTSC and BNI) maintain offices in: Moscow, Russia; Tashkent, Uzbekistan; Almaty, Kazakhstan; and Tbilisi, Georgia. Their staffs assist DTRA with environmental analysis, design, safety procedures, implementation assistance, and project support. BNI employs local subcontractors for construction, renovation, and installation and provides management oversight and verifies reporting.

In FY 2005, three scheduled A&Es of BS&S projects were cancelled. An A&E of interim site security upgrades in Georgia was cancelled because of delayed installation. Audits of security upgrades provided under ISTC project agreements in Russia at the State Research Center for Applied Microbiology and Vektor were cancelled because of a strained relationship with institute management.

Locations:

- Russia: Kol'tsovo-Vektor; Obolensk-State Research Center for Applied Microbiology; Serpukov-Research Center for Toxicology and Hygienic Regulation of Biopreparations; Golitsino-All-Russia Research Institute of Phytopathology; Pokrov-Pokrov Biologics Plant; Kazan'-All Russia Research Veterinary Institute; and Vladimir-All-Russia Research Institute of Animal Health.
- Kazakhstan: Almaty-Kazakh Scientific Center for Quarantine and Zoonotic Diseases and Central Sanitary and Epidemiologic Service Laboratory; Astana—National Veterinary Center; Otar—Scientific Research Agricultural Institute; and various Oblast laboratories associated with the Kazakh Scientific Center for Quarantine and Zoonotic Diseases and the Sanitary and Epidemiologic Service and Anti-Plague System.
- Uzbekistan: Samarkand-Scientific Research Institute of the Veterinary Science; Tashkent-Research Institute of Virology; Center for Prophylaxis and Quarantine of Most Hazardous Infections; Research Institute of Epidemiology, Microbiology, and Infectious Diseases; Republican Sanitary and Epidemiological Service; Central Veterinary Laboratory; MOD Medical Department Center for Veterinary Diagnostics and Extremely Dangerous Pathogens; and various Oblast laboratories associated with the Center for Prophylaxis and Quarantine of Most Hazardous Infections and the Sanitary and Epidemiologic Service.
- Georgia: Tbilisi-National Center for Disease Control of Georgia; Eliava Institute of Bacteriophage, Microbiology, and Virology; Georgia Central Laboratory for Veterinary Diagnostics and Expertise; and various Oblast Sentinel Stations associated with the National Center for Disease Control of Georgia.
- Ukraine: Kiev-Center for Sanitation and Epidemiology and Odessa-Anti-Plague Institute.
- Azerbaijan: Baku—the Anti-Plague Station; Republican Veterinary Laboratory; Institute of Medical Prophylaxis; Institute of Epidemiology and Hygiene; Azerbaijan State Scientific Control Institute for Veterinary Preparation; the Institute of Epidemiology and Hygiene; and Ministry of Defense Medical Department diagnostic reference laboratory.

<u>BWPP Value Added Tax (VAT) Concerns</u>: The umbrella agreements provide exemption from the payment of taxes on goods and services. In Uzbekistan and Kazakhstan, the necessary administrative documents were not put in place to apply tax and customs exemptions on equipment. This delayed shipments of equipment to project sites and impacted the work schedules. DoD resolved this issue with Uzbekistan in December 2005 and is working with Kazakhstan to apply the exemptions.

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

Implementing Agreement / Project	Prior Year	FY 2006	FY 2007	FY08-FY11	* Total
Nuclear Weapons Storage Security (Russia)					
Automated Inventory Control & Management System	\$58.0				\$58.0
Guard Force Equipment and Training	\$18.5				\$18.5
Site Security Enhancements	\$381.1	\$74.1	\$87.1	\$359.4	\$901.7
Far East Training Facility	\$0.3	\$10.0			\$10.3
Completed Projects	\$67.1				\$67.1
Nuclear Weapons Transportation Security (Russia)					
Nuclear Weapons Transportation	\$67.9	\$14.1	\$18.5	\$63.6	\$164.1
Railcar Maintenance and Procurement	\$13.9	\$15.9	\$14.5	\$71.7	\$116.0
Weapons Transportation Safety Enhancements	\$13.3				\$13.3
Completed Projects	\$33.0				\$33.0
Fissile Material Storage Facility (Russia)					
Fissile Material Storage Facility Transparency	\$23.0				\$23.0
Completed Projects	\$308.9				\$308.9
BW Proliferation Prevention (FSU)					
Biosecurity and Biosafety and Threat Agent Detection					
and Response	\$212.3	\$54.7	\$45.7	\$312.1	\$624.8
Chemical Weapons Destruction (Russia)					
Completed Projects	\$20.0				\$20.0
Budget	\$1,217.3	\$168.8	\$165.8	\$806.8	\$2,358.7
* Estimated Program FYDP Total					

# Objective 3: Increase Transparency and Encourage Higher Standards of Conduct In Handling FSU WMD

#### 3.1 BIOLOGICAL WEAPONS PROLIFERATION PREVENTION PROGRAM – FSU

(See paragraph 1.5 for BWPP program information.)

#### 3.1.1 Cooperative Biological Research

<u>FY 2007–FY 2011 Five-Year Plan, Purpose, and Resources</u>: DoD works with institutes and scientists previously involved in BW research to employ them in peaceful research focusing on investigating dangerous pathogens for prophylactic, preventive, or other peaceful purposes. By so engaging former BW scientists, CBR helps to: prevent the proliferation of BW scientific expertise and preempt potential "brain drain" of scientists to rogue states; increase the transparency at biological institutes and encourage higher standards of openness, ethics, and conduct by scientists; provide the U.S. access to expertise that can enhance preparedness against biological threats; enable the transfer of EDPs to the U.S. for study to improve public health; and enable forensics reference research.

<u>CBR Russia</u>: During FY 2005, there were 12 projects involving research at 5 institutes, the majority of which ended in FY 2005:

The Research Center for Toxicology and Hygienic Regulation of Biopreparations in Serpukov

- Design of Experimental Aerosol DNA-Vaccine Preparation Against Hantaviral Infection
- A Sampler for the Detection and Express Identification of Airborne Microorganisms;

State Research Institute of Highly Pure Biopreparations in St Petersburg

• Development of Liposomal Forms of Specific Immunoglobulins A for Urgent Prophylaxis and Treatment of Highly Dangerous Infections;

State Research Center for Applied Microbiology in Obolensk

- Study of the Role of *Yersinia pestis* Lipopolysaccharides Structural Organization in the Development of Immune Preparations
- Development of Methods for Therapy of Chronic Melioidosis with *Burkholderia* Specific Immunogens;

Research Center of Molecular Diagnostics and Therapy in Moscow

- Development of Immunofiltration and Immunoenzyme Express Diagnostic Test-Kits for the Determination of Infectious Diseases
- Magnetometric Immunosensor for Multi-Pathogen Continuous Monitoring; and

State Research Center of Virology and Biotechnology in Kol'tsovo

- Study of the Genomic Structure of Crimean-Congo Hemorrhagic Fever Virus Isolates Circulating in the Southern Regions of New Independent States Countries
- Experimental Study of Antiviral Activity of Glycyrrhyzic Acid Derivatives Against Marburg and Ebola Viruses

- 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
- Combinatorial Antibody Libraries to Orthopoxviruses.

The last three projects, which focus on protections against smallpox, are funded and managed jointly by DoD and the Department of Health and Human Services.

<u>CBR Non-Russia</u>: Seven CBR projects—two in Kazakhstan, four in Uzbekistan, and one in Georgia—are underway. Three additional projects are ready for implementation, and three proposals are in the final stages of development:

Kazakh Scientific Center for Quarantine and Zoonotic Diseases: Almaty, Kazakhstan

- Ecological and Socio-Economic Factors of Anthrax Foci Activity and Improvement of its Diagnosis and Prophylaxis
- The Epidemiological Surveillance of Crimean-Congo Hemorrhagic Fever Virus and Hemorrhagic Fever Viruses with Renal Syndrome;

Uzbek Center for the Prevention and Quarantine of the Most Hazardous Infections: Tashkent, Uzbekistan

• Epizootological and Epidemiological Mapping of Anthrax, Plague, and Tularemia;

Uzbek Institute of Virology: Tashkent, Uzbekistan

• Development of a Viral Diagnostic Facility in Uzbekistan;

Republican Institute of Epidemiology, Microbiology and Infectious Diseases: Tashkent, Uzbekistan

• 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;

Uzbek Scientific Research Veterinary Institute: Samarkand, Uzbekistan

• Evaluation of the Vaccinal Strain "Nevsky-13" of Brucella melitensis; and

National Center for Disease Control: Tbilisi, Georgia

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

The three projects approved and ready for implementation are:

Republican Sanitary Epidemiological Station: Almaty, 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;

Uzbek Institute of Virology: Tashkent, Uzbekistan

• Ecological and Virological Study of Arbovirus Infections in the South Aral Region of Uzbekistan; and

Eliava Institute of Bacteriophage, Microbiology, and Virology: Tbilisi, Georgia

• Isolation, Distribution, and Biodiversity of Selected Vibrios and Their Bacteriophages from Aquatic Environments in Georgia.

The three projects under development, two in Kazakhstan and one in Azerbaijan, are:

Kazakh Scientific Center for Quarantine and Zoonotic Diseases: Almaty, Kazakhstan

• Research on a new highly immunogenic strain from *Francisella tularensis*, *subspecies mediaasiatica*, a candidate for human vaccine;

Scientific Research Agricultural Institute: Otar, Kazakhstan

• Epizootological Monitoring and Biological Characterization of the Avian Influenza Virus; and

Republic Anti-Plague Station: Baku, Azerbaijan

• Integrated Assessment of the Current State of Human and Animal Infectious Diseases Surveillance Systems in Azerbaijan.

<u>Description of CTR Activities Carried Out in FY 2005</u>: In Russia, CBR has developed new antiviral compounds to treat infections, including smallpox; investigated the relationships of different strains of viruses to understand how they evolved to become more dangerous; researched vaccines and new therapies for pathogenic bacterial infections; and designed and tested new collection devices as a first line of detecting bioterrorism. The projects have engaged 403 scientists at 7 institutes and helped guide the publication of 14 articles in peer-reviewed journals. Also in Russia, an incident involving a U.S. citizen was addressed in a business-like fashion by both sides. Congress was advised of this matter through appropriate channels.

In non-Russian states, new projects have mapped the occurrence of anthrax throughout Kazakhstan. A characterization of the bacteria causing plague in Georgia and comparison of these strains with U.S. strains has begun. CBR projects in non-Russian states have produced a modern molecular epidemiological study of brucellosis, an important health and economic problem, in Kazakhstan and Uzbekistan. These studies have engaged 224 scientists at 11 different institutes. Non-Russian scientists, in collaboration with their U.S. colleagues, have made seven presentations at international conferences.

The National Academy of Sciences was contracted for general program support and scientific oversight. The Civilian Research and Development Foundation provided program management for projects in Kazakhstan and Uzbekistan. To increase oversight on CBR projects in Russia involving dangerous pathogens, DoD requires that a DoD-designated collaborator be in the laboratory at all times when DoD-funded research is being conducted. DoD renewed a contract with the University Strategic Partnership, led by the University of New Mexico and Pennsylvania State University, to recruit these DoD collaborators, known as Visiting Scientists. The University Strategic Partnership has two active visiting scientists and five identified candidates awaiting assignment.

CTRIC contractors have subcontractor teams supporting development and execution of projects with recipient states' institutes. DoD is integrating the CBR projects into BS&S and TADR activities. DoD's U.S. contractors visit the project's institute sites approximately ten days per month to assess the scientific relevance and credibility of work and to assist project management with environmental analysis, design, safety procedures, implementation assistance, and project support.

Locations: Novosibirsk, Obolensk, Moscow, St. Petersburg, and Serpukhov, Russia; Almaty and Otar, Kazakhstan; Tashkent and Samarkand, Uzbekistan; and Tbilisi, Georgia.

DCAA Audit of an ISTC Project: At the request of DoD, DCAA audited ISTC Project # 1176-2p "Development of Methods for Therapy of Chronic Melioidosis with Burkholdria Specific Immunogens" at the ISTC headquarters in Moscow and at the State Research Center for Applied Microbiology, the performing institute, during January 2005. The audit concluded that equipment controls for this project were adequate but that accounting and timekeeping controls were inadequate. Many of the exceptions reported by DCAA related to the poor performance of the State Research Center for Applied Microbiology's project manager, and subsequently, he was removed from his position. DCAA made several recommendations to improve accounting and time-charging controls in its report dated May 18, 2005. The ISTC's management generally agreed with, and is implementing, these recommendations.

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

Implementing Agreement / Project	Prior Year	FY 2006	FY 2007	FY08-FY11	* Total
BW Proliferation Prevention (FSU)					
Cooperative Biological Research	\$62.2	\$4.6	\$21.0	\$59.4	\$147.2
Budget	\$62.2	\$4.6	\$21.0	\$59.4	\$147.2
* Estimated Program FYDP Total					

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

#### 4.1 WEAPONS OF MASS DESTRUCTION-PROLIFERATION PREVENTION INITIATIVE PROGRAM – FSU, EXCEPT RUSSIA

The WMD-PPI program addresses the potential vulnerability of the non-Russian FSU states' borders to smuggling of WMD and related components. WMD-PPI attempts to complement the CTR Program's traditional focus, WMD at its source, by addressing WMD on the move. Currently, DoD is helping Ukraine, Kazakhstan, Uzbekistan, and Azerbaijan to develop and sustain capabilities to prevent the proliferation of WMD-related materials, components, and technologies across their borders. Agreements are made with the recipient states to have them report any WMD detections made with USG-supplied equipment to the incountry U.S. Embassy, for forwarding to the USG.

WMD-PPI projects follow an incremental implementation strategy: projects will not proceed until successful implementation of a previous stage. This approach provides flexibility and management control while minimizing program risk.

<u>Executive Reviews</u>: In September 2005, DoD held the first Executive Review of Uzbekistan's WMD-PPI project with officials of Uzbekistan's Ministry of Foreign Affairs, MOD, State Customs Committee, and State Committee for the Protection of the Borders. The JRIP, including its assumptions and allocation of responsibilities, was reviewed. It was agreed to have an additional project update meeting prior to the initialing of the JRIP by the Implementing Agents at a future date.

In September 2005, DoD held the first Executive Review of the WMD-PPI project in Ukraine with officials of the State Border Guard Service, the Implementing Agent. An introductory meeting was held with the Head of the State Customs Service which has been designated as the second Implementing Agent. The JRIP was reviewed, including its assumptions and allocation of responsibilities. The State Border Guard Service provided detailed edits of the first JRIP, which were reviewed and referred to the program managers for reconciliation.

#### 4.1.1 Land Border and Maritime Proliferation Prevention (Ukraine)

<u>FY 2007–FY 2011 Five-Year Plan, Purpose, and Resources</u>: In accordance with the Export Control Implementing Agreement, DoD will help Ukraine develop a comprehensive capability to detect and interdict WMD-related materials, technology, and components transiting Ukraine's border with Moldova and to address proliferation prevention along Ukraine's maritime border, on adjacent waters of the Black Sea and Sea of Azov, and at key seaports.

In the land border project, DoD will enhance Ukraine's border security capabilities at key POEs and will coordinate with DOE at common sites where its Second Line of Defense Program is installing portal monitors. The objective is to improve Ukraine's capabilities to monitor, detect, and interdict illicit trafficking in WMD and related materials transiting its border with Moldova, including land areas between POEs and waterways forming parts of the border.

The maritime project, which just commenced, is intended to enhance Ukraine's capabilities to monitor, detect, and interdict illicit trafficking in WMD and related materials transiting through Ukraine's key seaports and on adjacent waters of the Black Sea, including the Sea of Azov. A threat assessment will identify ports most at risk for WMD smuggling. DoD will also provide training for equipment operation and maintenance.

<u>Description of CTR Activities Carried Out in FY 2005</u>: RTSC developed and validated a capabilities assessment methodology and collected and measured traffic data at POEs and stations along Ukraine's border with Moldova. It provided enhancements to command and control, voice communications, surveillance, mobility, and detection and interdiction functions of the State Border Guard Service and State Customs Service within a geographic corridor designated as the project's test bed. RTSC also published an assessment that stipulated a baseline to measure enhancements of the WMD detection and interdiction capability in the test bed and along the border as a result of equipment and training provided by DoD. Use of the test bed continues. DoD signed a second contract with RTSC to initiate the maritime component.

Locations: Timkova, Platonove, Stepanovka, Gradenitsky, Luchinskaye, and Kuchurgan for the Land Border.

#### 4.1.2 Caspian Sea Maritime Proliferation Prevention (Kazakhstan)

<u>FY 2007–FY 2011 Five-Year Plan, Purpose, and Resources</u>: Under the WMDIE Implementing Agreement, DoD will help Kazakhstan develop a comprehensive WMD detection and interdiction capability for its maritime border along the Caspian Sea and on the adjacent waters. This project will be coordinated with the Caspian Sea Maritime Proliferation project in Azerbaijan. DoD is planning an assessment and coordination visit in early FY 2006 to determine the project's requirements and possible locations.

<u>Description of CTR Activities Carried Out in FY 2005</u>: An amendment to the WMDIE Implementing Agreement was concluded on August 23, 2005. It permits development of the WMD-PPI project.

Locations: TBD.

#### 4.1.3 Portal Monitoring (Uzbekistan)

<u>FY 2007–FY 2011 Five-Year Plan, Purpose, and Resources</u>: In accordance with the Border Security Assistance Implementing Agreement, DoD is providing a comprehensive capability for nuclear detection and interdiction at key POEs by providing equipment, training, and logistics support to agencies with authority to monitor its borders. These agencies include: the MOD, which is the Executive Agent; the State Customs Committee and the State Border Protection Committee, which are Implementing Agents; the State Joint Stock Railroad Company; and the Institute for Nuclear Physics. The project has three phases.

Phase 1, which is complete, consisted of a threat assessment, prioritization of POEs, and selected site surveys by Lawrence Livermore National Laboratory. The analysis ranked POEs according to their risk for nuclear smuggling and their priority for receiving portal monitors. DoD awarded a contract to WGI in connection with Phase 2 to: install 2 portal monitors; deliver

hand-held detectors; upgrade communication and data storage; perform additional traffic analysis; improve training on the use of detection, data-storage, and communications equipment; and develop an Employee Dependability Program. During Phase 3, DoD will work closely with DOE's Second Line of Defense Program. DOE ultimately will assume the long-term sustainment of DoD-installed portal monitoring equipment. Responsibility for reporting and training will transition fully to the State Customs Committee and Border Guards at the conclusion of Phase 3.

DoD will complete these three phases by the end of FY 2006. The need and potential for expansion of land-border surveillance, detection, and interdiction to the areas between POEs will be investigated subsequently. DoD also will evaluate the success of the portal monitor project based on Uzbekistan's ability to respond to and report incidents and to sustain training.

<u>Description of CTR Activities Carried Out in FY 2005</u>: WGI completed the installation of portal monitors at the 11 most-at-risk POEs and transitioned operation of the monitors to the Uzbekistan State Customs Committee. It received two contract modifications to install portal monitors at 6 additional POEs, complete communications upgrades at all 17 of these POEs, and provide associated training.

Locations: Alat, Andarkhon, Ayritom (rail and vehicle POEs), Dustlik, Gisht-Kuprik, Jar-Tepa, Karakalpakia, Keles/Nazarbek, Khodjidovlet, Khojayli, Navoi, Oybek, Sary-Assia, Tashkent International Airport Pedestrian and Cargo sites, Uzun, and Yallama.

#### 4.1.4 Caspian Sea Maritime Proliferation Prevention (Azerbaijan)

<u>FY 2007–FY 2011 Five-Year Plan, Purpose, and Resources</u>: In accordance with the WMD-PPI Implementing Agreement, this project supports Azerbaijan's development of a comprehensive capability for WMD surveillance and interdiction on its Caspian Sea border. The project 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 a coastal operating location in the south to improve on-station time and expand the patrol areas of the Maritime Border Guard's vessels.

Increment 1, completed in July 2005, defined the task to enhance Azerbaijan's capabilities for surveillance and interdiction and to establish an Initial Operational Capability. An Interim Command and Control Center was put into operation. Improving Azerbaijan's operational capability by repairs or upgrades of patrol and support craft began. DoD provided WMD detection equipment; installed radar and a data network; and enhanced maintenance, logistics, and training systems. Increment 2, which began in July 2005 and is scheduled to end in July 2006, will turnover to the Maritime Border Guard the responsibility for sustaining the new program for vessel maintenance. DoD also will support repairing patrol boats, construction of the Astara Boat Basin, revision of the detection and interdiction Concept of Operations and supporting plans, provide additional training assistance, and support planning for eventual transition of all new proliferation prevention capabilities to Azerbaijan.

<u>Description of CTR Activities Carried Out in FY 2005</u>: WGI developed an initial Concept of Operations, established the Interim Command and Control Center, installed shortand long-range radar data links to the Interim Command and Control Center, purchased and delivered WMD detection and boarding equipment, established a comprehensive training program, and completed an assessment plan.

Locations: Altiagach, Astara, and Baku.

#### 4.1.5 Land Border Proliferation Prevention (Moldova)

<u>FY 2007–FY 2011 Five-Year Plan, Purpose, and Resources</u>: DoD has tabled an implementing agreement with Moldova that would establish a legal framework to develop a WMD-PPI project to enhance Moldova's capabilities to monitor borders for illegal transport of WMD and WMD-related material. Specific project requirements will be determined after the implementing agreement is concluded.

Description of CTR Activities Carried Out in FY 2005: None. This is a new project.

Locations: TBD.

#### 4.1.6 Fissile and Radioactive Material Proliferation Prevention (Kazakhstan)

<u>FY 2007–FY 2011 Five-Year Plan, Purpose, and Resources</u>: In the summer of 2000, radiological sources were found in an unprotected environment at one site. Previous efforts to assist Kazakhstan in securing these sources were funded under the WMDIE Kazakhstan program. This project will be completed in FY 2006.

<u>Description of CTR Activities Carried Out in FY 2005</u>: A contract was awarded at the end of FY 2005. The CIS contractor performed two maintenance actions on DoD equipment.

Location: TBD.

#### 4.1.7 Expanded WMD-PPI Project Areas

<u>FY 2007–FY 2011 Five-Year Plan, Purpose, and Resources</u>: DoD is prepared to implement new WMD-PPI project areas following an interagency-coordinated decision to initiate a new project. "Quick response packages" can be implemented in a shorter timeframe than that required to develop a full project, if necessary to support U.S. national objectives. Factors determining the development and timing of any new initiative include the threat of proliferation, political considerations, evolving relations with recipient states including the signing of necessary CTR agreements, and the impact of complementary DoD and related U.S. efforts. The WMD-PPI program will continue to rely on incremental implementation in order to provide maximum flexibility, optimize the use of funds, respond quickly to evolving requirements, and reduce program risk.

Description of CTR Activities Carried Out in FY 2005: None.

Location: N/A.

#### 4.2 DEFENSE AND MILITARY CONTACTS

The DMC program was created in 1993 as a part of the larger CTR Program and is a policy tool to promote USG objectives in the FSU states that are eligible for CTR Program assistance. Conferences, familiarization visits, traveling contact teams, and combined military exercises are used. 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. They are designed to build security cooperation with the Eurasian states. 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, 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.

The DMC program attempts to develop positive relationships between the defense, military, and security communities of the U.S. and FSU states. This program is developed by the Office of the Assistant Secretary of Defense for International Security Policy, through the Deputy Assistant Secretary of Defense for Eurasia Policy, in close coordination with the Joint Staff, the Combatant Commands, and the U.S. military services to ensure that scheduled events support the Secretary of Defense's Security Cooperation Guidance and regional commands' 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.

<u>FY 2007–FY 2011 Five-Year Plan, Purpose, and Resources</u>: Future events will include Bilateral Defense Consultations between the Office of the Secretary of Defense and MODs, exchange visits between the Chairman of the Joint Chiefs of Staff and his FSU-states counterparts, and Consultative Staff Talks between U.S. Combatant Commanders and key FSU military leaders. In support of U.S. counterproliferation goals, the DMC program sponsors exercises and Traveling Contact Teams. In support of U.S. counterterrorism objectives, the DMC program will sponsor events such as Special Forces air interoperability familiarizations and intelligence operation and anti-terror Traveling Contact Teams. More traditional activities that promote defense reform and democratic military institutions will include: visits of senior and mid-level officers; visits among naval, air, and ground units; bilateral exercises; and ship visits.

<u>Description of CTR Activities Carried Out in FY 2005</u>: Over 200 events were conducted. These included eight Bilateral Defense Consultations; development of a defense assessment and implementation plan for Armenia; conduct of a revised defense assessment update and several familiarization events in support of the Georgia Sustainment and Stability Operations Program; conduct of mountainous terrain and special forces exercise exchanges with Kazakhstan; conduct of an Arctic search and rescue exercise with Russia; and holding the Peace Shield 2005 force interoperability planning conference with Ukraine. The DMC 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.

#### 4.3 CHEMICAL WEAPONS ELIMINATION – ALBANIA

This first CTR project outside the FSU will assist the Government of Albania to eliminate a stockpile of 16.45 metric tons of chemical weapons agent comprised of bulk-agent mustard, lewisite, mustard-lewisite, adamsite, and chloroacetophenone. The CTR Program supports disposal of the chemical agents in accordance with Albanian requirements under the CWC.

<u>FY 2007–FY 2011 Five-Year Plan, Purpose and Resources</u>: The project has four phases. Phase I surveys the potential elimination site; assesses the existing infrastructure; determines Albania's capabilities for support; establishes an environmental baseline; characterizes chemical agents at the site; prepares the site and roads to support elimination operations; designs, fabricates, and tests the elimination system; and assists the Albanian MOD to comply with OPCW documentation requirements. Phase II will ship and assemble the elimination equipment on-site and perform systemization and functionality testing. Elimination of all chemical agents will occur in Phase III. Phase IV will verify the chemical agent's elimination, decontamination and redeployment of equipment, and turnover of secondary waste to Albania for final disposition. This project will be completed after a close-out environmental and chemical-agent assessment to verify that the site is returned to pre-operational condition by April 2007.

Description of CTR Activities Carried Out in FY 2005: DoD awarded a task order to the CIS contractor, RTSC, for site preparations and road improvements. The U.S. Army Edgewood Chemical Biological Center collected and analyzed agent samples to characterize the material. The U.S. Army Center for Health Promotion and Preventive Medicine assessed samples to establish an environmental baseline for the site. DoD awarded a contract to WGI to design, fabricate, test, assemble, and operate a system to eliminate the agent. It is currently designing and fabricating the elimination system, designing infrastructure, developing work plans and procedures, and issuing subcontracts. WGI also initiated the Environmental Impact Assessment and provided OPCW documentation for Albania. The U.S. Army Center for Health Promotion and Preventive Medicine as the tention and Preventive Medicine, and the Tennessee Valley Authority are serving as technical consultants to assist program management and oversight.

On-site U.S. management of activities in Albania included numerous site inspections and oversight and coordination trips to Albania by the program management team in addition to the presence of the CIS contractor. WGI has an office in Tirana, Albania to manage and oversee preparatory work for elimination operations.

Location: Qaf Molla.

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

Implementing Agreement / Project	Prior Year	FY 2006	FY 2007	FY08-FY11	* Total
WMD Proliferation Prevention					
Land Border/Maritime Proliferation Prevention (Ukraine)	\$21.9	\$25.3	\$12.3	\$48.8	\$108.3
Caspian Sea Maritime Proliferation Prevention (Kazakhstan)	\$4.2	\$2.1	\$11.0	\$21.9	\$39.2
Portal Monitoring (Uzbekistan)	\$30.5	\$4.8	\$5.0	\$21.7	\$62.0
Caspian Sea Maritime Proliferation Prevention (Azerbaijan)	\$44.9	\$5.0	\$8.2		\$58.1
Land Border Proliferation Prevention (Moldova)		\$3.4	\$1.0	\$29.4	\$33.8
Fissile and Radioactive Material Proliferation Prevention (Kazakhstan)	\$4.5				\$4.5
Expanded WMD-PPI Project Areas				\$50.7	\$50.7
Defense and Military Contacts					
Defense and Military Contacts	\$56.6	\$8.0	\$8.0	\$32.0	\$104.6
Chemical Weapons Destruction Albania					
Chemical Weapons Elimination	\$34.4				\$34.4
Budget	\$197.0	\$48.6	\$45.5	\$204.5	\$495.6
* Estimated Program FYDP Total					

# **OTHER PROGRAM SUPPORT**

This work assists the overall implementation of the CTR Program in areas 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 umbrella and implementing agreements with recipient states and overall program management and administration.

#### **Audits and Examinations**

<u>FY 2007–FY 2011 Five-Year Plan, Purpose, and Resources</u>: The objective of the A&E program is to ensure that assistance provided by DoD's CTR Program is accounted for and used efficiently and effectively for its intended purpose. In accordance with the umbrella and implementing agreements, the U.S. has the right to examine the use of any material, training, or other services provided under these agreements. A&Es may be performed for a period of three years after expiration of the respective umbrella agreements with Russia, Kazakhstan, Georgia, Moldova, Albania, and Uzbekistan. For Ukraine, A&Es may be performed until expiration of the U.S.-Ukraine CTR Umbrella Agreement.

<u>Description of CTR Activities Carried Out in FY 2005</u>: DoD conducted five A&Es: four in Russia and one in Ukraine. Through FY 2005, the U.S. has conducted 162 A&Es in the recipient states.

#### **Program Management/Administration**

<u>FY 2007 – FY 2011 Five-Year Plan, Purpose, and Resources</u>: Program management and administration funding supports CTR requirements that are not unique to established projects. Expenditure of funds in this category supports development of technical requirements during a project's initial stage before appropriate implementing agreements are signed. Program management funding covers team travel expenses, translator/interpreter support, contracted Advisory and Assistance Services support, Independent Professional Analyst personnel, and support to CTR Defense Threat Reduction Offices at U.S. embassies in recipient states.

<u>Description of CTR Activities Carried Out in FY 2005</u>: Advisory and Assistance Services support through an incrementally funded contract was provided by the Threat Reduction Support Center (TRSC) team with Science Applications International Corporation as the prime contractor and TRSC manager. The TRSC 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 and Planning Programming Budgeting and Execution expertise; and supplied technical and analytical support for source selection boards.

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

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

Implementing Agreement / Project	Prior Year	FY 2006	FY 2007	FY08-FY11	*Total
Audits and Examinations	\$3.8	\$0.5	\$0.5	\$2.0	\$6.8
Program Management/Administration	\$144.6	\$14.1	\$18.0	\$77.3	\$254.0
Budget	\$148.4	\$14.6	\$18.5	\$79.3	\$260.8
* Estimated Program FYDP Total					

#### Figure 7: Summary of CTR Program FYDP funding by Objective in millions.

Objective	Prior Year	FY 2006	FY 2007	FY08-FY11	*Total
1. Dismantle former Soviet Union WMD and					
associated infrastructure	\$2,635.9	\$173.8	\$121.4	\$328.2	\$3,259.3
2. Consolidate and secure FSU WMD and					
related technology and materials	\$1,217.3	\$168.8	\$165.8	\$806.8	\$2,358.7
3. Increase transparency and encourage higher					
standards of conduct in handling FSU WMD	\$62.2	\$4.6	\$21.0	\$59.4	\$147.2
4. Support defense and military cooperation with					
objective of preventing proliferation	\$197.0	\$48.6	\$45.5	\$204.5	\$495.6
Other Program Support	\$148.4	\$14.6	\$18.5	\$79.3	\$260.8
CTR Programs that are complete or require no					
additional funding	\$827.2				\$827.2
Total Budget	\$5,088.0	\$410.4	\$372.1	\$1,478.3	\$7,348.8
* Estimated Program FYDP Total					

## **CTR Program Accountability Actions by Project for FY 2005**

The CTR Program Accountability Actions by Project for FY 2005 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. (see Figure 8) Paragraph references to project and program narratives are included.

CTR project and program managers (PMs): travel to locations in FSU states to review project status; provide support to CTR Policy; review and accept deliverables; negotiate contracts; meet with Executive Agents, Implementing Agents, and U.S. contractors; and perform additional management actions. PMs made 174 trips to FSU states during FY 2005. Because many trips supported multiple objectives, these trips have been appropriately counted against more than one program or project. The CIS contractor makes site visits to perform maintenance and/or provide Letter of Verification and Transfer of Custody support. A&Es, PM trips, and CIS actions shown in the program rows were performed for the benefit of multiple projects under the given program.

		A8	E(s)		0	CIS	
						Main-	U.S.
Paragraph				PM	Visits		<b>On-Site</b>
Reference	Program / Project	Planned	Complete	Trips		Actions	Support
1.1	Strategic Offensive Arms Elimination - Russia	1		1			
1.1.1	Emergency Response Support Equipment	1	1		4	32	
1.1.2	Solid Propellant ICBM/SLBM and Mobile Launcher			23	22	199	Y
1.1.3	Elimination Liquid Propellant ICBM and Silo Elimination			5	24	264	Y
1.1.3	SLBM Launcher Elimination/SSBN Dismantlement			6	13	127	I
1.1.4	Spent Naval Fuel Disposition			5	15	121	
1.1.6	Liquid Propellant SLBM Elimination			2	9	88	
<b>2.1</b>	Nuclear Weapons Storage Security - Russia	3	1	4	19	<b>52</b>	
2.1.1	Automated Inventory Control & Management System		•	3	4	52	
2.1.1	Guard Force Equipment and Training			1	1	1,103	Y
2.1.2	Site Security Enhancements			14	88	5	1
2.1.3	Far East Training Center			2	00	5	
2.1.4	Nuclear Weapons Transportation Security - Russia	3	2	2			
2.2.1	Nuclear Weapons Transportation Security - Russia	3	2				
2.2.1	Railcar Maintenance and Procurement			3	-		
2.2.2	Transportation Safety Enhancements			3	1		
	Fissile Material Storage Facility - Russia	2			1		
<b>2.3</b> 2.3.1		2					
<b>1.2</b>	Fissile Material Storage Facility Transparency Chemical Weapons Destruction - Russia						
1.2.1	Chemical Weapons Destruction Facility			e	17		Y
				6 10	17		T
1.2.2	Chemical Weapons Production Facility Demilitarization Russia Total	40	4	-	202	4 070	
1.3		10 1	-	85	202	1,870 141	
_	Strategic Nuclear Arms Elimination - Ukraine	1	1	6	15		V
1.3.1	SS-24 Missile Disassembly, Storage, and Elimination			6 6	10 62	30 412	Y Y
1.3.2	Bomber and ASM Elimination			6	62	412	ř
1.4	WMD Infrastructure Elimination - Ukraine						
1.4.1	Nuclear Weapons Storage Area Elimination			6	07	500	
4.2	Ukraine Total	1	1	24	87	583	v
4.3	Chemical Weapons Elimination - Albania	•	•	4	2	•	Y
45.04	Albania Total	0	0	4	2	0	
1.5, 2.4, 3.1	BW Proliferation Prevention - Former Soviet Union			7	8		
1.5.1	BW Infrastructure Elimination			5			Y
2.4.1	Biosecurity and Biosafety / Threat Agent Detection and	3		47			Y
2.4.1	Response	5		47			
3.1.1	Cooperative Biological Research			18			Y
4.1	WMD Proliferation Prevention Initiative - FSU			2	25	67	
4.1.1	Land Border/Maritime Proliferation Prevention (Ukraine)						
4.1.2	Caspian Sea Maritime Proliferation Prevention						
4.1.3	(Kazakhstan) Portal Monitoring (Uzbekistan)			8			
4.1.3	Caspian Sea Maritime Proliferation Prevention			0			
4.1.4	(Azerbaijan)			7			
4.1.5	Land Border Proliferation Prevention (Moldova)			7			
4.1.6	Fissile and Radioactive Materials Proliferation Prevention (Kazakhstan)			9		2	
4.1.7	Expanded WMD-PPI Project Areas				l		
4.2	Defense and Military Contacts				l		
	CTR Integrated Services Program			8	l		
	(TBD AUDIT)	2			1		
	FSU - Former Soviet Union Programs Total	5	0	118	33	69	
	Grand Totals	16	5	231	324	2,522	

Figure 8: CTR Program accountability actions by project for FY 2005.

#### **Accounting Activities Planned for FY 2006**

DoD has enhanced the development process for the FY 2006 Annual A&E Schedule. The risk matrix used previously has been replaced by project candidate analyses completed through a collaborative process including key stakeholders. These analyses contain anticipated audit objectives, recommended audit testing techniques, and key background data to help plan and execute each audit and address accountability concerns and implementation challenges. The use of the candidate analyses will help DoD to select projects to audit and to identify testing objectives that provide impartial feedback on the use of CTR Program assistance, assess efficiency and effectiveness of project implementation, and address the concerns of the program managers. Project candidate analyses, recommendations from program and executive management, and input from the Intelligence Community were key inputs to development of the A&E schedule for FY 2006.

DoD plans to conduct A&Es for FY 2006 in Russia, Ukraine, Uzbekistan, Kazakhstan, Azerbaijan, and Georgia as part of the Accounting for CTR Program Assistance in the States of the FSU to ensure that CTR Program assistance is fully accounted for, is used for its intended purposes, and is being used efficiently and effectively.

Month	Russia	Ukraine	Uzbekistan	Kazakhstan	Azerbaijan	Georgia	FY 2006
October	1						1
November							0
December							0
January	1						1
February			1				1
March							0
April						1	1
Мау	1						1
June					1		1
July	1	1					2
August			1	1			2
September	2						2
Total	6	1	2	1	1	1	12

Figure 9: A&E monthly activities for FY 2006.

# APPENDIX A: CTR PROGRAM UMBRELLA AGREEMENTS AND IMPLEMENTING AGREEMENTS

The Appendix lists umbrella agreements, implementing agreements, and memoranda of understanding that have been concluded with FSU states and Albania. 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 (U.S.-Albania CTR Umbrella 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, as amended September 27, 2005 (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, dated 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 and August 26, 2005 (WMD-PPI Implementing 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 the Area of Prevention of Proliferation of Technology, Pathogens and Expertise that Could Be Used in the Development of Biological Weapons, dated June 6, 2005 (Biological Threat Reduction Implementing Agreement - Azerbaijan)

#### **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, August 30, 2004, and November 3, 2005 (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, December 7, 2004, and August 23, 2005 (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, July 28, 2004, and October 6, 2005 (CWD 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, July 12, 2004, May 23, 2005, and August 26, 2005, 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 May 5, 2005, 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, as amended March 26, 2004 and June 27, 2005 (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)

Agreement Between the Department of Defense of the United States of America and the Ministry of Health of Ukraine Concerning Cooperation in the Area of Prevention of Proliferation of Technology, Pathogens and Expertise that could be Used in the Development of Biological Weapons, dated August 29, 2005 (Biological Threat Reduction Implementing Agreement -Ukraine)

# 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, October 22, 2004, and May 23, 2005 (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 IN MILLIONS

	Notified	Cumulative	Obligated	Cumulative	Expended	Cumulative
Program Name	In FY2005	Notified	In FY2005	Obligations	In FY2005	Expended
Strategic Offensive Arms Elimination (R)	\$11.30	\$1,133.01	\$68.32	\$1,129.45	\$118.26	\$977.13
Nuclear Weapons Storage Security (R)	\$73.90	\$525.00	\$72.35	\$476.45	\$71.48	\$293.57
Nuclear Weapons Transportation Security (R)		\$128.08	\$19.73	\$124.12	\$16.38	\$103.64
Fissile Material Storage Facility (R)		\$331.88	(\$0.02)	\$331.21	\$0.64	\$319.67
Fissile Material Containers (R)	(\$0.49)	\$73.02	(\$0.01)	\$72.95		\$69.35
Elimination of Weapons-Grade Plutonium Production (R)		\$26.05	(\$0.01)	\$25.93		\$25.93
Chemical Weapons Destruction (R)	\$154.22	\$983.55	\$151.84	\$961.44	\$129.25	\$484.42
Emergency Response (R)	(\$0.03)	\$15.25	(\$0.00)	\$14.85	(\$0.00)	\$14.83
Security Enhancements for Railcars (R)	(\$0.00)	\$21.49	(\$0.00)	\$21.38		\$21.38
Material Control and Accounting (R)	(\$0.01)	\$44.09		\$43.82		\$43.82
Export Control (R)	(\$0.19)	\$2.04		\$2.04		\$2.04
Defense Conversion (R)	(\$6.38)	\$37.28	(\$0.53)	\$36.67	(\$0.00)	\$36.12
International Science and Technology Center (R)	(\$0.00)	\$35.00		\$34.89		\$34.89
Arctic Nuclear Waste (R)	(\$0.08)	\$29.09	(\$0.00)	\$29.07		\$28.72
Strategic Nuclear Arms Elimination (U)	(\$7.17)	\$494.58	(\$1.23)	\$492.46	\$6.59	\$477.68
Government-to-Government Communications Link (U)	(\$0.11)	\$1.96	(\$0.11)	\$1.96		\$1.95
WMD Infrastructure Elimination (U)		\$25.10	(\$0.45)	\$22.41	\$1.12	\$21.17
Emergency Response (U)	(\$0.02)	\$2.80	(\$0.02)	\$2.80		\$2.80
Multilateral Nuclear Safety Initiative (U)	(\$0.01)	\$10.99		\$10.99		\$10.99
Material Control and Accounting (U)	(\$0.00)	\$21.97		\$21.97		\$21.75
Export Control (U)	(\$0.01)	\$13.85	(\$0.01)	\$13.85		\$13.85
Defense Conversion (U)	(\$0.35)	\$55.38	(\$0.13)	\$55.24	\$0.01	\$55.16
Science and Technology Center (U)	(\$0.31)	\$14.69		\$14.69		\$14.69
Strategic Offensive Arms Elimination (K)	(\$0.07)	\$59.49	(\$0.04)	\$59.47	\$0.00	\$58.82
Government-to-Government Communications Link (K)	(\$0.01)	\$2.31	(\$0.00)	\$2.31		\$2.31
WMD Infrastructure Elimination (K)	(\$6.35)	\$42.05	\$0.50	\$41.95	\$4.99	\$41.36
BW Proliferation Prevention (KZ)		\$5.00		\$4.99	\$1.01	\$4.99
Emergency Response (K)	(\$0.00)	\$3.99	(\$0.01)	\$3.99		\$3.99
Material Control and Accounting (K)	(\$0.00)	\$21.88		\$21.89		\$21.82
Export Control (K)	(\$0.01)	\$7.12	(\$0.01)	\$7.12	\$0.00	\$7.11
Defense Conversion (K)	(\$0.06)	\$17.14	(\$0.00)	\$17.10	\$0.02	\$17.06
Strategic Offensive Arms Elimination (B)	(******	\$3.34	(\$0.00)	\$3.34		\$3.34
Continuous Communications Link (B)	(\$0.00)	\$1.02	. ,	\$1.00		\$1.00
Environmental Restoration (Project Peace) (B)	(\$0.00)	\$24.44	(\$0.00)	\$24.44		\$24.36
Emergency Response (B)	(\$0.00)	\$4.97	(******	\$4.86		\$4.82
Export Control (B)	(\$0.03)	\$12.09	(\$0.00)	\$11.99		\$11.98
Defense Conversion (B)	(\$0.01)	\$19.24	(******	\$19.24		\$19.24
Nukus Chemical Research (UZ)	(\$0.09)	\$8.36	\$0.02	\$8.35	\$0.02	\$8.33
Export Control (G)	(\$0.01)	\$1.13	(\$0.01)	\$1.13		\$1.10
BW Proliferation Prevention (FSU)	\$94.94	\$293.84	\$108.35	\$288.70	\$73.08	\$156.05
Defense and Military Contacts (FSU)	(\$0.04)	\$56.77	\$12.21	\$48.54	\$8.91	\$37.11
Defense and Military Contacts (R)	(\$0.02)	\$11.64	\$0.08	\$11.19	\$0.06	\$10.15
Defense and Military Contacts (U)	(\$0.02)	\$5.37	<i>¥</i> 0.00	\$3.93	<i><b>40.00</b></i>	\$3.80
WMD Proliferation Prevention Initiative (FSU)	\$39.90	\$109.10	\$45.88	\$82.53	\$32.55	\$33.12
Chemical Weapons Destruction (Albania)	\$31.20	\$31.20	\$26.94	\$26.94	\$2.36	\$2.36
Other Assessments/Administration Costs	(\$0.30)	\$148.72	\$15.94	\$145.46	\$16.09	\$129.64
Programs with no financial activity in FY 2005	(\$0.50)	\$171.90	φ10.04	\$171.48	ψ10.03	\$168.40
Total CTR	\$383.29	\$5,088.26	\$519.57	\$4,952.59	\$482.81	\$3,847.81

# APPENDIX C: FINANCIAL COMMITMENTS FOR FY 2006 FROM THE INTERNATIONAL COMMUNITY AND RUSSIA FOR THE CHEMICAL WEAPONS DESTRUCTION FACILITY (CWDF) AT SHCHUCH'YE, RUSSIA

## FY 2006 Financial Commitment from the International Community

The international community has committed over \$237 million<sup>2</sup> for infrastructure and other support to construct the nerve-agent destruction facility at Shchuch'ye. As agreed by G-8 leaders at the Kananaskis Summit in June 2002, CWD in Russia is a high priority for the G-8 Global Partnership against the Spread of Weapons and Materials of Mass Destruction. Since the summit, several countries have announced commitments under the Global Partnership to provide assistance to Russian CWD, including Shchuch'ye. Other countries continue to indicate interest in supporting Shchuch'ye, and additional contributions for the CWDF project in FY 2006 are possible. Specific international commitments for Shchuch'ye include:

- <u>Belgium</u>: Announced at the October 2005 meeting of the Global Partnership Working Group its commitment to provide \$100K for the Shchuch'ye project.
- <u>Canada</u>: Canada signed a Memorandum of Understanding with the United Kingdom in November 2003 to provide C\$33 million (≈ \$27.8 million) for construction of an 18 kilometer railway linking the Planovy storage facility to the Shchuch'ye CWDF through the United Kingdom-Russia bilateral agreement. Canada also plans to fund the related railway inspection station required by Russia. In January 2005, Canada signed a second Memorandum of Understanding with the United Kingdom for additional contributions to Shchuch'ye CWDF construction. Canada has committed C\$10 million (≈ \$8.4 million) for key industrial projects at Shchuch'ye, including a local warning system to broadcast chemical contamination threat information. Total commitments to the Shchuch'ye CWDF by Canada as of August 2005 are just over C\$103.4 million (≈ \$86.9 million).
- <u>Czech Republic</u>: Committed \$207,000 ( $\approx$  \$69,000 per year for 2003-2005) for infrastructure and equipment for a second destruction line at Shchuch'ye.
- <u>Denmark</u>: Committed €100,000 (≈ \$125,000) to support the Green Cross CWD public outreach program in Russia. It is unclear if this will provide direct support for Shchuch'ye CWDF public outreach efforts.
- <u>European Union</u>: Provided €2 million (≈ \$2.4 million) for Shchuch'ye infrastructure under the Global Partnership.
- <u>Finland</u>: Committed €150,000 (≈ \$188,000) to support the Green Cross CWD public outreach program in Russia. It is unclear if this will support Shchuch'ye CWDF public outreach efforts.

<sup>&</sup>lt;sup>2</sup> 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.

- <u>France</u>: Committed €6 million (≈ \$7.5 million) for an environmental survey of the Shchuch'ye CWDF. At the December 13, 2004 Chemical Weapons Destruction Donor Coordination Meeting at The Hague, reported working with Russia on an agreement to fund an environmental survey in Shchuch'ye. At the October 2005 Global Partnership Working Group, Russia's Ministry of Foreign Affairs reported that the bilateral agreement had been completed and is to be signed shortly.
- <u>Ireland</u>: Committed €50,000 (≈ \$63,000) through the United Kingdom program for projects at Shchuch'ye.
- <u>Italy</u>: Provided €7.7 million (≈ \$9.6 million) for one portion of the gas pipeline in Shchuch'ye and committed €5 million (≈ \$6.3 million) for an additional portion of the gas pipeline.
- <u>Netherlands</u>: Provided €1.5 million (≈ \$1.88 million) through the United Kingdom for installation of a metal parts furnace for the Shchuch'ye CWDF and €48,700 (≈ \$60,900) for an assessment of social infrastructure investment and community development needs in the Shchuch'ye area and committed €43,300 (≈ \$54,100) through Green Cross for public outreach.
- <u>Sweden</u>: Announced at the October 2005 meeting of the Global Partnership Working Group its commitment to provide 5.5 million Kronor ( $\approx$  \$690,000) for the Shchuch'ye project.
- <u>Switzerland</u>: Committed CHF\$780,000 (Swiss Franks) ( $\approx$  \$630,000) for a sanitary and hygiene monitoring system in Shchuch'ye.
- <u>United Kingdom</u>: Committed up to £70 million (≈ \$127.0 million) for (1) procurement of equipment for the electricity substation; (2) construction of a railway from the Planovy chemical weapons storage site to the Shchuch'ye CWDF on behalf of Canada; (3) implementation of further industrial infrastructure projects on behalf of the United Kingdom, Canada, New Zealand, and other donors; and (4) procurement of main process equipment for the second munitions destruction building on behalf of the United Kingdom, Canada, Netherlands, and other donors.
- <u>The Nuclear Threat Initiative, a non-governmental organization</u>: Committed \$1.0 million to Shchuch'ye, tied to the Canadian railway commitment.

#### FY 2006 Financial Commitment from the Russian Federation

In September 2005, FAI reported total 2005 Russia funding for Shchuch'ye at R604 million ( $\approx$  \$21.3 million), with an additional R44 million ( $\approx$  \$1.5 million) having been made available during the year. Approximately two-thirds are for production facilities and the rest is for social infrastructure. FAI requested R18.287 billion ( $\approx$  \$643.9 million) in its 2006 budget submission for chemical weapons elimination (Russia-wide). This request has not yet been approved.

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

#### Russia

During FY 2005, DoD determined that only scrap-metal revenues resulting from dismantlement of SSBNs with CTR Program assistance will be subject to audit. DoD will require FAEA to report on the use of these proceeds. Further, the requirement to report on the quantity of scrap produced, proceeds obtained from its sale, and the disposition of these proceeds will be incorporated into all new contracts for SSBN dismantlement. This requirement and a definition of the allowable use of these funds will be reflected in the JRIP for the Nuclear Ballistic Missile Submarine Launcher Elimination and Spent Naval Fuel Disposition Projects between DoD and FAEA. DoD will discuss these requirements at a future Executive Review.

DoD determined that there will be no requirement to report on scrap generated from other SOAE projects in Russia, including liquid propellant ICBM and silo elimination, because the costs to monitor and audit the production of the relatively small quantity of scrap, proceeds from its sale, and disposition of the proceeds would exceed any benefits DoD might realize from data collection. Therefore, DoD omitted this reporting requirement from the JRIP with FSA.

#### Ukraine

Ukraine has stated that approximately 830,000 kilograms of scrap metal were generated from eliminating bombers during CY 2004, resulting in approximately \$515,000 of revenue. DoD audited this report by comparing the quantity of scrap metal reported with documentation provided by the USG's on-site contractors and dollars-per-kilogram generated to industry standards. Each comparison was favorable. Further, Ukraine indicated that the proceeds were used to construct housing for decommissioned military personnel, which DoD deems an acceptable disposition complementing CTR objectives. DoD will perform annual audits of scrap reporting and follow-up actions with Ukraine on any noted discrepancies.

# APPENDIX E: SECTION 1307 OF THE NDAA FOR FY 1999 SUMMARY OF AMOUNT, IN THOUSANDS, REQUESTED BY PROJECT CATEGORY

Program	Project	FY 2005	FY 2006	FY 2007
Strategic	Offensive Arms Elimination - Russia	\$52,495	\$62,688	\$76,985
	Emergency Response Support Equipment	\$400	\$400	\$400
	Solid Propellant ICBM/SLBM and Mobile Launcher Elimination	\$36,585	\$31,350	\$55,296
	Liquid Propellant ICBM and Silo Elimination	\$12,815	\$8,129	\$16,007
	SLBM Launcher Elimination/SSBN Dismantlement	\$1,868	\$21,783	\$2,592
	Spent Naval Fuel Disposition	\$419	\$261	\$230
	Liquid Propellant SLBM Elimination	\$408	\$765	\$2,460
Nuclear W	/eapons Storage Security - Russia	\$73,899	\$84,100	\$87,100
	Automated Inventory Control & Management System	\$1,500		
	Guard Force Equipment and Training	\$100		
	Site Security Enhancements	\$72,299	\$74,100	\$87,100
	Far East Training Center		\$10,000	
Nuclear W	/eapons Transportation Security - Russia		\$30,000	\$33,000
	Nuclear Weapons Transportation		\$14,084	\$18,484
	Railcar Maintenance and Procurement		\$15,916	\$14,516
Chemical	Weapons Destruction - Russia	\$157,875	\$108,500	\$42,700
	Chemical Weapons Destruction Facility	\$154,675	\$108,500	\$42,700
	CW Production Facility Demilitarization	\$3,200		
<b>BW Prolif</b>	eration Prevention - FSU	\$68,699	\$60,849	\$68,357
	BW Infrastructure Elimination		\$1,500	\$1,700
	Biosecurity & Biosafety and Threat Agent Detection and Response	\$58,261	\$54,749	\$45,657
	Cooperative Biological Research	\$10,438	\$4,600	\$21,000
WMD Pro	iferation Prevention - FSU	\$36,700	\$40,600	\$37,486
	Caspian Sea Maritime Proliferation Prevention (Azerbaijan)	\$11,961	\$4,993	\$8,218
	Caspian Sea Maritime Proliferation Prevention (Kazakhstan)	\$4,135	\$2,065	\$10,957
	Land Border and Maritime Proliferation Prevention (Ukraine)	\$5,634	\$25,345	\$12,297
	Portal Monitoring (Uzbekistan)	\$10,472	\$4,750	\$5,014
	Land Border Proliferation Prevention (Moldova)		\$3,447	\$1,000
	Fissile and Radioactive Material Proliferation Prevention (Kazakhstan)	\$4,498		
	nd Military Contacts - FSU	\$7,963	\$8,000	\$8,000
	Defense and Military Contacts	\$7,963	\$8,000	\$8,000
Other Ass	essments/Administrative Costs	\$3,387	\$14,600	\$18,500
	Audits and Examinations	\$500	\$500	\$500
	Program Management/Administration	\$2,887	\$14,100	\$18,000
Chemical	Weapons Elimination - Albania	\$6,855		
	Chemical Weapons Elimination	\$6,855		
Strategic	Nuclear Arms Elimination - Ukraine		\$1,100	
	SS-24 Missile Disassembly, Storage, and Elimination		\$1,100	
Total		\$407,873	\$410,437	\$372,128

# APPENDIX F: 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 Reductions (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 and limit its aggregate number of operationally deployed strategic nuclear warheads to between 1700 and 2200 by December 31, 2012. DoD's CTR Program assists FSU states to reduce the number of warheads 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 the reactor cores of 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 directly support implementation of the Moscow Treaty.

DoD develops CTR Program plans based on information provided by Russia on strategic systems and infrastructure that it expects to make available for elimination or consolidation or for more secure storage. DoD assistance is timed to accommodate the pace at which Russia projects that it will turn over these materials for deactivation. Thus, the CTR Program supports implementation of the Moscow Treaty by continuing to plan for elimination, consolidation, or securing of Russia's strategic systems and by providing assistance to improve Russia's inventory and control of its deactivated nuclear weapons and weapons-usable components and material. This report catalogues the CTR Program's planned FY 2006 activities that support implementation of the Moscow Treaty.

# II. Current Year (FY 2006) Activities

<u>Strategic Offensive Arms Elimination (SOAE)</u>: 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 Conversion or Elimination Protocol.

Solid Propellant ICBM/SLBM and Mobile Launcher Elimination. Eight SS-N-20 SLBMs, 15 SS-24 ICBMs, 9 rail-mobile ICBM launchers, and 16 launch-associated railcars and 40 SS-25 ICBMs and 25 SS-25 road-mobile launchers are expected to be eliminated. Seventy-two SS-25 support vehicles will be demilitarized. The road-mobile launchers, missiles, and support vehicles from four additional SS-25 regiments also will be decommissioned and removed from three ICBM bases.

*Liquid Propellant ICBM and Silo Elimination*. Fourteen SS-18 and eight SS-19 ICBMs will be eliminated.

*SLBM Launcher Elimination/SSBN Dismantlement*. DoD will dismantle 2 SSBNs and contract for the elimination of 20 additional SLBM launchers.

Spent Naval Fuel (SNF) Disposition. Production of 35 casks to store SNF will continue. An escort railcar to assist in transporting SNF from shipyards to centralized storage will be completed.

*Liquid Propellant SLBM Elimination*. Russia may eliminate some SLBMs with CTR Program-provided equipment.

<u>Nuclear Weapons Storage Security (NWSS)</u>: In accordance with the NWSS Implementing Agreement, this program supports U.S. proliferation prevention objectives by enhancing the security, safety, and control of stored nuclear weapons destined for dismantlement.

*AICMS*. This project enhances 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. Life-cycle support will be provided for the 16 completed AICMS sites.

*Site Security Enhancements.* This project enhances the safety and security of Russia's nuclear weapons storage at national stockpile sites and at Air Force, Strategic Rocket Forces, and Navy operational storage sites. DoD's activities are closely coordinated with DOE projects to enhance security at several of Russia's Navy and Strategic Rocket Forces sites. Since DOE is upgrading some Strategic Rocket Forces and Navy sites, DoD expects to provide security upgrades for up to 24 Nuclear Weapons Storage Areas. 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 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 been completed on one site and is ongoing on 15 additional sites. DoD expects to contract for eight additional sites.

<u>Nuclear Weapons Transportation Security (NWTS)</u>: In accordance with the NWTS Implementing Agreement, this program supports U.S. proliferation prevention objectives by enhancing the security and safety of nuclear weapons during shipment to consolidated storage sites and to dismantlement facilities.

*Nuclear Weapons Transportation.* This project assists MOD in the shipment of nuclear warheads from deployment sites to central storage and on to dismantlement locations. DoD expects to support 48 train shipments.

*Railcar Maintenance and Procurement.* This project is intended to ensure that the 200 nuclear weapons cargo railcars and 15 guard railcars that support MOD's dismantlement efforts maintain the required Ministry of Railways certification. The 15 guard railcars exceeded their service life in 2003 and were permanently removed from service. Oak Ridge National Laboratories was awarded a contract to procure 15 replacement guard railcars that are scheduled for delivery in FY 2006. DoD also anticipates awarding a contract to begin the procurement of up to 100 cargo railcars.

<u>Fissile Material Storage Facility (FMSF)</u>: 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. Enhanced transparency provides confidence that stored weapons-grade fissile material is safe and secure and that fissile material derived from the destruction of nuclear weapons has not been removed for any military purpose.

The FMSF was completed and commissioned on December 11, 2003, and loading is expected to begin in CY 2006. A Transparency Protocol has been negotiated, but final agreement is contingent on resolution of the legal framework governing application of the Protocol. Monitoring designed to measure certain attributes of the stored material should begin after the Protocol is signed and loading has begun.

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

Section 1307 of the Floyd D. Spence National Defense Authorization Act (NDAA) for FY 2004 requires the Secretary of Defense to submit to the congressional defense committees a certification for each facility where Cooperative Threat Reduction-funded construction occurred during the preceding fiscal year. The certification must address the following three requirements:

"(1) Whether or not such facility will be used for its intended purpose by the government of the state of the former Soviet Union in which the facility is constructed;

(2) Whether or not the government of such state remains committed to the use of such facility for its intended purpose;

(3) Whether those actions needed to ensure security at the facility, including secure transportation of any materials, substances, or weapons to, from, or within the facility, have been taken."

The requirements of the forgoing section are applicable to the following CTR activities and have been met:

#### Nuclear Weapons Storage Security - Russia

Automated Inventory Control & Management System (AICMS): Work began on the primary Central Control Point (CCP-1) in July 2003, was completed in October 2004, and custody was transferred to MOD on February 3, 2005. CCP-1 is the primary facility for operation and maintenance of the inventory and management database of Russia's nuclear weapons scheduled for dismantlement.

*Site Security Enhancements:* DoD provides assistance for the physical security upgrades at 16 permanent and temporary nuclear weapons storage sites. Assistance consists of providing state-of-art security system technologies and security force response and access control facilities to enhance MOD's capabilities to detect, assess, and respond to unauthorized entries. Construction necessary for security enhancements for 12 sites began in April 2004, one temporary storage site was completed in April 2005, and 11 are scheduled to be completed in the third quarter of FY 2006. Construction at four additional sites started in June 2005 and is scheduled for completion by the third quarter FY 2008.

#### **Chemical Weapons Destruction - Russia**

*Chemical Weapons Destruction Facility (CWDF):* DoD assists FAI to design and construct a facility at Shchuch'ye, Russia to eliminate its most proliferable nerve-agent weapons. The facility will have the capacity to destroy nerve agent from the Planovy stockpile, prior to 2012, in compliance with the CWC. DoD began construction of the CWDF in March 2003, with completion expected by July 2008.

#### Strategic Offensive Arms Elimination - Russia

*SS-24 ICBM Elimination:* In September 2004, DoD began the construction and equipping of a building at the Perm' Machine Building Plant to eliminate SS-24 ICBMs in accordance with the START Treaty. This facility was completed in March 2005.

*Spent Naval Fuel Disposition:* In March 2003, DoD began construction of the Spent Naval Fuel Storage Pad Expansion at the Onshore Defueling facility at Zvezdochka shipyard in Severodvinsk. The pads will be used for temporary storage of both SSBN and general purpose submarine SNF pending its transportation to Mayak for long-term storage and processing. Construction was completed in June 2005.

#### **Biological Weapons Proliferation Prevention - FSU**

*Biosecurity and Biosafety and Threat Agent Detection and Response Projects, Georgia:* Epidemiological Monitoring Station–Central Reference Laboratory (EMS-CRL) of the National Center for Disease Control, located in Tbilisi, is a human EMS-CRL with a repository for EDPs. It will serve as an interim laboratory until the CRL can be built. Construction renovation and equipment installation began in July 2004 and was completed in January 2005.

The Epidemiological Monitoring Module (EMM) of the Kutaisi Public Health Center is a human EMM. Construction and renovation work began in December 2004 and was completed in January 2005.

The EMM of the Central Laboratory of Veterinary Diagnostics and Expertise, located in Tbilisi, is a veterinary EMM. Construction and renovation work began in June 2005 and was completed in September 2005.

*Biosecurity and Biosafety and Threat Agent Detection and Response Projects, Uzbekistan:* The EMS-CRL of the Center for Prophylaxis of Quarantine and Most Hazardous Infections, located in Tashkent, is a human EMS-CRL with a repository for EDPs. The EMS-CRL will serve as an interim laboratory until the separate CRL can be built. Construction renovation work and equipment installation began in March 2005 and was completed in October 2005.

The EMM of the Republican Center for State Sanitary and Epidemiological Control, located in Tashkent, is a human EMM. Construction began in March 2005 and was completed in October 2005.

DoD began construction upgrades at the EMM of the Republican Special Veterinary Laboratory of Especially Dangerous Infections, located in Tashkent, during September 2005. Upgrades are scheduled for completion at this veterinary EMM in January 2006.

# ACRONYMS AND ABBREVIATIONS

A&E	Audit and Examination
AICMS Auto	omated Inventory Control & Management System
	Air-to-Surface Missile
BNI	Bechtel National, Inc.
BS&S	Biosecurity and Biosafety
	Biological Weapons
	Biological Weapons Proliferation Prevention
	Central Reference Laboratory
	Chemical Weapons Destruction Facility
	Defense Contract Audit Agency
	Defense Contract Management Agency
DMC	Defense and Military Contacts
DoD	Department of Defense
DOE	Department of Energy
DOS	Department of State
DTRA	Defense Threat Reduction Agency
EDP	Especially Dangerous Pathogen
EMM	Epidemiological Monitoring Module
EMS	Epidemiological Monitoring Station
FAEA	Federal Atomic Energy Agency
FAI	Federal Agency for Industry
FAR	Federal Acquisition Regulations
FMSF	Fissile Material Storage Facility
	Federal Space Agency
FSU	former Soviet Union
FY	
	Future Years Defense Plan
	Group of Eight
	Intercontinental Ballistic Missile
	International Science and Technology Center
JRIP	Joint Requirements and Implementation Plan

MDA	
MOD	
Moscow Treaty	
NDAA	National Defense Authorization Act
NWSS	
NWTS	
	Organization for the Prohibition of Chemical Weapons
Parsons	Parsons Global Services, Inc.
POE	Port of Entry
PM	Program/Project Manager
RTSC	Raytheon Technical Services Company LLC
SATC	
SATS	Small Arms Training System
SLBM	
SNAE	Strategic Nuclear Arms Elimination
SNF	Spent Naval Fuel
SOAE	Strategic Offensive Arms Elimination
SRM	Solid Rocket Motor
SSBN	Nuclear-Powered Ballistic Missile Submarine
TADR	
TRSC	Threat Reduction Support Center
U.S	United States
USG	United States Government
VAT	
WGI	Washington Group International, Inc.
WMD	Weapons of Mass Destruction
WMDIE	Weapons of Mass Destruction Infrastructure Elimination
WMD-PPI	WMD Proliferation Prevention Initiative