

DEFENSE THREAT REDUCTION AGENCY
Former Soviet Union Threat Reduction
FY 2000/2001 Biennial Budget Estimates

I. Description of Operations Financed: Weapons of Mass Destruction (WMD) located in Russia, the presence of significant quantities of nuclear warheads and fissile material, and the threat of proliferation of WMD are among the most serious challenges for U.S. national security planning in the post-Cold War period. The 1991 Soviet Nuclear Threat Reduction Act and subsequent congressional legislation established the basis for Department of Defense (DoD) implementation of the Cooperative Threat Reduction (CTR) Program. In his November Defense Reform Initiative (DRI), the Secretary of Defense identified the challenges posed by WMD as the greatest and most complex threats facing the DoD in the future. To address these challenges, the Department has established the Defense Threat Reduction Agency (DTRA) as a key component in the DoD response to these challenges. Establishment of DTRA is an evolving work in progress. The CTR program merges with DTRA, effective with FY 2000. Based on the CTR legislation, U.S. National Security policy, and an assessment of opportunities for cooperative engagement with Russia, Ukraine, Kazakhstan, and Belarus, DoD developed five CTR objectives:

A. Objective One:

Assist Ukraine, Kazakhstan, and Belarus to become non-nuclear weapons states, and eliminate Strategic Arms Reduction Treaty (START)-limited systems and weapons of mass destruction infrastructure.

Ukraine officially became a non-nuclear weapons state in June 1996. However, the dismantlement of the SS-24 Intercontinental Ballistic Missile (ICBM) system is a top U.S. Government priority which addresses a variety of national security, arms control, and nonproliferation objectives. The DoD and State Department consultations with the Ukraine's government asserting U.S. interest in elimination of the remaining 55 SS-24 missiles, 46 silos, 5 launch control centers, and supporting infrastructure led to the Government of Ukraine decision to eliminate the SS-24 weapon system. The DoD assistance supports integrating contractors to manage the elimination effort, construction of temporary missile storage (missiles awaiting elimination), dismantlement of silo launchers in accordance with START I protocols, building and operating a SS-24 solid rocket motor

DEFENSE THREAT REDUCTION AGENCY
Former Soviet Union Threat Reduction
FY 2000/2001 Biennial Budget Estimates

I. Description of Operations Financed (Continued):

propellant extraction facility, and SS-24 missile component elimination. Ukraine has requested assistance, in accordance with the December 1997 SECDEF/MINDEF Brussels Statement of Intent, to eliminate strategic bombers and associated Air-Launched Cruise Missiles (ALCMs). As a result DoD is funding the elimination of approximately 44 bombers and over 1,000 ALCMs. No additional funding for this objective is requested for Kazakhstan or Belarus.

B. Objective Two:

Assist Russia in accelerating strategic arms reductions to START levels. Russia will continue to be a nuclear weapons state possessing the infrastructure, materials, and technology to build and deploy nuclear weapons. START II, as revised by the Protocol to the Treaty in New York, requires mandatory reductions to 3,000-3,500 deployed strategic warheads and elimination of all SS-18 ICBMs by 2007. Presidents Yeltsin and Clinton's Helsinki Summit Joint Statement on Future Reductions in Nuclear Forces calls for lower aggregate levels of warheads to 2,000-2,500 under a START III and for CTR assistance to accomplish early deactivation of missile systems to be eliminated under START II. Recently, the Russian Federation has decoupled future strategic force structure reductions from START II ratification by the Duma. At Russia's request and consistent with SECDEF guidance, the CTR program is assisting the dismantlement of strategic nuclear delivery systems to levels at or below those specified by START protocols. CTR funds continue the destruction and/or dismantlement of: strategic missile systems; ICBM silos, road and rail mobile launchers; Sea Launched Ballistic Missile (SLBM)/ICBM liquid/solid rocket propellant missiles; SLBM launchers and the associated Sub-surface Submarine Ballistic Nuclear (SSBN); and heavy bombers. Major Western contractors are providing training, services, equipment and logistic support.

DEFENSE THREAT REDUCTION AGENCY
Former Soviet Union Threat Reduction
FY 2000/2001 Biennial Budget Estimates

I. Description of Operations Financed (Continued):

Where appropriate, direct contracting with Russian dismantlement enterprises, such as shipyards and design institutes, is incorporated to meet this objective.

C. Objective Three:

Enhance safety, security, control, accounting, and centralization of nuclear weapons and fissile material in the former Soviet Union to prevent their proliferation and encourage their reduction.

Pursuant to the Nuclear Weapons Transportation Security Agreement, the CTR Program will assist Russia to safely and securely transport nuclear warheads from deployed ICBMs/SLBMs to secure storage sites and dismantlement facilities. Approximately 4,000 nuclear weapons (two-thirds of the remaining Russian alert inventory) will be deactivated. Plans are to facilitate the deactivation by funding rail shipments to secure storage sites and from secure storage sites to dismantlement facilities. While the number of warheads per shipment and the distance of each shipment will vary, over 120,000 km of shipments are planned each year. Procurement of additional transportation safety equipment providing enhanced communications, diagnostics, access, and cold weather capability will begin in FY 1999 and be completed in FY 2000. Previously provided emergency support equipment will also be maintained.

The CTR Weapons Storage Security funding is enhancing the safety and security of Russian MOD nuclear weapons storage sites. Funding will also be used to procure, deliver, install, and certify the automated inventory control and management system, which contributes to the nonproliferation of weapons of mass destruction. Nuclear weapons storage site enhancements include the development of an integrated physical security and access denial system for 123 storage sites used by the Russian Air Force, Navy, Strategic

DEFENSE THREAT REDUCTION AGENCY
Former Soviet Union Threat Reduction
FY 2000/2001 Biennial Budget Estimates

I. Description of Operations Financed (Continued):

Rocket Forces and 12th Main Directorate. A Security Assessment and Training Center (SATC) will be completed in 1999 for use as a training location and test-bed for comparing and integrating candidate security systems to be installed at the nuclear weapons storage sites. Potential enhancements include: physical barrier systems; exterior/interior intrusion detection systems; assessment systems such as closed circuit television; central security control systems; site communication systems; personnel, package, and vehicle access control systems; intra-site data transmission media; and command, control, and display systems. In addition, systems for guard force training will be provided. Also, systems currently being provided for personnel reliability, personal safety, and guard force training will be expanded to support the Air Force, Navy, Strategic Rocket Forces site personnel.

The CTR funds assist Russia in dismantling their nuclear weapons. Funds for inserts needed for loading of the fissile material into the fissile material containers. The CTR plans to fund reshaping of the plutonium and Highly Enriched Uranium (HEU) from nuclear warheads into unclassified shapes, and loading the resulting shapes into 3mm wall thick stainless steel cladding to provide long term stability, and placing the cladded shapes into inserts prior to placement in the Fissile Material Containers (FMCs). The DoD provides equipment, training, and services to design and construct a safe and secure fissile material storage facility (FMSF) at Mayak, Russia. The facility will have a capacity in two wings to store 50,000 containers of weapons grade plutonium and highly enriched uranium from 12,500 weapons. The fissile material storage facility significantly enhances the material control and accounting, transparency, and safeguarding of fissile materials removed from dismantled nuclear weapons of the FSU. The facility construction schedule and funding are linked to accelerated rates of weapons systems dismantlement and Helsinki warhead reduction objectives. Funds for this project address a lack of storage capacity that the Russians have declared as the major bottleneck in the dismantlement process.

DEFENSE THREAT REDUCTION AGENCY
Former Soviet Union Threat Reduction
FY 2000/2001 Biennial Budget Estimates

I. Description of Operations Financed (Continued):

The Russian Reactor Core Conversion project, directed by a Gore-Chernomyrdin signed agreement, is a high priority of the Administration. This project will stop Russian production of weapons grade plutonium and improve operational safety by converting the reactor core design configuration of the reactors at Seversk and Zheleznogorsk. Currently, **each of the three** reactors can produce up to a total of 1.5 metric tons of plutonium per year. These reactors also provide critically needed district heat and electricity to Seversk and Zheleznogorsk. Total project costs **including the value of the uranium is** estimated in **October 1998** to be \$310 million. **Due to the financial situation in Russia,** the DoD intends to **request** additional funding for the design of **converting the cores;** improvements in safety systems; and **infrastructure** and materials needed to assure the actual conversion of the reactors; acceptance testing; and, regulatory approval.

D. Objective Four:

Assist the former Soviet Union (FSU) to eliminate and prevent proliferation of **biological and chemical** weapons capabilities. The biological and chemical weapons capabilities remaining in the former Soviet Union pose urgent proliferation and public safety concerns. To meet these concerns DoD is providing assistance in the reduction of these weapons stockpiles and associated production capabilities. **Funds may also be used for dismantlement of biological agent production facilities or equipment.**

The CTR biological weapons (BW) initiative will support collaborative research efforts with Russian scientists through direct lab-to-lab contacts designed to address DoD bio-defense needs in the areas of force protection, medical countermeasures and modeling. The CTR will augment other DoD research capabilities while gaining transparency into Russian biotechnology activities. The BW safeguard/transparency projects will reduce the threat of significant physical security deficiencies at various Russian BW facilities and dismantle former BW production facilities or equipment.

DEFENSE THREAT REDUCTION AGENCY
Former Soviet Union Threat Reduction
FY 2000/2001 Biennial Budget Estimates

I. Description of Operations Financed (Continued):

Russia, as a State Party to the Chemical Weapons Convention (CWC), is required to eliminate its stockpile of chemical weapons and demilitarize its former chemical weapons production facilities. Russia has declared a chemical weapons arsenal of 40,000 metric tons located at seven sites, including 32,500 metric tons of nerve agents at five sites. All nerve agents are contained in bombs, spray tanks, missile warheads, artillery projectiles, and rocket warheads. The CTR funding supports: provision of an analytical monitoring capability with mobile labs and the renovation of a fixed laboratory in Moscow; the design, equipment acquisition/installation, construction, systems integration, training, and start-up of a safe and secure pilot chemical weapons destruction facility at the Schuch'ye stockpile site in the Kurgan Oblast in FY 2005; and the demilitarization of former chemical weapons production facilities which may stimulate commercial conversion to non-prohibited chemical production. In addition, security enhancements for the protection of the chemical weapons stockpile at Schuch'ye and Kizner sites will be researched and implemented.

E. Objective Five:

Encourage military reductions and reforms and reduce proliferation threats in the former Soviet Union.

The CTR supports efforts to establish and expand a network of professional exchanges between US and FSU defense and military establishments. Activities include: Bilateral Working Group meetings and Joint Staff Talks between senior defense officials, a wide range of delegation exchanges on defense and military topics, sister base/unit exchanges, and combined exercises. In accordance with Congressional direction provided by the FY 1997 National Defense Authorization Act, Public Law 104-201, DoD is working to expand this program to other countries of the former Soviet Union besides Russia, Ukraine, Kazakhstan, and Belarus (the original recipients of CTR assistance). The DoD has already held events with its counterparts in Moldova, Kyrgyzstan, Uzbekistan, and Georgia.

DEFENSE THREAT REDUCTION AGENCY
Former Soviet Union Threat Reduction
FY 2000/2001 Biennial Budget Estimates

II. Force Structure Summary:

Other Assessments/Administrative Support funds the Audits and Examinations provisions included in all CTR Implementing Agreements. This Congressional interest item ensures that DoD provided equipment, services, and training are used for the intended purpose, and are satisfying the Congressionally mandated goals of the CTR Program. Funding supports: CTR delegation and technical team travel expenses, translator/interpreter support, and contracted technical and analytical support.

A. Strategic Offensive Arms Elimination - Russia: Accelerate Russian activities to meet strategic arms reduction goals in accordance with the Helsinki Joint Statement on Future Reductions in Nuclear Forces. The CTR Program is providing equipment and services to dismantle strategic nuclear delivery systems including: ICBM silos, mobile launchers, ICBMs, SLBMs, SLBM launchers and associated SSBN, and heavy bombers. Funding also supports transport, storage, and disposition of liquid/solid rocket propellants and disposition of spent fuel from SSBNs; and emergency support equipment.

B. Strategic Nuclear Arms Elimination - Ukraine: Assist Ukraine in meeting arms reductions under START. The CTR Program provides equipment and services to dismantle Ukrainian SS-24 missiles and launchers, strategic bombers, and air-launched cruise missiles (ALCMs); transport and dispose of propellants; and provide emergency response equipment.

C. Fissile Material Storage Facility - Russia: Rectify Russia's shortage of enhanced secure storage facilities for fissile materials from dismantled weapons. The CTR Program is providing materials, services, and training related to the design, construction, and operation of a safe, secure, and ecologically-sound Fissile Material Storage Facility at Mayak, Russia.

DEFENSE THREAT REDUCTION AGENCY
Former Soviet Union Threat Reduction
FY 2000/2001 Biennial Budget Estimates

II. Force Structure Summary (Continued):

D. Fissile Material Storage Containers - Russia: Provides fissile material containers (FMCs) to enhance security, safety, and accounting of fissile materials from dismantled weapons removed from operational strategic nuclear systems and facility upgrades to increase Russian FMC insert production to minimum of 2,000 units per year.

E. Warhead Dismantlement Processing - Russia: Assist Russia in dismantling nuclear weapons by preparing the plutonium and highly enriched uranium (HEU) for long term storage in fissile material containers and in the Fissile Material Storage Facility.

F. Weapons Storage Security - Russia: Assist Russia's non-proliferation efforts. The CTR Program is providing inventory control systems and security enhancements to Russian nuclear weapons storage sites in order to deter the theft, diversion, or sabotage of weapons.

G. Weapons Transportation Security - Russia: Transporting nuclear weapons and maintaining the safety and security enhancements to the Russian transport systems pending dismantlement and to deter proliferation of those nuclear weapons. CTR will fund the transport of warheads from SRF, Air and Navy sites to secure storage and to dismantlement sites.

H. Reactor Core Conversion - Russia: Ceases production of weapons-grade plutonium at the three remaining production reactors. Assist Russia in the design and installation of improved operational safety features, and preparation of the production capacities for manufacturing fuel elements and neutron absorber elements. Provides technical assistance in the review of the reactor design by U.S. experts.

DEFENSE THREAT REDUCTION AGENCY
Former Soviet Union Threat Reduction
FY 2000/2001 Biennial Budget Estimates

II. Force Structure Summary (Continued):

I. BW Proliferation Prevention - Russia: Establish a biological weapons threat reduction program with Russian biological weapons laboratories working through the International Science and Technology Center. The program will enhance security of the facilities and the biological agents from insider and outsider threats and redirect the efforts of the scientists through direct contacts with former BW institutes and collaboration with the United States and perhaps selected NATO nation scientists. Funds may also be used for dismantlement of biological agent production facilities or equipment.

J. Chemical Weapons Destruction - Russia: Assist Russia in the safe, secure, and ecologically sound destruction of its CW stockpile and minimize the potential for proliferation. The CTR Program is focused on accelerating nerve agent destruction by designing, constructing and equipping the first Russian CW Destruction Facility (CWDF) at Shchuch'ye. An Amendment to the CW Destruction Agreement expands the assistance provided to include the demilitarization of former CW production facilities.

K. Defense and Military Contacts: Promote democratic reform in the former Soviet Union. Improve cooperation and understanding between the U.S. and FSU military establishments through increased bilateral contacts, such as ship visits and exchanges, and joint training exercises.

L. Other Assessments/Administrative Support: Fund a Congressionally mandated Audits and Examinations (A&E) program and CTR program administrative and support costs. Activities include CTR delegation and technical team travel, translator/interpreter support, project requirements development, and contracted technical and analytical program support.

DEFENSE THREAT REDUCTION AGENCY
Former Soviet Union Threat Reduction
FY 2000/2001 Biennial Budget Estimates

III. Financial Summary (FSU: \$ in Thousands):

A. <u>Sub-Activity Group</u>	FY 1998 <u>Actuals</u>	FY 1999		<u>Current</u> Estimate	FY 2000 <u>Estimate</u>	FY2001 <u>Estimate</u>
		<u>Budget</u> Request	<u>Appropriation</u>			
1. Strategic Offensive Arms Elimination - Russia	77,900	142,400	142,400	142,400	157,300	157,800
2. Strategic Nuclear Arms Elimination - Ukraine	76,700	47,500	47,500	47,500	33,000	29,100
3. Fissile Material Storage Facility - Russia	57,700	60,900	60,900	60,900	64,500	64,500
4. Fissile Material Storage Containers - Russia	7,000					
5. Warhead Dismantlement Processing - Russia		9,400	9,400	9,400	9,300	9,300
6. Weapons Storage Security - Russia	36,000	41,700	41,700	41,700	40,000	20,000
7. Weapons Transportation Security - Russia		10,300	10,300	10,300	15,200	17,000
8. Reactor Core Conversion - Russia	41,000	29,800	29,800	29,800	20,000	25,000
9. BW Proliferation Prevention - Russia	2,000	2,000	2,000	2,000	2,000	2,000
10. Chemical Weapons Destruction - Russia	53,400	88,400	88,400	88,400	130,400	162,200
11. Defense and Military Contacts	9,337	2,000			2,000	7,800
12. Other Assessments/Administrative Support	20,500	8,000	8,000	8,000	1,800	6,300
Total	381,537	442,400	440,400	440,400	475,500	501,000

DEFENSE THREAT REDUCTION AGENCY
Former Soviet Union Threat Reduction
FY 2000/2001 Biennial Budget Estimates

III. Financial Summary (FSU: \$ in Thousands) (Continued):

<u>B. Reconciliation Summary</u>	Change	Change	Change
	<u>FY 1999/FY 1999</u>	<u>FY 1999/FY 2000</u>	<u>FY 2000/FY 2001</u>
Baseline Funding	442,400	440,400	475,500
Congressional Adjustments	-2,000	N/A	N/A
Supplemental Request	0	0	0
Price Change	0	6,606	7,134
Functional Transfer	0	0	0
Program Changes	0	28,494	18,366
Current Estimate	440,400	475,500	501,000
<u>C. Reconciliation of Increases and Decreases:</u>			
1. FY 1999 President's Budget Request			442,400
2. Congressional Adjustments (Distributed)			
a. Defense and Military Contacts		-2,000	
Total Congressional Adjustments (Distributed)			- 2,000
3. FY 1999 Appropriated Amount			440,400
4. Program Increases			0
5. Program Decreases			0
6. Revised FY 1999 Current Estimate			440,400
7. Price Growth			6,606
8. Program Increases			
a. Strategic Offensive Arms Elimination (SOAE)-Russia (FY 1999 Base: \$142,400)		12,764	
Provide additional assistance for increased SLBM dismantlements, and SS-18 weapon system dismantlement.			
b. Fissile Material Storage Facility - Russia (FY 1999 Base: \$60,900)		2,687	
Due to financial crisis in Russia, increases U.S. share to the design, equipment, training, materials, and construction services to construct a 25,000 container fissile material storage facility at Mayak.			

DEFENSE THREAT REDUCTION AGENCY
Former Soviet Union Threat Reduction
FY 2000/2001 Biennial Budget Estimates

III. Financial Summary (FSU: \$ in Thousands) (Continued):

C. Reconciliation of Increases and Decreases (Continued):

c. Weapons Transportation Security - Russia (FY 1999 Base: \$10,300)	4,746	
Complete procurements of additional data transfer and communication equipment, survey equipment, weapons diagnostic equipment, heavy access equipment, cold weather equipment, and related training and support required for MOD accident response groups while containing warhead transport at FY99 rates.		
d. Chemical Weapons Destruction - Russia (FY 1999 Base: \$88,400)	40,674	
Construction of supporting infrastructure, procurement of equipment items, Continue site utilities and construction and begin construction of CW destruction facility at Shchuch'ye.		
e. Defense and Military Contacts (FY 1999 Base: \$0)	2,000	
Funds for approximately 40 defense and military exchanges.		
9. Total Program Increases		62,871
10. Program Decreases		
a. Strategic Nuclear Arms Elimination (SNAE)-Ukraine (FY 1999 Base: \$47,500)	-15,213	
Completion of the elimination of the SS-19 weapons system.		
b. Warhead Dismantlement Processing - Russia (FY 1999 Base: \$9,400)	- 271	
Minor adjustment to align funds with total program budget.		
c. Weapons Storage Security - Russia (FY 1999 Base: \$41,700)	-2,326	
Minor adjustment as program completes system design and testing. Begin procurement of selected equipment.		
d. Other Assessments/Administrative Support (FY 1999: Base \$8,000)	-6,320	
Adjustment is based on actual prior year expenses of oversight and technical support requirements of the CTR program and current unobligated prior year funds.		
e. Reactor Core Conversion - Russia (FY 1999 Base: \$29,800)	-10,247	
Reduction is based on Russian scheduled changes for Reactor Core Conversion. Adjustment to align request with required precursors and infrastructure upgrades.		

**DEFENSE THREAT REDUCTION AGENCY
Former Soviet Union Threat Reduction
FY 2000/2001 Biennial Budget Estimates**

III. Financial Summary (FSU: \$ in Thousands) (Continued):

C. Reconciliation of Increases and Decreases (Continued):

11.	Total Program Decreases		-34,377
12.	FY 2000 Budget Request		475,500
13.	Price Growth		7,134
14.	Program Increases		
	a.	Weapons Transportation Security - Russia (FY 2000 Base: \$15,200) Increase funding for Transportation of tactical warheads to enhanced secure dismantlement facilities in addition to continued strategic warhead transportation.	1,572
	b.	Reactor Core Conversion - Russia (FY 2000 Base: \$20,000) Supports just-in-time funding to complete project in 2004.	4,700
	c.	Chemical Weapons Destruction - Russia (FY 2000 Base: \$130,400) Supports funding profile required to complete project by 2006.	29,844
	d.	Defense and Military Contacts (FY 2000 Base: \$2,000) Funds for approximately 110 additional defense and military exchanges.	5,770
	e.	Other Assessments/Administrative Support (FY 2000 Base: \$1,800) Adjustment is based on revised estimates of oversight requirements.	4,473
15.	Total Program Increases		46,359
16.	Program Decreases		
	a.	Strategic Offensive Arms Elimination (SOAE)-Russia (FY 2000 Base: \$157,300) Assistance remains constant except for inflation.	-1,860

DEFENSE THREAT REDUCTION AGENCY
Former Soviet Union Threat Reduction
FY 2000/2001 Biennial Budget Estimates

III. Financial Summary (FSU: \$ in Thousands) (Continued):

C. Reconciliation of Increases and Decreases (Continued):

b. Strategic Nuclear Arms Elimination (SNAE)-Ukraine (FY 2000 Base: \$33,000)	-4,395
Budget reduction due to completion of SS-24 silo and bomber elimination.	
c. Fissile Material Storage Facility - Russia (FY 2000 Base: \$64,500)	-968
Construction effort continues at same level except for inflation.	
d. Warhead Dismantlement Processing - Russia (FY 2000 Base: \$9,300)	-170
Construction effort continues at same level except for inflation.	
e. Weapons Storage Security - Russia (FY 2000 Base: \$40,000)	-20,600
Procurements of selected site enhancement to equipment will continue, but at a reduced rate. This will give Russia time to deliver equipment to Russian sites and to prepare its sites for installation and operations.	

17. Total Program Decreases	-27,993
18. FY 2001 Budget Request	501,000

IV. Performance Criteria and Evaluation Summary:

The CTR program is reducing the threat from WMD in the FSU by dismantling strategic delivery systems and their infrastructure, and enhancing the safety and security of nuclear weapons during transport or in storage pending dismantlement. Criteria for success is the numbers of systems dismantled or transport and storage facilities secured.

Assist Russia in accelerating strategic arms reductions to START levels:

DEFENSE THREAT REDUCTION AGENCY
Former Soviet Union Threat Reduction
FY 2000/2001 Biennial Budget Estimates

IV. Performance Criteria and Evaluation Summary (Continued):

(\$'s in Thousands)

	<u>FY 1998</u>	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>
A. <u>Strategic Offensive Arms Elimination (SOAE) - Russia</u>	77,900	142,400	157,300	157,800

FY 1998 funds will:

Provide equipment and services to eliminate 64 SLBM launchers and associated SSBNs;

Transport 110 SLBMs to dismantlement facilities;

Contract for equipment and facility modifications for volume reduction of low level radioactive waste (LLRW) to support dismantlement of Russian SSBNs at two Russian START-designated elimination facilities;

Provide assistance to store or process spent naval fuel from 8 SSBNs;

Provide infrastructure to dispose of ICBM/SLBM liquid propellant missile fuel;

Fund construction and testing of a prototype spent naval fuel storage and transportation container; and,

Provide consolidated logistical support to maintain CTR provided equipment.

FY 1999 funds will enable Russia to:

Eliminate 106 SLBM launchers and associated SSBNs;

Transport an estimated 100 SLBMs to disposition facilities;

Repair/recertify 125 rail cars and 670 intermodal containers for rocket fuel/oxidizer;

Continue volume reduction of 1,500 m3 of liquid and 200 m3 of solid LLRW

Construct mobile plant to eliminate 123,000 MT of liquid ICBM/SLBM oxidizer;

Provide equipment and facility modifications to assist in the elimination of up to 60 SS-17/19 ICBMs per year;

Eliminate 39 SS-17/18/19 ICBMs;

Provide assistance to eliminate 9 SS-N-20 SLBMs;

DEFENSE THREAT REDUCTION AGENCY
Former Soviet Union Threat Reduction
FY 2000/2001 Biennial Budget Estimates

IV. Performance Criteria and Evaluation Summary (Continued):

A. Strategic Offensive Arms Elimination (SOAE) - Russia (Continued):

Procure 4 rail cars and 36 containers for transportation of spent naval fuel;
Provide assistance to store or reprocess spent naval fuel from 7 SSBNs; and,
Provide consolidated logistical support to maintain CTR provided equipment.

FY 2000 funds will enable Russia to:

Begin procurement of equipment and services to modify facilities to
disassemble SS-24s ICBMs;
Eliminate 142 SLBM launchers and associated SSBNs;
Transport an estimated 100 SLBMs to disposition facilities;
Complete elimination of 26 SS-18 ICBM silo launcher sites;
Eliminate 68 SS-17/18/19/24/25 ICBMs;
Provide assistance to eliminate 10 SS-N-20 SLBMs;
Procure an additional 48 containers for naval spent fuel;
Provide assistance to store or reprocess spent naval fuel from 8 SSBNs;
Provide equipment and services to eliminate 36 SS-24 and 253 SS-25 mobile ICBM
launchers; and,
Provide consolidated logistical support to maintain CTR provided equipment.

FY 2001 funds will enable Russia to:

Eliminate 108 SLBM launchers and associated SSBNs;
Transport about 100 SLBMs to disposition facilities;
Continue volume reduction of 1,500 m³ of liquid and 200 m³ of solid low level
radioactive waste;
Complete elimination of 26 SS-18 silo launcher sites;
Eliminate 133 SS-17/18/19/24/25 ICBMs;
Provide assistance to eliminate 10 SS-N-20 SLBMs;
Procure an additional 48 containers for naval spent fuel;
Provide assistance to store or reprocess spent naval fuel from 6 SSBNs;

DEFENSE THREAT REDUCTION AGENCY
Former Soviet Union Threat Reduction
FY 2000/2001 Biennial Budget Estimates

IV. Performance Criteria and Evaluation Summary (Continued):

A. Strategic Offensive Arms Elimination (SOAE) - Russia (Continued):

Provide assistance to operate and maintain the solid rocket motor disposition facility; and,
Provide consolidated logistical support to maintain CTR provided equipment.

Assist Ukraine, Kazakhstan, and Belarus to become non-nuclear weapons states, and eliminate Strategic Arms Reduction Treaty (START) - limited systems and weapons of mass destruction infrastructure:

	(\$'s in Thousands)			
	<u>FY 1998</u>	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>
B. <u>Strategic Nuclear Arms Elimination (SNAE) - Ukraine</u>	76,700	47,500	33,000	29,100

FY 1998 funds will:

Continue dismantlement and elimination of the SS-19 weapon system;
Construct 20 SS-24 missile storage bays;
Store 10 SS-24 missiles;
Initiate disassembly of 55 SS-24 missiles;
Initiate repair/maintenance of rail infrastructure supporting missile transport;
Initiate the design and initial construction of a solid propellant disposition facility;
Initiate the elimination of 46 SS-24 launch silos; and 5 launch control centers;
Initiate the destruction of 44 heavy bombers and 1068 cruise missiles; and,
Provide consolidated logistical support to maintain CTR provided equipment.

DEFENSE THREAT REDUCTION AGENCY
Former Soviet Union Threat Reduction
FY 2000/2001 Biennial Budget Estimates

IV. Performance Criteria and Evaluation Summary (Continued):

B. Strategic Nuclear Arms Elimination (SNAE) - Ukraine (Continued):

FY 1999 funds will:

Complete **site restoration** for the SS-19 weapon system; and continue the SS-19 3rd stage and dry SS-19 missile elimination;

Fund storage of 36 SS-24 missiles;

Construct storage for **20** disassembled **or full-up** SS-24 missiles;

Continue disassembly of 55 SS-24 missiles;

Continue repair/maintenance of rail infrastructure supporting missile transport;

Continue the elimination of 46 SS-24 launch silos and 5 launch control centers;

Continue the destruction of 44 heavy bombers and 1068 cruise missiles;

Continue the construction of a solid propellant disposition facility; and,

Provide consolidated logistical support to maintain CTR provided equipment.

FY 2000 funds will:

Initiate disposition of 5,000 MT of rocket propellant (heptyl);

Complete the dismantlement and elimination of the SS-19 missile 3rd stage and dry missile;

Continue storage of SS-24 missiles;

Continue disassembly of 55 SS-24 missiles;

Continue the elimination of 46 SS-24 launch silos; and 5 launch control centers;

Continue the destruction of 44 heavy bombers and 1068 cruise missiles;

Continue the construction of a solid propellant disposition facility; and,

Provide consolidated logistical support to maintain CTR provided equipment.

**DEFENSE THREAT REDUCTION AGENCY
Former Soviet Union Threat Reduction
FY 2000/2001 Biennial Budget Estimates**

IV. Performance Criteria and Evaluation Summary (Continued):

B. Strategic Nuclear Arms Elimination (SNAE) - Ukraine (Continued):

FY 2001 funds will:

- Continue storage of SS-24 missiles;
- Continue to dispose of 5,000 MT of rocket propellant;
- Complete the construction of a solid propellant disposition facility;
- Continue disassembly and initiate elimination of 55 SS-24 missiles;
- Continue repair/maintenance of rail infrastructure supporting missile transport;
- Complete the site restoration of 46 SS-24 launch silos and 5 launch control silos;
- Complete the destruction of 1068 cruise missiles; and,
- Provide consolidated logistical support to maintain CTR provided equipment.

Enhance the security, control, accounting, and centralization of nuclear weapons and fissile materials in Russia to prevent their proliferation and encourage their reduction:

	(\$'s in Thousands)			
	FY 1998	FY 1999	FY 2000	FY 2001
C. <u>Fissile Material Storage Facility - Russia</u>	57,700	60,900	64,500	64,500

FY 1998 through FY 2001:

Supports the design, equipment, training, materials and construction services to construct a 25,000 container fissile material storage facility at Mayak.

DEFENSE THREAT REDUCTION AGENCY
Former Soviet Union Threat Reduction
FY 2000/2001 Biennial Budget Estimates

IV. Performance Criteria and Evaluation Summary (Continued):

					(\$'s in Thousands)			
					<u>FY 1998</u>	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>
D.	<u>Fissile Material Storage Containers - Russia</u>				7,000			

Funds facility upgrades and increases Russian FMC insert production to a minimum of 2,000 units per year.

					(\$'s in Thousands)			
					<u>FY 1998</u>	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>
E.	<u>Warhead Dismantlement Processing - Russia</u>					9,400	9,300	9,300

FY 1999 funding will purchase 2,000 FMC inserts additions and facility upgrades for material reshaping and packaging.

FY 2000 funding will continue with the purchase of 2,000 additional FMC inserts and begin purchase of 1,000 stainless steel shells for metallic spheres of fissile material.

FY 2001 funding will continue with the production of FMC inserts and of stainless steel shells; begin the reshaping process for the Pu and HEU components; and begin to load the Fissile Material Containers.

DEFENSE THREAT REDUCTION AGENCY
Former Soviet Union Threat Reduction
FY 2000/2001 Biennial Budget Estimates

IV. Performance Criteria and Evaluation Summary (Continued):

	(\$'s in Thousands)			
	<u>FY 1998</u>	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>
F. <u>Weapons Storage Security - Russia</u>	36,000	41,700	40,000	20,000

FY 1998 funds will:

- Provide computers, software and begin hardware/software certification to enhance the accounting and tracking of Nuclear warheads;
- Design a Security Assessment and Training Center (SATC) at Sergiev Posad, Russia;
- Provide support and equipment for developing a Russian Personnel Reliability program (PRP) for weapons handlers;
- Provide "Quick Fix" perimeter security equipment for up to 50 storage sites as the first enhancement increment;
- Provide a computer modeling capability to determine site vulnerabilities;
- Provide 35 dosimetry systems to manage Russian storage site personnel exposure to ionizing radiation; and,
- Provide consolidated logistical support to maintain CTR provided equipment.

FY 1999 funds will:

- Renovate/construct the SATC and begin testing security system enhancements;
- Continue procurement of perimeter security equipment and assist with installation;
- Provide guard force equipment to enhance Russian capability to train nuclear security forces;
- Finalize system architecture, continue hardware/software certification, and prepare sites to accept and certify the automated inventory control and management system; and,
- Provide consolidated logistical support to maintain CTR provided equipment.

DEFENSE THREAT REDUCTION AGENCY
Former Soviet Union Threat Reduction
FY 2000/2001 Biennial Budget Estimates

IV. Performance Criteria and Evaluation Summary (Continued):

F. Weapons Storage Security - Russia (Continued):

FY 2000 funds will:

Determine suites of security enhancements through the SATC process for up to 123 weapons storage sites;
Purchase selected security enhancements and transfer equipment to MOD for installation at 123 storage sites;
Continue to deploy, certify, install, and activate the automated inventory control and management system; and,
Provide consolidated logistical support to maintain CTR provided equipment.

FY 2001 funds will:

Finalize design of security enhancements through the SATC process for up to 123 weapons storage sites;
Purchase selected security enhancements and transfer equipment to MOD for installation at 123 storage sites;
Continue to deploy, certify, install, and activate the automated inventory control and management system; and,
Provide consolidated logistical support to maintain CTR provided equipment.

DEFENSE THREAT REDUCTION AGENCY
Former Soviet Union Threat Reduction
FY 2000/2001 Biennial Budget Estimates

IV. Performance Criteria and Evaluation Summary (Continued):

	(\$'s in Thousands)			
	<u>FY 1998</u>	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>
G. <u>Weapons Transportation Security - Russia</u>		10,300	15,200	17,000

FY 1999 funds will:

Provide transportation of deactivated warheads from deployed locations to enhanced security storage sites and dismantlement facilities. Warhead train movements are estimated to cover 10,000 KM per month;
Procure initial data transfer and communication equipment, survey equipment, weapons diagnostic equipment, heavy access equipment, cold weather equipment and related training and support; and,
Provide consolidated logistical support to maintain CTR provided equipment.

FY 2000 funds will:

Provide transportation of deactivated warheads from deployed locations to enhanced security storage sites and dismantlement facilities. Warhead train movements are estimated to cover 10,000 KM per month;
Procure additional data transfer and communication equipment, survey equipment, weapons diagnostic equipment, heavy access equipment, cold weather equipment and related training and support; and,
Provide consolidated logistical support to maintain CTR provided equipment.

FY 2001 funds will:

Provide transportation of deactivated strategic and tactical warheads from deployed locations to enhanced security storage sites and dismantlement facilities. Warhead train movements are estimated to cover 15,000 KM per month; and,
Provide consolidated logistical support to maintain CTR provided equipment.

**DEFENSE THREAT REDUCTION AGENCY
Former Soviet Union Threat Reduction
FY 2000/2001 Biennial Budget Estimates**

IV. Performance Criteria and Evaluation Summary (Continued):

	(\$'s in Thousands)			
	<u>FY 1998</u>	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>
H. <u>Reactor Core Conversion - Russia</u>	41,000	29,800	20,000	25,000

FY 1998 funds will procure long lead items (e.g. ECCS valves and pumps, graphite bushings, fuel channels and control channels) for the first reactor. Assist in procurement of analytical and measuring equipment used for fuel element production.

FY 1999 funds will procure the materials and equipment necessary to install the emergency core cooling system (ECCS), the redesigned control and protection system and the balance of plant modifications for the first reactor; and, procurement of long lead items for the second reactor.

FY 2000 funds will procure the materials and equipment necessary to install and complete acceptance testing for the emergency core cooling system and the balance of the plant modifications for the second reactor; and, procurement of long lead items for the third reactor.

FY 2001 funds will procure materials and equipment necessary to install and complete acceptance testing for the emergency core cooling system (ECCS), the re-designed control and protection system and the balance of plant modifications for the third reactor.

DEFENSE THREAT REDUCTION AGENCY
Former Soviet Union Threat Reduction
FY 2000/2001 Biennial Budget Estimates

IV. Performance Criteria and Evaluation Summary (Continued):

(\$'s in Thousands)

	<u>FY 1998</u>	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>
I. <u>BW Proliferation Prevention - Russia</u>	2,000	2,000	2,000	2,000

FY 1998 funds will:

Enhance physical security of Russian biological research facilities;
Initiate collaborative research efforts between U.S. and Russian biological scientists and dismantle former BW production facility; and,
Provide consolidated logistical support to maintain CTR provided equipment.

FY 1999 funds will:

Enhance physical security of Russian biological research facilities;
Fund collaborative research efforts between U.S. and Russian biological scientists; and,
Provide consolidated logistical support to maintain CTR provided equipment.

FY 2000 funds will:

Fund collaborative research efforts between U.S. and Russian biological scientists; and,
Provide consolidated logistical support to maintain CTR provided equipment.

FY 2001 funds will:

Fund collaborative research efforts between U.S. and Russian biological scientists; and,
Provide consolidated logistical support to maintain CTR provided equipment.

DEFENSE THREAT REDUCTION AGENCY
Former Soviet Union Threat Reduction
FY 2000/2001 Biennial Budget Estimates

IV. Performance Criteria and Evaluation Summary (Continued):

	(\$'s in Thousands)			
	<u>FY 1998</u>	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY2001</u>
J. <u>Chemical Weapons Destruction - Russia</u>	53,400	88,400	130,400	162,200

FY 1998 funds will:

Continue process systems, facility designs, and equipment development;
Conduct laboratory studies to optimize the two-step chemical agent destruction process and obtain engineering data to support the agent destruction process design effort;
Continue construction of the central analytical laboratories;
Initiate the demilitarization of the former CW production facilities in Volgograd; and,
Provide consolidated logistical support to maintain CTR provided equipment.

FY 1999 funds will:

Conduct laboratory studies to optimize the two-step chemical agent destruction process and obtain engineering data to support the agent destruction process design effort;
Initiate development, fabrication and testing of munitions destruction process line components, and a scaled-up reactor system to obtain engineering data to support the design of the agent destruction process lines;
Continue preliminary design package and begin site preparations for the Shchuch'ye CWDF; and,
Provide consolidated logistical support to maintain CTR provided equipment;
Assess existing site security requirements to protect the chemical weapons stockpile at Shchuch'ye and Kizner.

DEFENSE THREAT REDUCTION AGENCY
Former Soviet Union Threat Reduction
FY 2000/2001 Biennial Budget Estimates

IV. Performance Criteria and Evaluation Summary (Continued):

J. Chemical Weapons Destruction - Russia (Continued):

FY 2000 funds will:

Complete the optimization of the two-step chemical agent destruction process, testing of the scaled-up reactor system for chemical agent destruction, and preliminary design package for the Shchuch'ye CWDF;
Continue testing of the munitions destruction process lines;
Continue detailed design package for the CWDF;
Continue CWDF site preparation for construction of industrial area and supporting infrastructure, procurement of long lead equipment items, and construction of site utilities and selected buildings; and,
Provide consolidated logistical support to maintain CTR provided equipment.
Initiate security enhancements projects at Shchuch'ye and Kizner.

FY 2001 funds will:

Continue equipment acquisitions for CWDF;
Continue construction on the main destruction building and the bituminization building;
Continue construction of the CWDF support facilities; and,
Continue CW Destruction theory training and drafting standard operating procedures.

DEFENSE THREAT REDUCTION AGENCY
Former Soviet Union Threat Reduction
FY 2000/2001 Biennial Budget Estimates

IV. Performance Criteria and Evaluation Summary (Continued):

	(\$'s in Thousands)			
	<u>FY 1998</u>	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>
K. <u>Defense and Military Contacts</u>	9,337		2,000	7,800

FY 1998 funds will provide approximately 180 defense and military exchanges.

In FY 1999, the defense and military exchanges will be maintained at 180 events by using prior year funds.

FY 2000 funds will provide approximately 40 defense and military exchanges. The defense and military exchanges will be maintained at 180 events by using prior year funds.

FY 2001 funds will provide approximately 145 defense and military exchanges. The defense and military exchanges will be maintained at 180 events by using prior year funds.

**DEFENSE THREAT REDUCTION AGENCY
Former Soviet Union Threat Reduction
FY 2000/2001 Biennial Budget Estimates**

IV. Performance Criteria and Evaluation Summary (Continued):

	(\$'s in Thousands)			
	<u>FY 1998</u>	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>
L. <u>Other Assessments/Administrative Support</u>	20,500	8,000	1,800	6,300

FY 1998 funded 7 A&Es were conducted in Russia, 6 in Ukraine, 4 in Kazakhstan, and 2 in Belarus, for a total of 19 and fund contracts for technical and program support.

FY 1999 funds will conduct 22 A&Es and fund contracts for technical and program support.

FY 2000 funds will conduct 20 A&Es and fund contracts for technical and program support.

FY 2001 funds will conduct 20 A&Es and fund contracts for technical and program support.

V. Personnel Summary: N/A

**Former Soviet Union Threat Reduction
FY 2000/2001 Biennial Budget Estimates**

VI. Summary of Price and Program Changes (\$ in Thousands):

Subactivity Group	FY 1998	Price	Program	FY 1999	Price	Program	FY 2000	Price	Program	FY 2001
	<u>Estimate</u>	<u>Growth</u>	<u>Growth</u>	<u>Estimate</u>	<u>Growth</u>	<u>Growth</u>	<u>Estimate</u>	<u>Growth</u>	<u>Growth</u>	<u>Estimate</u>
308 Travel of Persons	1,200	13	12	1,225	18	57	1,300	20	80	1,400
771 Commercial Transp.	625	7	18	650	10	40	700	11	39	750
925 Equipment Purchases	34,000	374	136	34,510	518	-28	35,000	525	-25	35,500
933 Studies, Analysis, and Evaluation	6,200	68	32	6,300	94	-5,394	1,000	15	4,335	5,350
989 Other Contracts	339,512	3,735	54,468	397,715	5,966	33,819	437,500	6,563	13,937	458,000
Total	381,537	4,197	54,666	440,400	6,606	28,494	475,500	7,134	18,366	501,000